$2.50

Washington Apple Pi

Journal of the Washington Apple Pi, Ltd.

Volume 10 March 1988 Number 3

Highlights

- Four Assemblers for the IIGS
- Smoothtalker
- The Legacy of Daryl Anderson
- MacNovice: Mac's New "MultiFinder"
- Developer's View: S.F. MacWorld Expo
- Word Footnotes Made Easy

In This Issue

Officers & Staff, Editorial 3
President's Corner ..... Tom Warrick 4
General Information, Event Queue, Classifieds 5
Job Mart, Volunteer Profiles 6
WAP Calendar, SIG News 7
WAP Hotline 8
AppleWorks Tax Template: Mod 1 to Rev 1 ....Paul Koskos 9
Annapolis Apple Slice News ..... Katherine M. Cave 9
Commercial Classifieds 9
WordPerfect 1.1 (Apple II): A Review ..... Bob Oringel 10
Patchmania (Apple II): A Review ..... Bob Oringel 10
Q & A ..... Robert C. Platt & Bruce F. Field 12
IIGS Stuff: BASIC & Some Books ..... Ted Meyer 16
Two Pascals for the IIGS ..... Ted Meyer 18
Pascal News ..... Robert C. Platt 19
Four Assemblers for IIGS ... Richard Sanders & Ted Meyer 20
Smoothtalker: OK, But What Good Is It? ...Brian G. Mason 26
Program Interface SIG (PI-SIG News) ..... Robert Golden 28
An Open Letter to Jean-Louis Gassée ..... Phil Shapiro 29
Best of the Apple Items from the TCS .... Alexander Barnes 30
The Legacy of Daryl Anderson ..... David Ottalini 34
On the Trail of the Apple /// ..... David Ottalini 35
WAP Acrostic ..... Dana J. Schwartz 37
GameSIG News ..... Steven Payne 38
Defender of the Crown: A Review ..... Dave Brouwer 38
NBA: A Review ..... Reid Hutchinson 39
Calculus for a New Century: Final Rpt. ...Joseph A. Hasson 40
Frederick Apple Core 44
Getting Your IW II Out of a Jam ..... David Morganstein 45
Desktop Publishing SIG Meeting Report ...Cynthia Yockey 46
Book Reviews ..... Robert C. Platt 47
Stock SIG News ..... Andrew D. Thompson 48
Mac Meeting Report—Jan. 23 ..... Cynthia Yockey 49
Federal SIG News ..... Dan Adkins 49
MacNovice Column: MultiFinder ..... Ralph J. Begleiter 50
Developer's View: San Francisco MacWorld ..... Bill Hole 54
Macinations ..... Robb Wolov 56
Softviews ..... David Morganstein 58
Macintosh Bits and Bytes ..... Lynn R. Trusal 60
Excel SIG/Discussion Group ..... Larry Feldman 63
Excelling on Your Mac: Part 18 ..... David Morganstein 64
Object Logo: A Review ..... Jessica Weissman 66
Word Footnotes Made Easy ... Charles R. Geer Jr & Milrod 67
More MS Word ..... Martin Milrod 69
A Cable for All Seasons: Grappler ..... Robb Wolov 70
Another Episode from MacEngland . Adrien & Siew Youell 71
Delta 3.2 Medical Record System 72
HyperCard News ..... Robert C. Platt 73
Best of the Mac Items from the TCS ..... Dan Hughes 74
IIGS Disketeria News ..... David Todd 81
Mac Disketeria News ..... Martin Milrod & David Weikert 82
Index to Advertisers, Index to Authors 85
WAP Membership Application Form 86
Disketeria Order Form, Tutorial Registration Form 87, 88

Family Computer CENTER

Your Friendly Apple Dealer.

CLF NEW LOCATION
10565 Lee Highway
Fairfax, Virginia
(703) 385-2758

Backlick Shopping Cente
6691 Backlick Road
Springfield, Virginia
(703) 866-9122

You Don't Deserve This...

It isn't hard to imagine why we've made customer service our #1 priority!

Sringfield Location Now Open Sundays From 12 to 5.

Trade-In Your Apple IIc or Apple IIe for an Apple IIGS

Call for Details

Authorized Apple *Express* Service

When your Apple equipment breaks down, you need it fixed, not excuses. That's why we're introducing *ServiCenter* Express Service for Apple π members at a special rate. But what does Express Service mean to you? Express Service means fast repairs at reasonable prices for you. As an Apple π member in good standing you pay only regular labor rates for Express Service. It means that if we have parts in stock for your Apple-brand peripheral, you can have it repaired while you wait in most cases.
To take advantage of this special offer you must do two things. First, call for an appointment before bringing you machine in for repair. Second, you must present your current Apple π membership card when you present your equipment for repair to receive the special Apple π discount on Express Service labor rates. For appointment call our service department: 644-8442 π discount applies only to express service rates.

Wap Bonus Buy Special

Rodime 20 meg Hard Disk Drive

$699.

No other purchase necessary. Offer good with this coupon only.

π Member Discount

25%off

All Apple brand peripherals and upgrades!*

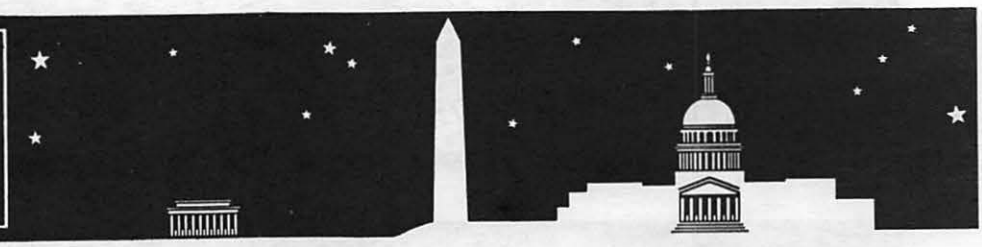
Wap Bonus Buy Special

Buy Two Boxes of Computer Paper and get a third one **free**.

Free Box of equal or Lesser value. No other purchase necessary. Offer good with this coupon only.

Apple and the Apple logo are registered trademarks of Apple Computer, Inc. Apple and Macintosh are trademarks of Apple Computer, Inc.
* 25% off list price on all non-allocated peripherals, not including CPU's. This discount cannot be used retroactively or in combination with any other promotions. π identification required. Family Computer reserves the right to change this policy without prior notice.

Clinton Computer

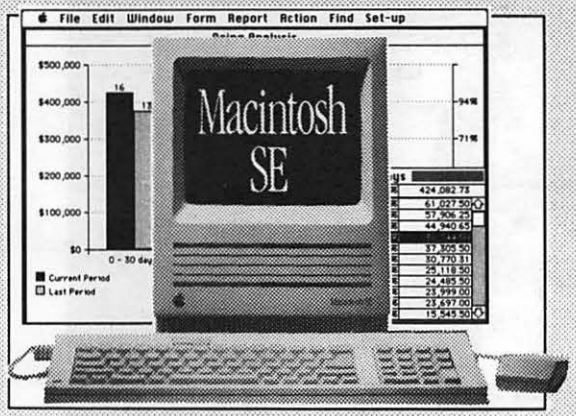


- 8032 Leesburg Pike, Vienna, VA (703)442-3800
- 277 S. Washington St, Alexandria, VA (703)838-9700
- 12204 Rockville Pike, Rockville, MD (301)881-2810

Authorized Dealer

- 6443 Old Alex. Ferry Rd, Clinton, MD (301)856-2500
- 9636 Ft. Meade Rd, Laurel, MD (301)953-1110 or (301)792-0600
- Government and Corporate Sales (703)838-9722

If Your Business Needs Timely and Accurate Accounting Data, You Need INSIGHT!



"In-Store" Days

Your Chance to Talk with an Insight Expert!

•Alexandria Store•
Thursday, March 10, 1-3PM

•Tysons Store•
Thursday, March 24, 1-3PM

•Laurel Store•
Thursday, April 7, 1-3PM

•Clinton Store•
Thursday, April 21, 1-3PM

•Rockville Store•
Thursday, May 5, 1-3PM

Free!
Accounting Seminars

•Old Town Alexandria, VA•
Thur, March 3, 10AM, 2PM
(Call "Red" at 838-9700)

•Tysons Corner, VA•
Thur, March 17, 10AM, 2PM
(Call Doreen at 442-3800 to register)

•Calverton/Beltsville, MD•
Thur, March 31, 10AM, 2PM
(Call Pam at 953-1110 to register)

•Clinton, MD•
Thur, April 14, 10AM, 2PM
(Call Sharon at 856-2500 to register)

•Rockville/Bethesda, MD•
Thur, April 28, 10AM, 2PM
(Call Diane at 881-2810 to register)

Take $595 Off Your Payables!

Buy Accounts Receivable by March 31, 1988 & Get Accounts Payable Free – $595 Value!

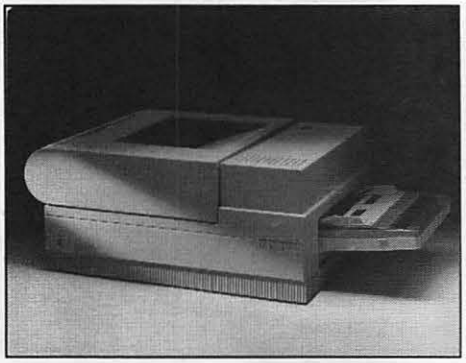
INSIGHT is America's best-selling accounting software. It does far more than just your bookkeeping and billing. It goes beyond the numbers to analyze and interpret them to help you make fundamental decisions about your business.

INSIGHT's integrated modules for General Ledger, Accounts Receivable and Billing, and Accounts Payable are as powerful as many mini-computer accounting packages.

INSIGHT was designed to work the way people work, so you spend your time *doing* accounting, not *learning* how to run a computer!

DISCOUNT POLICY FOR WASHINGTON APPLE PI MEMBERS

CLINTON COMPUTER offers Washington Apple Pi members a 25% DISCOUNT OFF THE LIST PRICE on all non-allocated Apple brand peripherals (no CPU's), software and AppleCare. For upgrades, the 25% discount applies to both the parts and normal labor rate. 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. No phone or mail orders, please. Discount cannot be used in combination with other promotions. Products on allocation from Apple are excluded from this offer. Clinton Computer reserves the right to change this policy at any time.



Introducing the New LaserWriter II Printers

Apple® Computer's technology leadership has produced another important first -- the first family of fully upgradeable laser printers.

The LaserWriter® IISC offers the individual Macintosh user excellent full-page text and graphic printing capabilities at an affordable price.

The LaserWriter IINT lets individuals and workgroups produce a full range of professional quality documents.

The LaserWriter IINTX provides un-paralleled performance and flexibility for those with high-volume printing requirements and advanced page layout and document processing needs.

Seminars and Training Available

Clinton Computer offers a comprehensive training program on both Apple™ and MS-DOS microcomputers in Laurel, Rockville and Alexandria. For registration information, contact the Training Department at 953-1110.

We also offer a wide variety of Free Seminars on PageMaker, Adobe Illustrator, Powerpoint, Freehand, and Insight Accounting. Call Alyce at 838-9700 to register for upcoming sessions.

Apple, the Apple logo, and LaserWriter are registered trademarks of Apple Computer, Inc. Macintosh is a trademark of Apple Computer, Inc. Apple products are available only from authorized Apple dealers. They are not available by telephone or mail order.

*TEMPEST Macintosh™ II Personal Computer

- Full 32-Bit 68020 Microprocessor 15.7 Megahertz
- 68881 Floating Point Coprocessor
- 1MB RAM, Expandable to 8MB
- 6 NuBus Expansion Slots
- 2 RS232/RS422 Ports
- SCSI Interface
- TEMPEST Mouse
- Detachable Extended Keyboard 105 Keys, 15 Function Keys
- 800K Built-in Disk Drive (Second Drive Can Be Added)
- External Hard Disk Drive, 20MB, 40MB, 80MB (Option)
- 12″ TEMPEST Apple® High-Resolution Monochrome Monitor
- 13″ TEMPEST Color Monitor 800 × 560 (Option)
- 19″ TEMPEST High Resolution Color Monitor, 1280 × 1024 (Option)

Authorized Value Added Reseller

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

TEMPEST Products Incorporated

(703) 450-9090 1439 Shepard Drive Sterling, VA 22170

OFFICERS & STAFF

Board of Directors

President	- Tom Warrick	(301) 654-8060
Vice Pres-Apple	- Raymond Hobbs	(301) 725-5972
Vice Pres-Mac	- Bob Platt	(703) 486-1466
Treasurer	- Edward Myerson	(703) 759-5479
Secretary	- Peter Combes	(301) 251-6369
Directors	- Bruce Field	(301) 340-7038
	- Harvey Kaye	(301) 493-6875
	- Priscilla Myerson	(703) 759-5479
	- Leon Raesly	(301) 439-1799
	- Eric Rall	(301) 596-0004
	- Jay Thal	(202) 244-3649
	- Lynn R. Trusal	(301) 845-2651
Past President	- David Morganstein	(301) 972-4263
Editor	- Bernie Urban	(301) 229-3458
Head Software Libr.	- Jim Little	(301) 762-3215
Office Managers	- Gena & Bernie Urban	(301) 654-8060
Journal Staff:		
Associate Editor	- Gena Urban	(301) 229-3458
Store Distrbtn.	- Ray Hakim	(301) 649-1891
Columnists:		
Apple ///	- Dave Ottalini	(301) 681-5792
Apple II News	- Walt Mossberg	(202) 244-4898
Developer's View	- Jim Lanford	(301) 589-6300
EDSIG	- Peter Combes	(301) 251-6369
GameSIG	- Steven Payne	(202) 832-6622
Mac Bits & Bytes	- Lynn R. Trusal	(301) 845-2651
MacNovice	- Ralph Begleiter	(301) 340-3296
Mac Q & A	- Jonathan Hardis	(301) 330-1422
Meeting Reporter	- Cynthia Yockey	(301) 565-3951
Musical Apple	- Raymond Hobbs	(301) 490-7484
Pascal and Q & A	- Bob Platt	(703) 486-1466
Q & A	- Bruce Field	(301) 340-7038
Softviews & Excel	- David Morganstein	(301) 972-4263
StockSIG	- Andrew Thompson	(301) 270-6790
Review Coord.	- James Burger (day)	(703) 264-5112
Review Corrd.	- Raymond Hobbs	(301) 490-7484
Review Coord.	- David Morganstein	(301) 972-4263
Review Coord. IIgs	- Leon Raesly	(301) 439-1799
TCS - Apple	- Alexander Barnes	(301) 474-5310
TCS - Mac	- Dan Hughes	(202) 234-7735
Telecom SIG	- Dave Harvey	(703) 578-4621
View From Hill	- Rich Norling	(202) 547-5508
Disketeria:		
DOS 3.3 Lib.	- Jim Little	(301) 762-3215
Macintosh Lib.	- David Weikert	(301) 963-0063
	- Martin Milrod	(301) 464-5981
Pascal Lib.	- Mike Hartman	(301) 445-1583
ProDOS-CP/M Lib	- John T. Bell	(301) 441-9069
IIgs Lib.	- David Todd	(301) 228-0237
	- Sherman Lewis	(703) 437-3483
Apple II Disks	- Jim & Nancy Little	(301) 762-3215
	- John Bell, Bob Johnson, Bob Platt	

☛ Use the Hotline for Technical Questions

Mac Lib. Staff	- Dave Benbennick, Rick Chapman,	
	- Hampton DeJarnette,John DeMarco,	
	- Garry Elliott, Ben Frank, Andy Gallant, ,	
	- John Gertsch, Gary Grey,	
	- Mary Hockmeyer, William Jones,	
	- Al Maloney, Ralph Mullendore,	
	- Mike Robinett, FredRodgers,	
	- Charles Sicard, Bob Soule, Joe Swick,	
	- Bob Vandegrift, Jessica Weissman	
Group Purchases	- Rich Wasserstrom *	(202) 544-8327
* (Evenings 7:00-9:30, M-F)		
Head Reading Lib.	- Walt Francis	(202) 966-5742
Apple Tea Coord.	- Amy Billingsley	(301) 622-2203
Arrangements	- Leon Moore	(301) 946-2642
Dealer Rel. Comm.	- John Alden	(202) 686-1656
	- Harvey Kaye	(301) 493-6875
	- Bob Platt	(703) 486-1466
	- Bernie Urban	(301) 229-3458
	- Rich Wasserstrom	
Legal Counsel	- Charles Calkins	
	- Dan Dwyer	(301) 445-2895
Membership	- Dana Schwartz	(301) 654-8060
Program	- John Alden	(202) 686-1656
Public Relations	- Charles Redmond	(202) 363-3184
SIGs&Slices Coord.	- Jay Thal	(202) 244-3649
Telecom Sys. Opr.	- Leon Raesly	(301) 439-1799
Tutorials	- Bob Platt	(703) 486-1466
Volunteer Coord.	- David Morganstein	(301) 972-4263
SIG Chairmen:		
Annapolis Slice	- Craig Contardi	
AppleWorks	- Ken DeVito	(703) 960-0787
Apple IIgs	- Ted Meyer	(703) 893-6845
Apple ///	- David Ottalini	(301) 681-5792
	- Tom Bartkiewicz	(703) 435-3295
AV-SIG	- Jay Williams	(202) 728-1009
CP/M	- Charles Franklin	(301) 997-9138
DisabledSIG	- Jay Thal	(202) 244-3649
dPub SIG	- Tom Piwowar	(202) 223-6813
EDSIG	- Peter Combes	(301) 251-6369
Federal SIG	- Gordon Stubbs	(703) 750-0224
	- Daniel Adkins	(202) 822-8052
Frederick Slice	- Oscar Fisher Jr.	(301) 694-9237
GameSIG	- Charles Don Hall	(301) 864-2715
Chrmn. Emeritus	- Ron Wartow	(607) 257-4873
LawSIG	- John Weld (day)	(202) 463-0662
Mac Prog. Grp.	- Bob Shaffer	(703) 671-1194
	- Bruce Jacobs	(301) 439-7812
Music SIG	- Bill Bittle	(301) 236-9898
Pascal (PIG)	- Mike Hartman	(301) 445-1583
PI-SIG	- Bob Golden	(301) 593-6165
StockSIG	- Peter Kasper	(703) 620-4071
Telecomm. SIG	- Allan Levy	(301) 340-7839

Washington Apple Pi, Ltd.
8227 Woodmont Avenue, Suite 201
Bethesda, MD 20814
Business Office (301) 654-8060
© 1988, Washington Apple Pi, Ltd.

Telecommunications System (301) 986-8085

CO-EDITORIAL

You never know what aspect of Washington Apple Pi will "turn someone on." The other day I walked into our local small-town post office in Glen Echo to mail a package, and the clerk said, "Oh, you're Washington Apple Pi(e), aren't you? That makes me feel good, cause I like apple pie, and waiting on you makes me happy." I didn't go into my usual song and dance about how we are Apple Pi, the Greek letter, not the pastry. Why spoil a good feeling?

But it started me thinking about how, in a group like WAP, you don't always realize what effect the organization or the individual members may have on the public (or on each other), and you just may be surprised at what makes people happy. Anyway, what do you think—should we change our name to Washington Apple Pie? It's a sure bet to make people smile!

Re this issue, we have many more articles which merit highlighting, but we have only so much space on the cover for that purpose. So, look them all over and enjoy.

PRESIDENT'S CORNER

by Tom Warrick

This month, I'm going to start close at home and get further afield as we go.

As you might expect from your computer user group, we do keep track of all that information you provide when you fill out your membership application or renewal form. Lately, it's been telling us some interesting things. Membership has jumped somewhat in the past few months, to ***5,374*** just before the January 1988 meeting. This confirms ***Myerson's rule***, that Washington Apple Pi membership is a lagging indicator of Apple Computer's sales, which reached record levels in the fourth quarter of 1987. The principal reason for Washington Apple Pi's membership increase, it appears from the statistics, has to do with the ***exponential growth*** we've experienced in the numbers of ***Apple IIgs***, ***Macintosh SE*** and ***Macintosh II*** members. We reported 25 ***Apple IIgs*** owners in January 1987, a little less than a year after the Apple IIgs rollout, but today we have 337. Part of this increase is an artifact of the reporting process (you let us know what type of computer you own only once a year, when you join the Pi or when you renew your membership; on the other hand, if you report you own a IIgs and a Macintosh SE, we record you in the "Apple II and Mac" category without differentiating among types of Apple II's or types of Macs), but part of it is due to the fact that IIgs sales are picking up. Apple Computer has been saying for several months that sales of the Apple IIgs have exceeded internal expectations. Normally, of course, when a company says this about its internal sales, cynics say that it has more to do with the company's internal forecasting than with anything else.

It is true that sales of the Apple IIgs were originally disappointing, which was not surprising considering that there was little if any software to take advantage of the IIgs's special capabilities so as to make the IIgs worth the premium price. To hear that IIgs sales are increasing should be very good news for current IIgs owners. It is axiomatic in the computer industry that hardware and software for a new computer are a chicken-egg problem: Who will write software for a new computer that few people own? Who will buy a new computer for which few people have written software? So the more IIgs's there are out there, the more software will be written for the IIgs. IIgs owners: encourage your friends to buy a IIgs!

In contrast to the slow start-up of the IIgs, the ***Macintosh SE*** was an instant hit after its introduction in March of 1987. The optional built-in hard disk or built-in second floppy disk drive, coupled with faster hard disk performance, made many industry observers predict that the Mac SE would be very popular among businesses, as it has been. But it has also been a hit among our members, who are, for the most part, individuals reporting computers they own as individuals. We began recording SE membership in May. By July, we had 35 Mac SE members, but in January of 1988 this number had increased to 226.

The numbers of Pi members reporting that they own a ***Macintosh II***, as you would expect, have been smaller than those reporting they own a Mac SE or an Apple IIgs. Not surprising, considering (1)until late last year you could not get a color monitor for the Mac II, and (2)it's hard to both get a Mac II system and have change left over from your $8,000. Still, Mac II membership has gone from 6 in July to 80 in January.

There is one noteworthy statistic buried in the data on what types of computers we own. In November, Washington Apple Pi became a ***50-50*** organization, with the same number of members reporting they owned members of the Apple II family (by which I include the Apple ///, since it uses the same type of 6502 microprocessor as the Apple II) and the Macintosh family. Actually, rather than "50-50," it would be more accurate to say "56-56," since about ***12percent*** of our members report they ***own both*** Apple II's and Macintoshes.

Elsewhere in the computer industry, ***Steve Jobs' Next, Inc.*** is due to unveil soon its new line of workstation computers to compete with the Macintosh II and workstations from Sun Microsystems and a number of other vendors. Jobs has managed to keep the wraps on his first post-Macintosh child, although enough has leaked out to let us know that the low-end model is small, black, uses Display Postscript (a screen version of the page-description language used by the LaserWriter) and has a 68020 microprocessor with lots of memory. He has apparently lined up a number of top software houses, including ***Microsoft***, to come out with "Next" versions of their top software. Sounds great? Maybe it is, technologically, but would you want to be the person to try to persuade the board of trustees of MIT or CalTech to require every student to get a computer from a company with no track record, no installed base, and run by someone who once, almost singlehandedly, ran a Fortune 500 company into the ground because of his shortsightedness?

The computer world has changed greatly from what it was in 1984, the year Jobs introduced the 128K Mac with a single disk drive. The magic phrase I remember from business school is ***"barrier to entry."*** In other words, if you and everybody else who markets detergent each spend $100 million a year in advertising, it will be hard for an outsider to break into the detergent market unless he has the resources to spend a similar amount. Next faces barriers to entry because of the software chicken-egg problem mentioned a few paragraphs before (although their choice of microprocessor and of Display Postscript help to overcome this problem), as well as barriers in the marketing and service sectors. None of the Silicon Valley whiz kids—Nolan Bushnell (Atari) and Adam Osborne come to mind—has had a second success to rival his first. Steve Jobs will have quite a task in front of him to avoid joining that group.

Finally, to end this column—as promised—far afield of

contd.

computers, let me recommend a book that has nothing to do with computers. (Yes, I do admit to reading such books on occasion. I started reading this book in a dentist's waiting room, which may tell you something.) The book is ***Secrets of the Temple*** by former Washington Post editor ***William Greider***, and the subject is United States ***monetary policy*** under former Federal Reserve Board chairman Paul Volcker. It sounds like a real snoozer, but, really, it's not. To the contrary—it's a fascinating and engaging history of the United States told from a perspective that one almost never gets from television, newspapers or news magazines. If during the 1980's you owned a house, had a checking account, or even just owed someone money, this book may help explain a lot of the crazy things that happened during that turbulent period. It certainly makes a change from reading about Presidential primaries and makes you realize that the person for whom you vote on Super Tuesday may not be the most important government official in your future.

GENERAL INFORMATION

Apple user groups may reprint without prior permission any portion of the contents herein, provided proper author, title and publication credits are given.

Membership dues for Washington Apple Pi are $32.00 for the first year and $25.00 per year thereafter, beginning in the month joined. If you would like to join, please call the club office or write to the office address. A membership application will be mailed to you. Subscriptions to the Washington Apple Pi Journal are not available. The Journal is distributed as a benefit of membership.

Mailing Notice: Change of address must be postmarked at least 30 days prior to effective date of move. Journal issues missed due to non-receipt of change of address may be acquired via mail for $2.50 per issue.

Current office hours are:

Monday - Friday	-	10 AM to 2:30 PM
Tues. & Thurs.	-	7 PM to 9:00 PM
Saturday	-	12 Noon to 3:00 PM

Please note that the office is closed on all U.S. Government holidays. Members are asked to place phone calls to the office during the day hours Monday - Friday whenever possible, since only one person staffs the office during evening hours and on Saturday.

EVENT QUEUE

Washington Apple Pi meets on the 4th Saturday of each month (except December. Currently we are in the process of establishing a new "permanent" meeting site, and locations for the time being will be listed on a month-to-month basis. The March 26 and April 23 meetings will be at Georgetown University, 3900 Reservoir Rd. DC, Pre-Clinical Science Bldg. Rooms LA4 and LA6. Disketeria transactions, Journal pickup, memberships, etc. are from 8:45-10:00 AM. The business meeting is from 9:00-9:30.

A sign interpreter and reserved seating can be provided for the hearing impaired, but we need 5 business days notice. Call the office.

Following are dates and topics for upcoming months:

March 26 - Apple II - Programming
- Mac TBA

April 23 - Music

The Executive Board of Washington Apple Pi meets on the second Wednesday of each month at 7:30 PM at the office.

CLASSIFIEDS

Friends of Bill W.: Developing Apple network of recovering alcoholics to exchange letters on diskette and otherwise pursue primary purpose by keyboard and modem. Contact Arthur K. Burditt, Box 958, Moen, Truk FSM 96942.

WANTED: Used Mac 512K, 512K enhanced, or Mac Plus and peripherals for personal use. Write Alan Williams, 1621 Shady Leaf Drive, Valrico FL 33594 or call (813) 830-6403 days or (813) 685-0601 evenings.

FOR SALE: DataFrame XP-60, 60MB SCSI hard disk. Call David, evenings and weekends at (301) 972-4263.

FOR SALE: 400K Mac disk drive, $60; 300 baud Apple external modem, $10. Call Cynthia at 565-3951, day or evening.

FOR SALE: ProWriter 8510, excellent condition, $120; Color Monitor for the //c, $100. Call (703) 960-5561, ask for Dave.

FOR SALE: Ergotron Macbuffer (512K), $200; Macintosh 400K external drive, $75. Call Larry, (703) 698-7826.

FOR SALE: LaserWriter Plus. Like new. Only 600 sheets have been run through this machine and only one person has ever operated it. Only five months old. Includes all documentation and packaging. $3000. Call (202) 543-0095. (If I am not in, leave a message and I will return your call.)

FOR SALE: Software for Apple II: Sensible Speller, useful with most word processors, and Multiplan Spreadsheet. Both essentially new. First caller with a good price—(301) 933-3065. Will sell separately.

FOR SALE: Apple 400K external drive, $50. Call (202) 387-4798, day or evening.

FOR SALE: Apple 400K external drive and/or Word 1.05 with full documentation. Best offers. Leave a message for Richard at 982-5074.

FOR SALE: Mac XL with 2 Meg AST RamStack and 10 Meg internal hard drive. 12-inch screen. Well cared for and in great shape, but I can't keep it busy with my SE sitting next to it. Comes with a vast assortment of software including MacServe XL (connects to other Macs and printers), Word, MacProof, PageMaker, Excel, FileMaker Plus, SuperPaint, VideoWorks, Turbo Pascal, CricketGraph, MacTerminal, MicroPlanner, Copy II Mac and several dozen others. A lot of computing power for $1225. Also for sale: Apple 512K Ram board for the XL, $150. Call Dan Goodman at (301) 933-9744 between 10AM and 9PM.

FOR SALE: Apple //e with 128K 80-column card, Kensington System Saver, Monitor (mono), KoalaPad, Joystick, AE RamWorks Card with 768K ROM chips installed (room for up to 1 meg), Seriall Card for modem and printer, 2 disk drives, Grappler+ parallel printer card. Plus much software and manuals including AppleWorks; Apple Writer II and 2.0; Ram-Works User Disk; Zoom TCS; PFS File, Report, Sortworks and Graph;

contd.

Copy II+; PrintShop and Graphics Disk #1&2; Micro Illustrator; Financial Cookbook; Zaxxon; Dollars and $ense; Webster's Spelling Checker; Netmaster Comm. Software; ProDos Users Disk, Newsroom and Graphics Disk, Micro Cookbook, Flight Simulator, plus assorted games and back issues of WAP Journal. $1595 or best offer. Call Joe at (301) 490-9112.

FOR SALE: Apple][+ 48K, 16K RAM card, Apple disk controller card, Apple Super Serial card, Videx Enhancer II, Function Strip, Mountain Computer ROMPLUS+ card, Teko 12" green-screen monitor, power strip, leather Apple sack, manuals, software,][in a Mac. $150. Call Dwin Craig at (703) 461-0509.

FOR SALE: Apple Quantum 40MB, internal hard disk for Mac II. Need larger capacity. $1000, but will listen to other offers. Lynn Trusal (301) 845-2651. Call before 10PM please.

FOR SALE: Mac software. One original copy of each of the following, along with original documentation: Word 3.0, Word 1.05, Excel 1.03, Typing Tutor III, MaxRam MaxPrint, HFS Backup 1.1, Fokker Triplane, Uninvited. Call George at (703) 860-8280. No reasonable offer refused.

FOR SALE: Mac Vision from the Koala Technologies Corporation. Video digitizer for the Mac. Will work with VCR or Video camera. Also included is coupon for discounts on video camera. Original documentation, software and hardware. $170. Call Dwin Craig at (703) 461-0509.

FOR SALE: Macintosh 512E. $1300 or best offer. Call Jeff (301) 563-1903.

JOB MART

HELP WANTED:

Freelance Mac experts needed in all areas, especially desktop publishing and graphics. Please send your resume and a sample or two to Cynthia Yockey, Cynthia Yockey & Associates, 9039 Sligo Creek Pkwy., Suite 1802, Silver Spring, MD 20901. Phone (301) 565-3951.

Part Time, Weekends/Eves., **computer instructors** with excellent working knowledge of **Apple IIGS**. Experience with ProDOS, Apple //e, //c and AppleWorks preferred. Class locations—Laurel and Rockville, MD. Send resume of computer experience to Laura Garner, Clinton Computer, 9636 Ft. Meade Rd., Laurel MD 20707.

Part Time, Weekends/Eves., **computer instructors** with excellent working knowledge of the **Apple Macintosh**. Experience with MacWrite, MacPaint essential. Other software experience a plus. Class locations—Laurel and Rockville, MD. Send resume of computer experience to Laura Garner, Clinton Comptuer, 9636 Ft. Meade Rd., Laurel MD 20707.

Economic Development: Project design and implementation. Professional(s) proficient in Apple or other PC applications needed—versatile individuals to work in isolated, laid-back, tropical developing country environment. Send letter and resume to Arthur K. Burditt, State Economist, Box 958, Moen, Truk, FSM 96942.

Macintosh WP/Graphics Support Needed: Several positions available with a small, expanding Macintosh-based production department. Seeking Mac-enthusiasts interested in a challenging position with opportunities to grow within the defense industry. Projects involve a variety of word processing, presentation graphics, project management SW, IBM PC/Mac networking, state-of art SW, etc. MacDraw, Microsoft Word, and PageMaker familiarity preferred but not required. Call Treva Coleman or Susan LeGath at 521-3812 or send resume to Dynamics Research Corporation, 1755 Jeff Davis Hwy, #802, Arlington, VA 22202.

Part-time. Small environmental consulting firm that uses a MacPlus and a variety of software programs (word processing, HyperCard, mailing list, graphics) for spill response and contingency planning work for the government seeks a highly motivated Macintosh user/exper to do computer and general office work. Old Town Alexandria. Flexible hours (10-15 hours per week) and negotiable salary. Please call Ann Hayward Walker at (703) 683-8324.

VOLUNTEER PROFILES

We continue our portfolio of WAP volunteers, without apologies to the scotch whiskey whose ads suggested the format.

Name: Ray Hobbs
Occupation: Mgr. of an Application Development Dept.
Residence: Laurel, MD
Computer: Apple IIgs & Mac+
Favorite Drink: Kona Coffee
Favorite Software: The Performer (music synthesis) and Turbo Pascal compiler
Service to WAP: Chairman of Assembly Lang. SIG, PI-SIG, Music SIG, Review Coord., Journal Dist. Coord., Director-at-Large, Vice Pres., and author of "The Musical Apple" and "Button Down Guide to the Apple" columns.

Photo by Peter Combes

Name: Ted Meyer
Occupation: Aerospace Engineer
Residence: McLean, VA
Computer: Apple IIgs with 1.5MB RAM
Favorite Drink: Squirt
Favorite Software: Leisure Suit Larry in the Land of the Lounge Lizards
Service to WAP: Chairman of IIgs SIG and Tutorial Instructor

Photo by Peter Combes

* March 1988 *

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Apple II +,e,c Beginning Tutorial #1 7:30-9PM Office	2 Mac Progmrs. 7:30 PM Office; dPub SIG 7:30 PM PEPCO	3 GameSIG 7:30 PM Office	4	5 Introduction to HyperTalk Tutorial - Office 9:00 AM - Noon
6 Deadline for Journal articles is Tuesday March 8 -->	7 PI-SIG 7:30 PM Office	8 Apple II +,e,c Beginning Tutorial #2 7:30-9PM Office	9 Executive Board 7:30 PM Office	10 Stock SIG 8:00 PM Office	11	12 HyperTalk Adv. Problem Solving - Office 9:00 AM - Noon
13	14 Introduction to Macintosh Tutorial - Office 7:15 - 10 PM	15 Apple II Beginning Tutorial #3 (AW) 7:30-9PM Office	16 Introduction to Word 3.01 Tutorial - Office 7:30 - 9:30 PM	17 Pascal SIG 8:00 PM Office	18	19 Excel: Charting & Database Tutorial - Office 9:00 AM - Noon
20	21 Intermediate Mac Skills Tutorial - Office 7:15 - 10 PM	22 Mutual Fund Sub Group (Stock SIG) 8 PM Office	23 Apple /// SIG 7:30 PM Office	24	25	26 WAP Meeting 9:00 AM Georgetown U. Pre-Clinical Sci.
27	28 Productivity on Your Mac Tutorial - Office 7:15 - 10 PM	29	30	31		

* April 1988 *

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3 Deadline for Journal articles is Thursday April 7	4 PI-SIG 7:30 PM Office	5 Apple IIgs Beginning Tutorial #1 7:30-9PM Office	6 Mac Progmrs. 7:30 PM Office; dPub SIG 7:30 PM PEPCO	7 GameSIG 7:30 PM Office	8	9 Introduction to ReadySetGo 4.0 9-12 AM Office
10	11 Introduction to Macintosh Tutorial - Office 7:15 - 10 PM	12 Apple IIgs Beginning Tutorial #2 7:30-9PM Office	13 Executive Board 7:30 PM Office	14 Stock SIG 8:00 PM Office	15	16
17	18 Intermediate Mac Skills Tutorial - Office 7:15 - 10 PM	19 Apple IIgs Beginning Tutorial #3 7:30-9PM Office	20 Excel SIG Meeting 7:15 PM Office	21 Pascal SIG 8:00 PM Office	22	23 WAP Meeting 9:00 AM Georgetown U. Pre-Clinical Sci.
24	25 Productivity on Your Mac Tutorial - Office 7:15 - 10 PM	26 Mutual Fund Sub Group (Stock SIG) 8 PM Office	27 Apple /// SIG 7:30 PM Office	28	29	30

SIGNEWS

Apple IIGS SIG is currently meeting on the Monday after the regular WAP meeting. See IIGS Stuff elsewhere in this Journal or call Ted Meyer at (703) 893-6845 eves., 7 - 8 PM.

Apple /// SIG meets on the 4th Wednesday at 7:30 PM in the WAP office. The next meeting is March 23.

AppleWorks SIG offers two meeting options: 8:00AM before the regular WAP meeting and 12 Noon after the meeting. Attend either or both.

AV-SIG is the new SIG for arts and video. For information call Jay Williams at 728-1009.

dPub SIG (Desktop Publishing) meets on the 1st Wednesday of the month at 7:30 PM in the PEPCO Auditorium at 1900 Penn. Ave., NW. The next meeting is on March 2.

EDSIG is the education special interest group. For information, call Peter Combes at 251-6369.

Fed(eral) SIG - Call the Chairman for details.

GameSIG meets on the 1st Thursday of the month at the office, 7:30 PM. The next meeting will be on March 3.

HyperCard SIG meets after the WAP monthly meeting.

Mac Programmers meet on the 1st Wednesday of the month at the office, 7:30 PM. Next meeting is March 2.

MusicSIG meets on the 2nd Saturday of each month. Call Bill Bittle (301) 236-9898 for details.

PIG, the Pascal Interest Group, meets on the 3rd Thursday of each month at 8:00 PM at the office. The next meeting will be on March 17.

PI-SIG (Program Interface) meets on the 1st Monday of the month, 7:30 PM at the office. Next meeting is March 7.

Stock SIG meetings are on the second Thursday of each month at the office, 8 PM. The next meeting is March 10.

Telecom SIG - Call the Chairman for details.

WAP HOTLINE For Use by WAP Members Only

Have a problem? The following club members have agreed to help other members. PLEASE, keep in mind that the people listed are VOLUNTEERS. Respect all telephone restrictions, where listed, and no calls after 10:00 PM except where indicated. Users of the Hotline users are reminded that calls regarding commercial software packages should be limited to those you have purchased. Please do not call about copied software for which you have no documentation. Telephone numbers are home phones unless otherwise specified. When requests are made to return calls, long distance will be collect.

Apple II

General	Dave Harvey	(703) 578-4621
	Robert Martin	(301) 498-6074
Accounting Packages		
Accountant(Dec.Sup.)	Mark Pankin	(703) 524-0937
BPI Programs	Jaxon Brown	(301) 350-3283
BPI & Howardsoft (Tax)	Otis Greever	(615) 638-1525
Dollars & $ense	Barry Fox	(717) 652-4328
Home Accountant	Leon Raesly	(301) 439-1799
Howardsoft (Tax)	Leon Raesly	(301) 439-1799
APPLE SSC	Bernie Benson	(301) 951-5294
AppleWorks	Ken DeVito	(703) 960-0787
	Bob Martz	(301) 795-5689
	Ray Settle	(301) 647-9192
	Charles Baumgardner	(703) 538-2316
	Ken Black	(703) 369-3366
AppleWorks Data Base	Morgan Jopling	(301) 261-3886
Communications Packages		
ASCII Express	Dave Harvey	(703) 578-4621
Talk is Cheap/Pt. to Pt.	Barry Fox	(717) 652-4328
XTALK CP/M Comm.	Bernie Benson	(301) 951-5294
Data Bases		
dBase II	Paul Bublitz	(301) 261-4124
	John Staples	(703) 255-6955
dBase II & III	Ray Hobbs (BBS)	(301) 490-7484
	Jim Kellock (day)	(301) 986-9522
	Leon Raesly	(301) 439-1799
Data Perfect	Leon Raesly	(301) 439-1799
PFS	Bill Etue	(703) 620-2103
Profiler 3.0	Barry Fox	(717) 652-4328
Dvorak Keyboard	Ginny Spevak	(202) 362-3887
Hard Disks		
CMC (not CMS)	Barry Fox	(717) 652-4328
Corvus & Omninet	Tom Vier (BBS)	(301) 986-8085
Corvus	Leon Raesly	(301) 439-1799
Sider	Jaxon Brown	(301) 350-3283
	Otis Greever	(615) 638-1525
Languages (A=Applesoft, I=Integer, P=Pascal, M=Machine)		
A	Louis Biggie	(301) 967-3977
A	Peter Combes	(301) 251-6369
A	Leon Raesly	(301) 439-1799
A,I,M	John Love	(703) 569-2294
M	Ray Hobbs (BBS)	(301) 490-7484
P	Michael Hartman	(301) 445-1583
Forth	Bruce Field	(301) 340-7038
Operating Systems		
Apple DOS	Adam Robie	(301) 460-6537
CP/M	Art Wilson	(301) 774-8043
ProDOS	Leon Raesly	(301) 439-1799
	John Love	(703) 569-2294
	Eric Rall	(301) 596-0004
ProDOS 8 and 16	Barry Fox	(717) 652-4328
Print Shop	Thomas O'Hagan	(301) 593-9683
Newsroom	Carol Thomas	(301) 424-1266
Spreadsheets	Walt Francis	(202) 966-5742
Sprdsht.2.0(MagicCalc)	Leon Raesly	(301) 439-1799
SuperCalc Ver. 2.0	Leon Raesly	(301) 430-1799
	Terry Prudden	(301) 933-3065
Utilities: ProSel	Barry Fox	(717) 652-4328
Word Processors	Walt Francis	(202) 966-5742
Apple Writer II	Dianne Lorenz	(301) 530-7881
	Leon Raesly	(301) 439-1799
Gutenberg	Harris Silverstone	(301) 435-3582
Letter & Simply Perfect	Leon Raesly	(301) 439-1799
Magic Window and II	Joyce C. Little	(301) 321-2989
Mouse Write	Barry Fox	(717) 652-4328
ScreenWriter II	Peter Combes	(301) 251-6369
	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
	Dana Riel	(301) 350-3283

Apple IIgs

General	Barry Fox	(717) 652-4328
General/Finder	David Todd *	(301) 228-0237
General/Monitor	Neil Walter	(301) 946-4526
General/Paintworks Plus	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) 652-4328
Multiscribe GS	Ray Settle	(301) 647-9192
Newsroom/Pinpoint	Chuck Ward (til 9 pm)	(703) 830-3720
Telecommunications	Dale Smith	(301) 762-5158
& Utilities: ProSel	Barry Fox	(717) 652-4328
VIP-Pro/Multiscribe	Jim Frison	(703) 525-9395
816 Paint/Writr's Ch. El.	Andy Gavin	(703) 734-3049

Macintosh

General	Donald Schmitt	(717) 334-3265
Art and Video	Jay Williams	(301) 9398910
Data Bases		
dBase Mac	John Trotter	(301) 340-3278
Helix	Jim Berry *	(703) 662-0640
	Harvey Levine	(301) 299-9380
MacLion	Mark Miani	(202) 333-0098
MS-File	John Love	(703) 569-2294
Omnis 3 and 3+	Paul Tabler	(703) 278-8657
	Jeff Alpher *	(301) 630-2036
OverVue	J.T.(Tom) DeMay Jr.	(301) 461-1798
	Tom Parrish	(301) 654-8784
Desktop Publishing		
& Graphics	Jay Rohr	(301) 655-0875
PageMaker	Kate Burton *	(301) 621-6351
	Eleanor Sontag	(301) 251-0695
ReadySetGo	Jim Graham	(703) 370-5737
	Marty Milrod	(301) 464-5981
Graphics	Bill Baldridge	(301) 779-8271
Full Paint & SuperPaint	Bill Baldridge	(301) 779-8271
HyperCard	John Love	(703) 569-2294
	Holger Sommer	(301) 474-3467
	Rick Chapman	(301) 989-9708
Inside Mac	Jon Hardis	(301) 330-1422
MacDraft	Bob Wilbur	(703) 379-2960
MacDraw	Tom Berilla	(301) 434-3256
	Tom Parrish	(301) 654-8784
	John Spencer	(301) 730-1084
MacMoney	Chuck Sicard	(301) 963-2879
MacProject	Jay Lucas	(703) 751-3332
MacTerminal	Jon Hardis	(301) 330-1422
Magic	Joyce C. Little	(301) 321-2989
Power Point	Herb Schwartz	(301) 983-0534
Programming, MS-BASIC	John Love	(703) 569-2294
Spreadsheets	David Morganstein	(301) 972-4263
& Graphics	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 (BBS)	(301) 490-7484
Telecommunications	Eric Rall	(301) 596-0004
ThinkTank/More	Jim Graham	(703) 370-5737
	Tom Parrish	(301) 654-8784
Word	Marty Milrod	(301) 464-5981
WriteNow	Bill Baldridge	(301) 779-8271

General

Franklin & Laser 128	Bob Martz	(301) 795-5689
Games - Apple II	Charles Don Hall	(301) 864-2715
Games - Mac	Perri Mongan	(301) 572-5459
IBM	Ray Hobbs (BBS)	(301) 490-7484
	Leon Raesly	(301) 439-1799
Lotus 1-2-3	Walt Francis	(202) 966-5742
& MS BASIC	Ray Hobbs (BBS)	(301) 490-7484
Math/OR Applns.	Mark Pankin	(703) 524-0937
Modems		
Anchr Mrk 12&BIZ Comp	Jeremy Parker	(301) 229-2578
Hayes Smartmodem	Bernie Benson	(301) 951-5294
Smartcom I	Harmon Pritchard	(301) 972-4667
Music Systems	Ray Hobbs (BBS)	(301) 490-7484
Printers - General	Walt Francis	(202) 966-5742
	Leon Raesly	(301) 439-1799
MX-80	Jeff Dillon	(301) 662-2070
Okidata	Michael Proffitt	(301) 874-2270
Stat. Packages	David Morganstein	(301) 972-4263
Stock Market	Robert Wood	(703) 893-9591
TCS	Eric Rall	(301) 596-0004
Time-Sharing	Dave Harvey	(703) 578-5621

* Calls until midnight are ok.

APPLEWORKS TAX TEMPLATE: MOD 1 TO REVISION 1

by Paul Koskos

It has come to our attention that those of you not over 65, and not blind, would not get a correct standard deduction in Form 1040, line 32a, as it is presently constituted.

If you find yourself in that situation, you can make the following changes in four formulas found in column I of your template. The changes are underlined below:

(IRS87FORM1: ROWS 465 - 468)
(IRS87.A: ROWS 342 - 345)
COL 1

---

1. @IF(G407=1,@CHOOSE(F469+1,2540,3750,4500),0)
2. @IF(@OR(G407=2,G407=5),@CHOOSE(F469 +1,3760,5600,6200,6800,7400),0)
3. @IF(G407=3,@CHOOSE(F469+1,1880,3100,3700, 4300,4900),0)
4. @IF(G407=4,@CHOOSE(F469+1,2540,5150,5900),0)

To make the EDIT changes:

1. Move cursor to first cell to be edited.
2. Press OPEN-APPLE-U
3. Arrow to first insertion point (underlined)
4. Type in underlined text, press RETURN
5. Cursor to next cell to be edited.
6. Repeat steps 2 thru 6
7. When all four cells have been edited, SAVE file to DISK

If you itemize deductions, or if you (or your spouse in a joint return) are over 65 or blind, these modifications are unnecessary.

ANNAPOLIS APPLE SLICE NEWS

by Katherine M. Cave

At the January meeting of the Annapolis Apple Slice, a new suggestion was implemented. Three-by-five cards were handed out to attendees, to be used for any questions or information required during the meeting. These were collected at the end of the meeting and discussed.

WAP Journal submissions were encouraged by offering a prize to one of those of those writing an article. The names would be placed in a hat, and each six months a discount at a local computer store would be the prize for the lucky name drawn. Ray Settle and Barry Conner offered to write articles and will send them to the Secretary or President for submission to WAP.

President Craig Contardi announced the new BABBS system, compliments of Clinton Computer. A new name for the system will be chosen at the February meeting. Also, a sub-board system will be set up for student participation with members of AAS, who will answer questions on school subjects. The new name of the sub-board will be named at the February meeting, but suggestions came in such as "Dear Babby" or "Dear Babbs". Code names will be used instead of members' actual names. Preferential treatment will be given to Annapolis Apple Slice members for access to the bulletin board. The phone number is (301) 974-0221.

A motion was made, seconded and passed that the student membership dues be reduced to $5 per year.

The subject of the program was telecommunications in the area. Grayson Merrill gave a very thorough talk on telecomputing in Anne Arundel County, and Ray Settle told about telecomputing in Baltimore County. The program for February is again scheduled to be on telecommunications—this time to cover "User Participation: How, When, Where and Why." The March program is scheduled to be on taxes. All meetings are held at Anne Arundel Community College in the lecture room of Careers Hall on the second Saturday of the month from 10:00AM to Noon.

COMMERCIAL CLASSIFIEDS

FOR SALE: Analog interface and control for 8 channels of input and output, by Omega Engineering, for Apple II. Thermocouples included. Originally $1200—now $450. Call (301) 694-0681.

"The Mouse Droppings Second Book of Macintosh Hints." 110 pages, spiral binding, all new hints. Large index ALSO includes every hint in the original Mouse Droppings Hint Book. Either volume, $8.95 postpaid. Order from author, Philip C. Russell, 1420 SW Crest Circle, Waldport, OR 97394.

Authorized Applied Engineering Dealer

Satellite Scientific

All Modems Hayes Compatible

Practical Peripherals 2400 Modem	$190
Avatex 1200HC Modem	$125
New - Avatex 1200e	$90
Orange Micro C/Mac/GS (Any parallel becomes Imagewriter Compatible)	$75
Panasonic 1080i Printer	$180
Applied Engineering GSRAM 1.5 Meg	$call
Cables	$18

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

Call for all your computer software and hardware needs

WORDPERFECT 1.1 (APPLE II): A Review

by Bob Oringel

The question is sometimes raised, "Why do I need anything more complex in the way of a word processor, than the word processing module of AppleWorks?" "Well", the response comes, "it depends very much on what you are writing." And of course, this response sounds so terribly elitist. But indeed, if your writing comes close to being a professional endeavor, you need as many contextual features in your word processing program as you can get, without resorting to add-ons. Add-ons, such as separate macro programs and separate spell checkers are often very necessary, but they become available to you at additional cost, and more importantly, you must often spend additional valuable time leaving the word processing program, booting and using the add-on, and then re-booting and returning to the word processor, unless you are working from a RAM-disk.

WordPerfect is a word processor which has many of—but unfortunately not all—the peripheral facilities that the professional writing user might want, like perhaps a thesaurus or an index-maker.

WordPerfect is a classic program, which can be found and appreciated in the MS-DOS world as well. It was translated and adapted from the IBM and Data General versions for the Apple IIe and IIc. It comes to the user on six unprotected disk sides, with a well written, bound-and-boxed loose leaf manual. The documentation contains a thorough tutorial, and there is a stick-on keyboard template which is to be mounted above the top row of keys of the IIc or IIe. The template labels most of WordPerfect's functions. These functions can be performed by using the Open Apple or Closed Apple keys in conjunction with another key. The fact that the template was deemed necessary points up another consideration of WordPerfect. It has a lot of commands, and it therefore is not the easiest program to learn. The other side of that coin, is that once learned, it stays with you, like riding a bike.

Let us take a look at some of WordPerfect's features. It begins with a setup procedure where the user sets date and time, and indicates his printer(s), slot, and interface. It continues with Binding Width, which shifts text to the right on odd numbered pages, and to the left on even, allowing for holes or other binding on two-sided pages; a feature named Block, which when ON, permits a number of print options; cut and paste, printer-font change, footnoting, super and sub-scripting, page formatting, help screens throughout, mail merge, automatic page numbering, macros and macro chaining, statistical typing, including equations, and a built-in spell checker.

WordPerfect is a comprehensive word processor indeed. It is a product of WordPerfect Corporation, of Orem, Utah.

(Ed. Note: Also see Walt Francis' review of Word Perfect in the Dec. 1985 issue of the WAP Journal .)

PATCHMANIA (APPLE II): A Review

by Bob Oringel

For those many of us who use AppleWorks daily, a tremendous amount of sincere thanks should be given to programmer Randy Brandt. Randy has put together an assortment of Patches to AppleWorks TWO, known collectively as **PatchMania**. The collection comes on an unprotected disk, with six pages of documentation in a text file.

The patches are simplicity themselves, to install on a backup copy of AppleWorks, and they include: one, to expand the number of file copies that you can print, from the usual limit of 9, to 255, with credit to Alan Bird for its creation; a group of four patches which gives you a choice of: (1) swaps the blinking underscore, and the inverse block cursors, (2) makes AppleWorks use the IIe routines instead of the special 16 bit routines on the IIgs (3) eliminates the message and keystroke, "Press Space bar to continue", (4) eliminates the message and input, "enter today's date", which is the second screen on the Program disk. This one caused my //e to beep frantically, and it froze the program in mid-stride. Watch out for this one!

Next is a group of patches for expanded memory card users, which skips pre-loading of AppleWorks modules entirely, or permits a pre-load of only one of the modules. If you are running AppleWorks from a RAMDisk, cancel pre-load. It wastes time at bootup, says Brandt; a Word Processor file load patch which returns you to the exact spot where you left off when the file was last saved; a file order patch, which changes the order in which AppleWorks displays its files, to save you time; a TimeOut FileMaster patch which repeats the previous patch on FileMaster (if you have it); a fix for the Control-@ AppleWorks bug; a patch which cancels the "Yes/No" question screens, and always answers Yes; and finally, as if the above were not enough for $20, a patch which changes the AppleWorks error buzz to a beep. This is a disk worth owning, if you are an AppleWorks TWO user.

PatchMania is available by mail from Jem Software, at PO Box 20920, El Cajon, CA 92021.

HARD DRIVES 'IZ' ME

Sale!

Apple //e, IIgs & Mac	
20 MEG Sider	$525
40 MEG Sider	795
Back-up Tape Drive	450
40 MEG/w integral Tape	1295
60 MEG CMS	895

//c only
ProAPP 10 or 20 MEG
Special Price - $50 above manuf. cost

All ProDOS or CP/M Conversion for Siders $45.
(All above plus $12 shipping)
PLS, Inc.
(301) 439-1799 (ask for Lee Raesly)

Apple Discounts
from VF Associates

SPECIAL OF THE MONTH:
FINGERPRINT AUTOMATIC GRAPHICS PARALLEL PRINTER CARD:

$59.00

MACINTOSH CORNER

- DS/DD DISKS, BOX OF 10 .. **$12.00**
- DS/DD DISKS, CASE OF 50 . **$55.00**
- 10 DISK STORAGE BOX **$2.50**
- 36 DISK STORAGE BOX **$9.00**
- IMAGEWRITER CABLE **$19.00**
- MODEM CABLE **$19.00**
- IMAGEWRITER RIBBON **$9.00**
- MAC+ TO MAC CONVERSION CABLE **$7.00**

5¼ 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 ..... **$2.25 EACH**
  5 for $10.00
  (SPECIFY COLOR CHOICES: BEIGE, BLACK, BLUE, GREEN, GREY, RED, YELLOW)
- 75 FLIP TOP DISK CASE ... **$11.00**

PRINTERS

- CITIZEN 120-D ..... **$179.00** ⊗
- STAR NX-1000 ..... **$199.00**
- PANASONIC 1080i/2 ..... **$209.00** *
- PANASONIC 1091i/2 ..... **$239.00** *
- CITIZEN MSP-15e, WIDE ... **$399.00**
- PANASONIC P3131, LQ .... **$349.00** *
- NEC P6, LQ **$495.00**

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**
- SWITCH BOX, 2 WAY **$39.00**
- SWITCH BOX, 4 WAY **$59.00**

DISK DRIVES

- 5-1/4" FLOPPY DRIVE ..... **$95.00** *
- CONTROLLER **$49.00**

CALL FOR OUR FREE CATALOG!

MONITORS

- MED. RES COMPOSITE **$89.00**
- HI RES COMPOSITE/GREEN . **$129.00**
- HI RES COMPOSITE/AMBER . **$139.00**
- RGB COLOR **$269.00**

MODEMS

- 300/1200 EXT. **$95.00**
- 300/1200/2400 EXT. **$189.00**

SOUND & VIDEO DEVICES

- MUSIC SYNTHESIZER **$149.00**
- COMPUTEREYES **$119.00**

CHIPS

- EPROMS 2716/2732/2764 .... **$6.00**
- EPROMS 27128/27256 ..... **$8.00**
- 64K, SET OF 8 ..... **$36.00** *
- 256K, SET OF 8 ..... **$72.00** *

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**
- GLARE FILTER **$29.00**
- MOBILE COMPUTER STAND . **$139.00** ⊗

COMPATIBLE COMPUTERS

- LASER 128 ..... **$395.00**
- LASER 128EX **$475.00**
- VF PC, APPLE II & IBM COMPATIBLE **$909.00**
- VF-PC, IBM COMPATIBLE .. **$560.00**
- VF-AT, IBM COMPATIBLE .. **$920.00**
- VF-386, IBM COMPATIBLE . **$2060.00**

GAME I/O DEVICES

- STANDARD JOYSTICK **$29.00**
- CH MACH III JOYSTICK **$39.00**
- I/O PORT EXPANDER **$25.00**
- 9-16 OR 16-9 ADAPTER **$9.00**
- MOUSE **$75.00**

SLOT EXPANSION

- MULTI-RAM, 64K MEMORY . **$119.00**
- 320K MEMORY **$150.00**
- 512K MEMORY **$182.00**
- RGB OPTION ON MULTI-RAM ..... **ADD $40.00**
- SERI-ALL **$99.00**
- ACCELERATOR **$179.00**
- EDD 4 PLUS EXACT BIT COPY BOARD **$69.00**
- MULTIPLE-SLOT CHASSIS . **$149.00**
- SINGLE-SLOT EXTENDER .. **$29.00**
- QUICK-LOADER PROM BD . **$149.00**
- PROM BURNER **$119.00**

SPECIAL PERIPHERALS

- COOLING FAN WITH SURGE PROTECT **$39.00**
- POWER SUPPLY **$69.00**
- NO SLOT CLOCK **$39.00**
- SHIFT KEY MOD KIT **$8.00**
- RF MODULATOR **$39.00**

APPLE SOFTWARE

- COPY II + ... **$29.00**
- ESSENTIAL DATA DUPLICATOR **$25.00**
- PLUSWORKS (RUNS APPLEWORKS ON II+) **$19.00**
- "WRITE CHOICE" WORD PROCESSOR **$29.00**

APPLE IIc CORNER

- SECOND DISK DR FOR IIc .. **$95.00**
- HOTLINK TO PARALLEL PRINTER **$55.00**
- GRAPPLER C **$95.00**
- PRINTER OR MODEM CABLE **$20.00**
- DISK DRIVE CABLE ADAPTER **$14.00**
- 9-16 GAME I/O ADAPTER **$9.00**
- MULTI-RAM CX, 256K **$239.00**
- MULTI-RAM CX, 512K **$270.00**

*** DENOTES NEW PRICE**
⊗ DENOTES NEW ITEM

LONG DISTANCE:
The new VF toll-free ordering number is now operating. Call **800-666-STAR. For local number, see below.**

UPS SHIPPING
$4.00 per order plus **$6.00** per printer or monitor. Computers: **$30.00**

PLEASE NOTE:
Add **10% per 30 days** for purchase orders. **Prices changes often. Price on day of purchase applies**

VF ASSOCIATES

8231 Woodmont Avenue, Bethesda, MD 20814 ☎ (301) 652-4232
Bulletin Board Service (Modem) Bethesda ☎ (301) 320-6098

STORE HOURS: Monday through Thursday: 12 noon - 8 p.m.
Friday: 12 noon - 6 p.m. ■ Saturday: 11 a.m. - 5 p.m.

Q & A

by Robert C. Platt & Bruce F. Field

Mailbag. Cyrus Roton, Editor of the Ridgecrest Apple User Group Newsletter, responded to our comments regarding the use of hi-res graphics page 2. Cyrus correctly points out that if you use HGR to initialize hi-res page 2, it will clear out the whole page, removing any background or other non-animated objects. Instead, he recommends preceding draws on hi-res page 1 with POKE 230,32 and preceding draws on hi-res page 1 with POKE 230,64. These POKEs allow you to draw on the indicated page without changing which page is currently displayed for the user. The "soft switches" at 49236 and 49237 can be POKEd to switch the viewing page after the drawing is completed.

Errata. Last month, we listed a program to turn on shadowing on a IIgs after running Appleworks 2.0. Unfornately, one number was left off the data statement. Here is the complete program:

```
10 REM fix for IIgs shadow shutdown
20 FOR I=0 TO 10: READ X: POKE 768+I,X:NEXT I
30 DATA 173, 53, 192, 41, 160, 9, 8, 141, 53, 192, 96
40 CALL 768
50 END
```

I regret any inconvenience which the missing 160 may have caused.

Q. How do I list my program to the printer in IIgs BASIC?

A. You can use the following immediate mode commands (at the] prompt.)

```
OPEN ".PRINTER" FOR OUTPUT AS#1
OUTPUT #1: LIST: OUTPUT #0
CLOSE #1
```

Q. What is the most sneaky and subtle problem in converting such Applesoft programs?

A. Applesoft BASIC assumes that all numbers including constants will be floating point numbers unless you specify an integer variable (by ending a variable name with a %.) However, in GSBASIC, if a numeric constant does not contain a decimal point, it is treated as an integer. As a result, you may be truncating fractions when you don't intend it. For example, the Applesoft statement:

```
10 X=INT(2+3*RND(1))
```

will generate a range of random numbers between 2 and 5. However, in GSBASIC, X will always be 2. The correct translation should be:

```
10 X=INT(2.0+3.0*RND(1)) .
```

Q. On the Apple IIgs, how do you install fonts?

A. Place a copy of the font file in the FONTS folder which in turn is in the SYSTEM folder of your startup disk. You can obtain additional Apple IIgs fonts from your local user group. A program called "Font Munger" runs on the Macintosh and converts Mac fonts into IIgs format. As a result, most of the common Mac fonts are now available on the IIgs. Note that although your FONTS folder can hold a very large number of font files, some applications have limits on the number of fonts which they will display on their Font menus.

Q. My IIgs would not boot properly when I installed a RAM card in Slot 7. When I removed my RAM card, the IIgs booted correctly from the disk in Slot 5. Also, when I set the Control Panel to boot from Slot 5, the machine will function correctly with the card installed. What's happening?

A. Before the IIgs, all of the data necessary for starting your computer had to be stored in the ROM of the earlier Apple II's. Because these machines could not "remember" customizing information after the power was turned-off, a convention was necessary to determine the location of the startup disk. The process for searching for a startup disk is called a "slot scan." On the old II's, the ROM would start in slot 7 and work down to lower numbered slots until it found a disk drive control card. It would then try to read startup information from that drive. If no disk was in that drive, the drive would continue spinning until your pressed RESET.

On the IIgs, your selection of a startup device is stored in battery-powered RAM and is remembered between startups. This is set by the "Startup Slot" option on the Slots menu of the control panel. If you select SCAN (the default setting), then the ROM will awake peripheral cards in the process of looking for a startup disk. You have discovered that specifying the intended slot instead of using the SCAN will avoid cards in high numbered slots from interfering with the startup process. Designating RAM CARD as the Startup Slot will use the RAM card which you created from the Control Panel's RAM disk as your startup disk. It will not look for RAM cards in your peripheral slots. If you designate the RAM disk as the Startup Slot, remember to change the control panel to a different setting before you turn off your IIgs.

Q. What is a "stack?"

A. A stack is a type of data structure widely used in computers. It is like the stack of trays in a cafeteria line—the last item you placed on the stack will be the next item to be pulled off. The microprocessors used in the Apple II—the 6502 and the 65C816—both have a special stack register to keep track of the location of the top of a stack of information used by all programs on the Apple II. Everytime your Applesoft program calls a subroutine or your IIgs calls a ROM routine, information is left on the stack for later retrieval and use. If too much information is left on the stack before being retrieved, you can get a STACK OVERFLOW error message.

Q. How do I convert numbers between decimal and hexadecimal on the IIgs?

A. You can use the Monitor. To enter the monitor type CALL -151 at the Applesoft] prompt. You will get a * prompt character. To convert from hexademical to decimal, type the hex number followed by an equal sign and then press return.

contd.

For example,

*FF= <return>

The Monitor will respond with 255. To convert from decimal to hex, type an equal sign followed by the number. For example,

*=255 <return>

The Monitor will respond with FF. To return to Applesoft, type 3D0G and return. If you have IIgs BASIC, you can use two built-in functions. For example,

```
10 PRINT TEN("FF")
```

will convert from hex to decimal, and

```
10 PRINT HEX$(255)
```

will convert decimal to hex.

Q. I have an Apple //e without a clock card. How can I get ProDOS to store dates in my disk directories.

A. The best method is to include an Applesoft program on each startup disk which will prompt the user for the date and then set it for later use by ProDOS. (On computers with clock cards, ProDOS automatically finds and stores the date.) From the Applesoft prompt, type NEW and then the following program. After entering the program, save it with the filename STARTUP. This will cause ProDOS to run it whenever you boot a startup disk.

```
10 REM *** SET DATE
20 PRINT "SET PRODOS DATE ROUTINE"
30 INPUT "DAY>";DY
40 IF DY<1 OR DY>31 THEN 30
50 INPUT "MONTH>";MO
60 IF MO<1 OR MO>12 THEN 50
70 INPUT "YEAR>";YR
80 IF YR<88 OR YR>99 THEN 70
90 POKE 49041,2*YR+(MO>7)
100 POKE 49040,DY+32*(MO-8*(MO>7))
110 PRINT CHR$(4);"CAT"
120 END
```

Q. I'm using ProDOS version 1.1.1 on a //e with a Thunderclock and it appears to be storing 1988 dates on my disks as 1982. What is wrong?

A. The Thunderclock does not keep track of the current year. Hence, the ProDOS date routines will assign a year based upon a comparison of the day of the week with the date. This method will only work for the seven years ending in 1987. The best solution is to upgrade to ProDOS 8, version 1.4.

Q. A few months ago, you printed a table of machine identification bytes which will allow a program to tell which type of computer is being used. I don't know assembly language, so please tell me how to use this information from Applesoft?

A. Using Applesoft, you can determine the identity of the machine except for telling the difference between an enhanced //e or a IIgs. (A short assembly routine is needed for this last step.)

```
10 GOSUB 100: END
100 I=PEEK(64435)
110 IF I=56 THEN PRINT "II":RETURN
120 IF I=234 THEN GOTO 220
130 IF I<>6 THEN PRINT "ERROR":RETURN
140 I=PEEK(64448)
150 IF I=234 THEN PRINT "classic //e":RETURN
160 IF I=224 THEN PRINT "enhanced //e or
    IIgs":RETURN
170 IF I<>0 THEN PRINT "ERROR":RETURN
180 I=PEEK(64447)
190 IF I=0 THEN PRINT "//c (3.5 ROM)":RETURN
200 IF I=3 THEN PRINT "//c (mem. exp.)":RETURN
210 PRINT "classic //c":RETURN
220 IF PEEK(64286)=173 THEN PRINT
    "II+":RETURN
230 PRINT "/// EMULATION":RETURN
```

Photo by Peter Combes

Tom Warrick and Ray Hobbs discuss Apple II meeting

NEW!

APPLE COMPATIBLE PRODUCTS

LOW FACTORY DIRECT PRICES!

DEALERS CALL!
UNIV & SCHOOL P.O.'s WELCOME!

ONE MEG RAM BOARDS?
WE'VE GOT EM!
THE Super Expanders!

S.E. IIgs	OK Now	$49
S.E. IIe	* OK Now	$59
S.E. IIc	* OK 1/88	$69
S.E. II+	* OK 3/88	$79

Above with 256K =
Above with 512K = CALL
Above with 1MEG =

* FREE Appleworks RAM Expansion Software!

QUIET COOLING FANS!

IIgs No Audio Noise	$25
II+/e w/Surge Protect	$27

OTHER PERIPHERALS!

64K/80 Column Bd	IIe	$35
Super 64K/80 Col	IIe	$49
16K RAM Board	II+	$35
128K RAM Board	II+	$65
80 Column Board	II+	$49
Super Serial Bd	II+/e	$49
Z80 CP/M Board	II+/e	$35
Numeric Keypad	IIe	$35
Graphic Par Bd w/Cble		$45
Joystick	$15 &	$25

A/B SWITCHBOX!
Centronics or Serial $29

ADD ON DISK DRIVE: 5¼
Specify Your Model $119

TWO YEAR WARRANTY ON ALL PRODUCTS
CALL OR WRITE FOR ILLUSTRATED LISTINGS!
ADD $3 Shipping / COD ADD $2 / VISA/MC OKAY 0%

NEXO DISTRIBUTION
914 E. 8TH ST., Suite 109, National City, CA 92050
(619) 474-3328 10AM-6PM Mon-Fri

APPLEFEST

Solutions looking for problems.

If finding answers to all your Apple II® questions has been a problem, AppleFest® '88 at Boston's Hynes Convention Center, May 20-22 is the solution. It's the biggest AppleFest ever! With a full schedule of seminars and conferences, the largest collection of Apple II software ever compiled, and more than 200 companies exhibiting products that answer every Apple II question you can think of. Here's what we mean.

Solutions for Everyone

Which Apple® Is the Right One for You?

Lifelines: A Guide to Support Services for Apple Computer Owners

Telecom I: Having Fun (and Staying Sane) Telecommunicating on the //

Telecom II: Tips for Experienced Telecommunicators

New Graphic Capabilities of the Apple //GS

Composing and Performing Music on the Apple //GS

The New Look of Game Software on the Apple //GS

Managing Home Finances on an Apple // Computer

Programming I: Using the //GS Toolbox

Programming II: For Experts Only

Future Tech: CD-ROM, Voice Synthesis, and Optical Technology

Best Home and Educational Software for the Macintosh®

Dozens of New Product Spotlights

Solutions for Educators

Answers to All of Your Questions About the Apple //GS

Desktop Publishing: Classroom Applications

Apple and the Special Needs Student

Apple's Classroom of Tomorrow: A Glimpse into an Ideal World

Three Favorite Programs by Five Classroom Experts

Science Through Simulations

Creative Classroom Applications of AppleWorks®

Critical Non-Technical Skills for Computing Coordinators

Telecommunications Applications for Classroom Teachers

Educational Computing in Japan, Europe and the USSR

Educational Applications of HyperCard®

Educational Roundtables in Elementary Math and Language Arts, Science, Social Studies, High School Math and Language Arts, Music, Art, and Foreign Languages

Personal Office Solutions

Launching and Operating the Efficient Home Office

AppleWorks I: Introduction to Features and Techniques

AppleWorks II: Sophisticated Applications

An Impartial Review of Apple // Word Processors

The Great Apple // Data Base Showdown

Desktop Publishing Applications

Desktop Presentations

Putting HyperCard to Work in the Personal Office

Solutions From the Top

Keynote Addresses by Apple Chief Operating Officer Del Yocam; Apple co-founder Steve Wozniak; and Boston Computer Society President Jonathan Rotenberg

Educational Keynotes by Tom Snyder, Chairman, Tom Snyder Productions; software designer Adeline Naiman; and Apple Classroom of Tomorrow Director Martin Engel

More In-Depth Solutions

The AppleFest Intensive One-Day Workshops: featuring small classes, top workshop leaders, valuable hand-outs, lunch, and admission to full AppleFest Conference and Exhibits

Workshop I: AppleWorks (versions for beginning and advanced users)

Workshop II: AppleWorks for Educators

Workshop III: Desktop Publishing on the //

Money Saving Solutions

Save $15 or more by pre-registering now (or bring this coupon to the door for a lesser discount).

Make reservations now at AppleFest's Headquarters Hotels for great savings on the regular hotel prices. **Plus:** Give yourself a chance to win a deluxe Weekender Package!

Fly on American Airlines, AppleFest's official carrier, for guaranteed lowest prices to Boston. Call 800-433-1790 and ask for STAR number S-14125.

To pre-register for AppleFest, fill out the coupon, or call

1-800-FEST

(617-860-7100 in MA).

PRE-REGISTRATION COUPON

Name

Affiliation

Address

City/State Zip

Phone

Advance Discount Prices

3-Day Conference	~~$50~~	$35
3-Day Exhibits Only	~~$15~~	$7.50

Family Package (up to four individuals)

3-Day Conference	~~$200~~	$80
3-Day Exhibits Only	~~$60~~	$30

AppleFest Workshops (Includes Conference and Exhibits)

I: AppleWorks	~~$125~~	$95
II. AppleWorks for Eds.	~~$125~~	$95
III: Desktop Publishing	~~$125~~	$95

Please circle desired date of workshop: May 19 May 20 May 21

Hotel Reservations (Circle first choice, and indicate number of rooms desired.)

Back Bay Hilton 800-874-0663 Single ($110) Double ($130)

Copley Plaza 800-225-7654 Single ($120) Double ($140)

Arrival Date: Departure Date:

Payment

Conference and/or Exhibits ☐ Hotel ☐ Both ☐

Check enclosed* ☐ Credit Card (circle one): AMEX MC Visa

Credit Card # Exp. date

Cardholder's Name Amt. of charge

Authorized Signature

*Hotel reservations must be guaranteed by one night's deposit. Visa, MC, AMEX, or check payable to the hotel of your choice. Checks for ticket fees payable to Cambridge Marketing, Inc.

Mail this form by April 15 to Cambridge Marketing, Inc., One Forbes Rd., Lexington, MA 02173, or call 1-800-262-FEST. 617-860-7100 in MA.

APPLEFEST '88 BOSTON

AppleFest is an independent trade show, not affiliated with Apple Computer, Inc. AppleFest, Apple, Macintosh, HyperCard, AppleWorks, and the Apple logo are registered trademarks of Apple Computer, Inc.

IIGS STUFF: BASIC AND SOME BOOKS

by Ted Meyer

This month's article will ramble through a variety of subjects to partially fill you in on various IIGS related items. Next month I'll go back to a tutorial on using the RAM disk from the Finder.

Many of you have heard that my wife and I have been blessed with a handsome baby boy. Thank you for the many congratulations that I received from SIG members. As soon as Teddy starts programming I'll make sure he submits his efforts to the club disk library. As a result of time spent with my family I haven't been writing much. That's why I didn't get articles into the last two journals. I'll try to do better, but no promises.

IIGS SIG Meeting News

There was no meeting report in January. The meeting, which was to be held in McLean's Dolley Madison Library, was cancelled due to the snow. Judging from the number of people who called to ask whether the meeting had been cancelled, I supect it would have been well attended.

February's meeting will be on the 29th, from 7:00 pm to 9:30pm, at Thomas Pyle Intermediate School in Bethesda. From the Beltway, take River Road (Rt 190) east for about 1 mile to Wilson Lane (Rt 188). Turn left on Wilson and go about 1/2 mile to Thomas Pyle on the left. Park in the back. We'll be in the cafeteria. With the extra time we'll be able to demonstrate various software and hardware. Ray Hobbs will be showing the PC Transporter from Applied Engineering for those of you interested in turning your Apple into a PC clone.

March's meeting will be at Kent Gardens Elementary School in McLean, Virginia on March 28th from 7:00 to 9:30pm. From the Beltway, take Dolley Madison Boulevard (Rt 123) east towards McLean. At Great Falls Street turn right. After one block on Great Falls, turn left at the stoplight onto Chain Bridge Road. Follow Chain Bridge to the next stoplight which is Westmoreland Street. Make a right on Westmoreland and go about 7/10ths of a mile to Lumsden Street. Follow Lumsden to Melbourne Avenue. Turn left on Melbourne and you'll see the school parking lot. We're meeting in the cafeteria.

Rumors and Stuff

From all reports the IIGS has been selling very well. More than 200,000 sold so far, and sales are still very brisk. With Apple's CEO, John Sculley, making a strong statement of commitment to the Apple II line at the Applefest in San Francisco, we can be fairly confident that a growing number of developers will be producing software for the IIGS.

Apple's new software development company, Claris, has put multipage ads in various Apple II magazines, pushing the AppleWorks V.2.0. (which has been available for quite a few months.) I've heard rumors about a new IIGS specific version of AppleWorks being worked on, and I've heard rumors that no such program is being developed. I've also heard that the IIGS may get an upgrade this year. (Maybe a faster clock rate or the 65832 chip?) And how about a CD-ROM (Laser Disk) interface? Maybe we'll get something beyond rumors at Applefest in Boston. Applefest will be on May 20th to 22nd. Washington Apple Pi will have a booth there. Let us know if you're going.

A Contest for Members

Several months ago I stated that the new IIGS BASIC was based on Apple II Business BASIC. I mistyped that. It is based on Apple III Business BASIC. David Ottalini, Apple III SIG chairman, pointed this error out to me. He also pointed out that the WAP's Apple III Disk Library contains a lot of Business BASIC programs that might be easily converted for use with IIGS BASIC. I've got a software prize for the donor of the first 3.5 inch disk of converted (or new) useful Apple IIGS BASIC programs to the IIGS Disk Library. David Todd, disk librarian, will judge this contest. Contact him with any submissions.

Books

I thought that I would bring you up to date on the results of my browsing through some book stores. More and more books related to programming the IIGS are becoming available. There is still a decided lack of manuals for a person just beginning computing with the IIGS. One bright spot is that Apple is finally releasing a manual covering the new System Disk and the Finder.

Apple released the *Apple IIGS System Disk User's Guide* earlier this month. This spiral-bound guide covers the Finder, the Systems Utilities, and the Launcher. I've seen it and it's not too bad. Finally, there is a document that begins to answer some of the basic questions that every beginner has about the IIGS and its system software. This guide costs $17 and should be available from Apple dealers. If they don't have it, they should be able to order it as part number A2D6001.

Another book from Apple is the *Programmer's Introduction to the Apple IIGS*, which is presently being distributed by APDA (Apple Programmer's and Developer's Association) in a three-hole punched pre-release version. This book uses the program Hodge Podge as an example of programming a desktop application. Hodge Podge is a program that is available in the club disk library as part of the Apple Demo Program on WAP 2002. A disk is included with the book that contains source code for Hodge Podge in APW (or ORCA/M) assembly language, APW C, and TML Systems Pascal. The book use the source code as a step-through example of programming the IIGS. This isn't too bad for $37.50 if you don't mind the lack of an index, final editorial corrections, and final graphics.

Elementary Assembly Language for the Apple IIGS and the 65816 by William B. Sanders is a beginners guide to assembly language, using BASIC as a starting off point. Included with the book is a listing of the Level II Elementary Assembler, a BASIC program that you can type in that IS an Assembler. This basic program is also available on disk for $15. The book includes tutorials for the Elementary Assembler, Merlin 8/16, and the IIGS Monitor's Mini-assembler. It includes discussions on using the IIGS Toolbox and super hi-res graphics. This book costs $19.95 and is published by Scott, Foresman and Company Computer Books.

Roger Wagner has long been one of the premiere sources of

contd.

valuable information and software for the Apple II series computers. His book *Compute!'s Apple IIGS Machine Language for Beginners* is another good resource for someone starting out in assembly language programming. This book includes tutorials in both Merlin 8/16 and the Apple Programmer's Workshop (APW), as well as lots of useful examples with listings for both assemblers. He also starts off comparing BASIC and Assembly Language and quickly works up to developing a drawing program using various toolbox functions. A complete listing of a ProDOS 16 File Dump Utility is included for the programmer. A disk with examples is available for $15.95. The book is published by Compute! Publications, Inc. and costs $19.95.

Exploring the Apple IIGS by Gary B. Little, published by the Addison-Wesley Publishing Company, Inc. is one of those all-purpose technical references. It cost $22.95 and contains a LOT of information for the technical user. It includes assembly language programming examples with each chapter divided into a "Discussion" and a "Reference" section. Chapters include: Tools, Memory, Events, Windows, DA's, ProDOS, and Sound & Music.

I picked up *Programming the Apple IIGS in C and Assembly Language* by Mark Andrews because it was the first book I've seen (not from Apple or part of a software package) that covers a higher level language for the IIGS. This book is published by Howard W. Sams & Company and costs $18.95. The book specifically uses APW for both its assembly language and C examples and includes an appendix with most, if not all, of the Apple IIGS Toolbox calls. My one complaint is that it doesn't go enough into C. The examples in the book demonstrate the use of super hi-res graphics, the menu manager, windows, dialogs, and file I/O.

Three hardbound texts have recently been released by Addison-Wesley Publishing Company, Inc. for Apple, the *Apple IIGS ProDOS 16 Reference Including the System Loader*, the *Apple IIGS Firmware Reference*, and the *Apple IIGS Hardware Reference*. They are priced at $29.95, $24.95, and $24.95 respectively, and are well worth it if you don't mind some redundancy of information between the books, and are interested in getting down into the nitty-gritty of how your computer works.

The book on ProDOS and the Loader describes the specifics of ProDOS file architecture and does a reasonable job of describing how to make ProDOS 16 calls. The book includes a 3.5 inch disk with a System Exerciser program which allows you to try any of the ProDOS calls and see the result. It also lists system error codes and compares ProDOS 16 other operating systems for the Apple IIs.

The hardware reference book includes schematics for the IIGS motherboard and data sheets for 65816. It also covers: language card select switches, video display specs, soft switches, peeks & pokes, shadow & speed registers, memory maps, sound & oscillator, the Apple Desktop Bus, the I/O ports & clock, expansion slots, and the power supply.

The firmware reference covers the following: ID bytes, entry points, vectors, soft switches, the Monitor and Mini-assembler, the Control Panel, video control, the serial-port, Disk II support, the Smartport, the interrupt-handler, the Apple Desktop Bus, and the mouse.

That's it for this month. Hope to see you at upcoming meetings!

Smart Computer

The Generic PC: An Enduring Classic

by Bud Stolker

These are the glory days for users of IBM-compatible personal computers! Ten million PC systems are now in use. Tens of thousands of free or inexpensive programs are available to release the incredible computing power of today's systems. Features are proliferating even as hardware costs plummet.

With hundreds of PC clones crowding the marketplace, the choice of IBM-compatible computers and programs has never been richer. There's the classic XT and AT series, the luggables and laptops, the 386-based systems, the new PS/2 line.

There's never been a better time to get hands on your own PC. But with the proliferation of options has come some hard buying decisions as well. Should you get a 386, 286, or 8086-based machine? Classic or Micro Channel? Color or monochrome display? HGC, CGA, EGA, or VGA video? Laser, daisywheel or matrix printer? Hard disk or floppy system? How many megabytes of storage is enough, and how many milliseconds should you wait to access it?

We can help you slice through the confusion. For nine years we've been giving clients straight talk on what's hot and what's not in personal computing. We are advocates of cost-effective computing, and we know how to wring maximum effectiveness from inexpensive hardware and software.

That's why clients who buy personal computers from Landmark can count on several things going right with their purchase:

- **The right software.** We equip each system with a mix of software, including word processing, data base management, financial analysis, telecommunications, file management, diagnostics, help screens, and tutorials—all custom-tailored to your needs.
- **Careful assembly and testing.** We build each machine from board-level components and run performance tests on everything. We know how to properly optimize PCs and do that as a matter of course. We install all software so it will work properly with your particular mix of equipment. When you get the machine it is ready to go to work for you.
- **Insured against obsolescence.** New designs and faster, cheaper computers will inevitably replace whatever you buy today. But our machines will last longer than many of the clones on the market. The reason: we take care to stick to proven architecture that can be upgraded easily. Even our XT models will handle up to 32 megabytes of main memory. We guarantee that we can convert any of our systems—even our earliest and smallest model—to a full, no-compromise 32-bit computer. And we offer clients a trade-up policy to further ensure a painless transition.

When you're ready to buy a personal computer, let's chat. We have elegant solutions at surprisingly reasonable prices. Dollar for dollar, there's no better value than a generic computer from Landmark, and we're prepared—and delighted—to show you why.

Landmark Computer Laboratories
Suite 1506
101 South Whiting Street
Alexandria, Virginia 22304

Telephone (703) 370-2242 ☎ SourceMail TCB076

IBM PC, PC XT, PC AT, and Micro Channel are registered trademarks of International Business Machines Corporation.

TWO PASCALS FOR THE IIGS

by Ted Meyer

Two companies have produced Pascal compilers for the IIGS which allow programmers extensive use of the toolbox and other IIGS specific features; TML Systems and The Byte Works.

TML has two versions of their compiler using different "environments" or development systems. They originally released a version that required APW (the Apple Programmer's Workshop, see the article on IIGS assmblers for more info) or ORCA/M, which is a standard "type-in-the-command-and-hit-return" type environment which makes no use of the mouse interface. More recently, TML released their stand-alone (or desktop) system which runs in the 640 resolution window environment with complete mouse control and requires no additional software. In this article we will be talking about the stand-alone system unless otherwise stated.

Byteworks, which essentially wrote the APW system for Apple, has released ORCA/Pascal which can run by itself, with ORCA/M, or with APW. Running by itself, it uses a subset of ORCA/M's or APW's shell command set.

Comparing these two systems is like comparing Apple IIGS's to oranges. The two environments that are provided are very different in their capabilities and functionality. My judgment, after working with the two systems for a few weeks, is that ORCA/Pascal is a more powerful system (especially when used with ORC/M or APW), but that TML is much easier to use. Both Bytework's and TML's systems can make extensive use of the IIGS RAM and ROM based tools. Both can do segmentation, create Classic and New Desk Accessories (CDAs and NDAs), alter the size of the usable stack, and compile units and programs.

However, with ORCA/Pascal you can compile with and without optimization, allowing you to choose the speed of the compilation, and the size and speed of the final code produced. Turning optimization on produces smaller, faster code but takes longer to compile. ORCA/Pascal also allows you to turn range checking and traceback on and off. These functions aid in the debugging process, but make the code less efficient. While debugging and error trapping with ORCA/Pascal, the programmer would normally turn optimization off and the other error checking code on. When a final version of the code is produced, turning optimization on and error checking off will produce the most efficient version of the software. TML Pascal does have various compiler directives which allow some control over error checking. But its control is not as complete as ORCA/Pascal's. I tried compiling some simple iterative routines, using the GetASCIItime tool before and after. For source code that was very similar, TML's executable was faster, but ORCA/Pascal's was smaller. This was not an exhaustive and final test. One of the IIGS SIG members, Dick Fitzhugh, is testing TML Pascal in various ways. We'll provide further reports in upcoming issues.

Within 20 minutes of opening the TML Pascal package I had compiled and run one of the example programs, and had started making minor alterations to it. I have some experience with the "Mac" interface so the desktop environment was a familiar place for me. Once the program is finished booting, you are presented with a screen that looks very familiar to anyone who commonly uses the Finder. Across the top is the familiar menu bar with the colored apple in the left corner for NDAs. Across the menu bar are the menu titles; "File", "Edit", etc. To open an example source code file just choose "Open" from the "File" menu and you are presented with a dialog for choosing files. Opening the file is done the same way as in Multiscribe GS, DeluxePaint II, and most other IIGS specific software. Opening the file presents you with an editor window with the source code displayed for alteration. Once you've opened a file and are in the editor, compiling and running is done by choosing "Compile to Memory" from the "Compile" menu. The program will start compiling, running, and when finished will return to the TML Pascal editor with the source code displayed for further alteration. If bugs are found while compilation is under way, the system displays a dialog and when the mouse is clicked, returns you to the editor with the presumed error selected for you to change.

Newcomers to computing will probably take longer then 20 minutes to start writing and altering code in TML Pascal, but TML's stand alone system takes less time than ORCA. Unless you are already familiar with the APW or ORCA/M shell environment it will take you a while to find your way around. When the ORCA/Pascal disk is booted (It does take less time to boot than TML) you are presented with a copyright notification, a prompt symbol ("#"), and a blinking cursor. Typing "HELP" at this point will result in a screen full of commands appearing. Typing "HELP" and then one of the command names will give you more information about that command. To edit a program you must type "EDIT" followed by the pathname of the file altered. After editing the program, compilation and running is done by typing "RUN" and then the pathname. By adding the "+E" option to this statement you will be returned to the editor with the cursor on the offending line if a bug is found during compilation. For a more complete description of the ORCA environment, read the article on IIGS assemblers mentioned earlier, remembering that ORCA/Pascal has a subset of the shell which is supplied with ORCA/M and APW.

The editors for the two systems are very different. For ORCA the editor is very similar to the AppleWorks editor. An AppleWorks user would probably feel pretty much at home. TML is most similar to MacWrite (or Multiscribe GS). The mouse is used for moving, cutting, copying, and pasting. If you have a strong preference for one environment or another this may influence your opinion of these systems.

For those of you interested in eventually porting software you have developed to other systems or porting source code from other systems to your IIGS, both Pascal systems provide some information about the standards to which they conform. ORCA/Pascal states in its manual that it conforms with level 0 of ISO (International Standards Organization) standard 7185 and has various extensions which are enumerated. TML Pascal lists it's exceptions and extensions to ANS (American National Standard) Pascal as defined by ANSI/IEEE 770X3.97-1983 in the book American National Standard Pascal Computer Programming Language. I have not tried to test these conformances.

contd.

TML Pascal includes a Console I/O unit which is used to emulate routines used in UCSD Pascal such as GotoXY. This allows some level of compatibility with the old Apple Pascal. However, one of TML Pascal's exceptions to the ANS Pascal standard is the lack of the Get and Put procedures. Since these are included in UCSD Pascal some rewrites are sure to result. The TML manual states that version 1.0 of TML Pascal doesn't include interfaces to the Apple Desktop Bus, the SANE, the Integer Math, the Disk Utilities, and the Note Sequencer Tool Sets (the last two because Apple had not yet released them), but promises to very soon, if they haven't already. ORCA appears to support an interface to all the tools that are available, but I have not tested them all.

What You Get

The stand alone version of TML Pascal comes with a 255-page paperbound manual which includes a short tutorial, sections on writing IIGS desktop application, desk accesories, and "plain vanilla" programs, and a description and listings of the toolbox interface. The software comes on a 3.5 inch disk and includes two directories of example programs including: several desk accessories, a paint program, and an interface for using "turtle" graphics.

ORCA/Pascal includes a 286-page spiral bound manual. The manual has a short tutorial and sections on the shell, the editor, programming in the graphics, text, and desktop environment, as well as a section on writing and interfacing to assembly language subroutines. The software comes on two 3.5 inch disks. The first contains the shell, the compiler, the editor, and various utilities. The second disk contains various programming examples such as: various desk accessories, text, graphic, and desktop source code and executables, as well as some "make" files for "exec"ing to demonstrate the sequence of producing an executable. One interesting program on the disk is a version of the "Othello" game in 320 resolution mode with all of its source code. The second disk also contains the source code for the toolbox interface, so you can use the toolbox from Pascal.

Additional Resources

It's usually helpful to find other sources of information on the language and system that we are programming with. Programmers, especially those starting out on a new system, are constantly looking for good sample programs, additional utilities, and sources of helpful hints.

The TML Source Code Library disk, which costs extra (see prices below), includes an excellent set of example programs using each of the Toolbox units in running software. TML is also one of the languages covered in the book, *Programmer's Introduction to the Apple IIGS*. (See the IIGS Stuff article for more information. TML also sells the Speech Tool Kit which can interface to TML Pascal so that your programs could include spoken output. If at some later point you would like to expand your software development skills into other directions TML also has a version of TML Pascal which is compatible with ORCA/M and APW. TML is also releasing a IIGS BASIC compatible interpreter and compiler which will produce routines callable by TML Pascal (and vice-versa).

As I mentioned earlier, ORCA/Pascal can be part of a larger development system. ORCA/M and APW, which are nearly equivalent, can both incorporate ORCA/Pascal. Using APW or ORCA/M, the programmer will be capable of incorporating routines written in Pascal, Assembly Language, and C into one program. The Byte Works is also planning, if they haven't already, to release ORCA/Basic, which will also produce code that will be linkable to ORCA/APW programs.

(**A late note**—The Byte Works will soon release a desktop environment which will be compatible with their ORCA and APW systems. I'll report on this system and upgrade policies as soon as The Byte Works passes the information to me.)

Summary

The two systems are for two types of programmers. If you are a student, taking a Pascal programming for the first time, and want a system which is easy to learn and start off with, or if you're a hobbyist or an occasional programmer just interested in learning some of the basics of Pascal and how to use the IIGS toolbox for your own programs, you might want to try TML Pascal. If you're interested in multi-language and large-scale development, being compatible and linking with other APW developed software, and producing the most efficient code possible, then ORCA/Pascal may be the direction to go. Whichever you choose you'll be getting a powerful and useful programming system.

Requirements, Sources, and Cost

TML is offering WAP members a discount on their products. By ordering more than four units of a particular product we can get the following discounts.

Product	List Price	WAP Price
TML Pascal	$125.00	$85.00
TML Speech Toolkit	$69.00	$45.00
TML Pascal Source Code Libr.	$49.00	$32.00

TML Pascal requires 512K of memory and a 3.5" disk drive for your GS.

The Byte Works has offered their ORCA/Pascal to WAP at a 40% discount. That works out to the following discount schedule.

Product	List Price	WAP Price
ORCA/Pascal	$125.00	$75.00

If you're interested in this discount please contact Ted Meyer weekday evenings between 7 and 8 p.m. at (703) 893-6845. ORCA/Pascal requires 768K RAM and a 3.5" drive.

PASCAL NEWS
by Robert C. Platt

PIG. The Pascal Interest Group meets on the third Thursday of each month. Our January meeting focused on pointers, handles and general memory management problems. A sample program involving the use of handles to manipulate a large data structure was presented, and the group actually helped the presenter solve a few vexing bugs!

We have several interesting presentations planned for the February and March meetings, but will also welcome your questions and programming (or bug) examples.

The PIG is also considering expanding our scope to cover objectoriented languages beyond Pascal and Modula-2. We welcome your input on this idea.

New Products. The new version of MPW and MPW Pascal are now shipping. Dave Neuman has purchased SemperSoft Modula-2 for the Mac and is still evaluating it.

FOUR ASSEMBLERS FOR THE IIGS

by Richard Sanders and Ted Meyer

Software for the IIGS is starting to abound, as Walt Mossberg's article last month testifies. One of the reasons for this is the expanding number of software development systems which are available and the growing number of people using these systems. This article compares four development systems which let you write your own 65816 assembly language programs for the Apple IIGS. These systems are: Apple IIGS Programmer's Workshop (APW) version 1.0 by Apple and The Byte Works, Merlin 8/16 (version 3.41 of Merlin 16) by Roger Wagner Publishing, Micol Macro Assembler (MMA) version 2.01, and ORCA/M version 1.0a, also by The Byte Works.

APW and ORCA/M are complete shells for doing multi-language development on the IIGS and are not designed solely for machine language development. APW was developed for Apple by Byteworks, the company that produced ORCA/M. Since APW and ORCA/M were mostly written by the same company they are almost carbon copies of each other. However, they differ from each other in some minor ways. More on this later. Merlin 8/16 comes with three assemblers, two for 6502 & 65C02 assembly language (on DOS 3.3 and ProDOS 8) and one for the 65816 and 65802. We plan to only compare the latter part, Merlin 16, with the other program packages since we are only looking at the Apple IIGS and not Apple II's in general.

All four program packages have a "shell" type environment which let you catalog disks, load files for editing, save and delete files, and all of those housekeeping functions that you need to have available in order to work. Merlin is somewhat different in that you have to access its commands from a menu in a hierarchical manner similar to earlier versions of Merlin. All have an editor for entering programs. And all have an assembler.

Each of the packages can boot up by themselves. You don't need to boot a system disk or a program launcher or the Finder to get them running. All but APW boot directly into their shell environment. APW boots to the Program Launcher, then requires you to open the APW folder, and then launch APW itself. This is one of the minor differences between APW and ORCA referred to in the second paragraph above. Instructions are included to reconfigure APW so you can boot directly into APW instead of the launcher. The directions are straightforward and easy to understand. All can be loaded to and run from a hard disk.

As we were writing this article we found some discrepancies between what was described in each system's documentation and how the system actually ran. We contacted the manufacturers and were sent updates which we used in our assessment. We have, in each case, the most recent version of each package. All of the companies were helpful and seemed very interested in providing support.

The Shells

Once in the shell, APW, MMA, and ORCA/M have a "help" command. You simply type in HELP, hit return, and bang—there are all the commands available for you to use. APW lists 65 commands, ORCA/M lists 55, and MMA lists 18. Micol Macro's HELP screen includes input parameters and syntax for each command as well as a description. All the information for each command appears on one line. APW/ORCA have so many commands that using the HELP command results in nearly a full screen list of commands. If you want to know more about a command in APW/ORCA, you type HELP and then the name of the command you are interested in. Then you get additional help. In some cases a whole screen full of information appears telling you how to use that one particular command. You don't necessarily need to fumble through the book looking for how to use the command. The information is right there. This is probably the best technique for both developers and for neophytes. The first help screen containing all of the commands reminds the experienced user of the name of the command. The neophyte may need more help which he or she can get by typing in HELP and the command name. There is no "HELP" command for Merlin since most of the information is already on the screen in menu form. However, it would be helpful if Merlin would list and describe the disk commands on line so you don't have to refer to the documentation.

A few words need to be said about the number of commands in APW/ORCA. Some are duplicates. For example, the commands ASSMLG, CMPLG, and RUN all do the same thing as long as you are only using assembly language. So in a sense you only have one command with three names not three distinct commands. If you count only the distinct commands then APW has 59 and ORCA/M has 47, which is still considerably more than MMA or Merlin. But when you look at some of the commands that have additional attributes (or options) the difference becomes more pronounced. Several commands have 5 attributes which you can turn off or on (one has 10). This increases the actual number of ways you can exercise a command which increases the control that you have over what will be done. This is a plus for APW or ORCA/M. It also increases the complexity of the system and might slow the beginner down. MMA has far fewer commands, but this could be considered an advantage. (Remember the KISS principle: Keep It Simple, Stupid.) Merlin accomplishes many of the functions provided for by these APW/ORCA and MMA shell commands with "open-Apple" and "closed-Apple" key commands from within its editor. To assemble a file, for example, requires typing ASML in APW/ORCA. In Merlin, however, an open-Apple-A will accomplish the same thing.

One difference between APW and ORCA/M is that there are 12 commands that APW has that ORCA/M doesn't, and two that ORCA/M has that APW doesn't. These differences aren't major but some of the commands add significant capability. The two extra commands that Orca has are COMPRESS; which alphabetizes and compacts a directory, and SWITCH, which can be used to change the order of files within a directory. Five extra commands that APW has that are significant are ALINK, CANNON, COMPACT, EQUAL, and SEARCH.

Table 1 shows a listing of some of the commands which are common among the four shells. We have tried to match Micol's and Merlin's commands to those of APW and ORCA/M's since matching between APW and ORCA/M is done by finding the

contd.

same name in both (no biggie). Column 5 has a brief description of what each command does. In some cases the name is the same for all four and the function is identical. Example of this is PREFIX. In other cases the same function might be done by all four systems but the command name is different. An example of this is TYPE in APW and ORCA/M versus LIST in MMA and P in Merlin. We listed these on the same line in the table with the corresponding match to APW. In some cases there was no match. These were listed separately. Finally some commands in APW and ORCA/M do more with their attributes than the corresponding command does in MMA or Merlin. For these, the corresponding command was listed in parenthesis. In Merlin, many functions are accomplished from within the editor or by keyboard macros.

The next item of difference among the four is the command line itself. APW, MMA, and ORCA/M let you enter your commands on one line. Merlin does a combination of selection from a menu and typing in commands. APW/ORCA allow you to toggle between an insert mode and an overstrike mode. (But you can't tell which mode you are in because both show a blinking rectangular cursor. This could stand changing.) MMA and Merlin only have an overstrike mode. MMA will let you insert a space at the cursor position by pressing control-S and at that point you can insert another letter. Also in MMA and Merlin you can't use the delete button to delete a character. APW/ORCA allow you to recall from memory (the computer's) the last 20 command lines that you input and reuse them with or without modification. MMA lets you bring up only the last single line you input. Merlin has no provision for this recall. APW/ORCA also allow you to type in just the first letter or letters of a command followed by the right arrow key. This automatically finishes typing the command for you, using the first matching command in the command list.

The Editors

In the Editors there are some obvious differences. There are help screens that can be accessed from three of the editors which show you the commands that you can use. There are no help screens in Merlin, so you must use the book to see what keystroke commands are available. APW and ORCA/M use the same set of 43 different editor commands. MMA has 26. However, this is where Merlin beats them all. It has 62 of these commands plus it has 19 "Box Commands". These "Box commands" must be typed in rather than using keystroke commands. Merlin, once mastered, has a very powerful editor which is specifically designed for assembly language programming.

When you enter the editor of MMA the top line shows the title of the company. The bottom line shows the line and column number that your cursor is in, the percentage of the text buffer remaining for your use, the name of the file you are editing and the date and time. These last two add a nice touch to this editor. APW/ORCA are similar except for the lack of date and time. Merlin shows you little. It only shows the line number. You can go to the command box and find out how full your text file is, however, by executing the proper command.

All the editors allow you to move around the file with ease; but APW and ORCA/M let you move along the line by word, and throughout the file like AppleWorks. MMA and Merlin don't have a within-line movement capability except the right or left arrows that move you one character at a time. MMA will move you to the beginning of the file or to the end; but intermediate places throughout the file can only be reached by paging the screen or using the Option-G (Goto line number option). One warning: in Merlin, the Open-apple-1..9 keypresses don't move you through the file as in AppleWorks. Each of these keypresses is set up as a macro to assemble the file with various options, so AppleWorks users will have to relearn their keyboard.

APW, Merlin, and ORCA/M have macro capabilities within the editor itself. Eleven are already programmed for your use in APW/ORCA. You can change any of these or add your own. You are limited by the number of alpha characters on the keyboard, no more than 26. In APW/ORCA each macro can have a maximum number of 128 keystrokes to define it. However, one macro can call another. Merlin has this capability but you must BRUN one of the files before starting your editing. Merlin listed 46 but a few weren't functioning when we tested them. Additional ones can be added by making changes to data statements in the program that then must be assembled and then BRUNed. This is not quite as easy as APW and ORCA/M which can be changed "on the fly." You can go to the macro screen, define the set of key strokes for your macro, exit the macro definition screen, and your macro is ready for use. Micol Macro has no macros within its editor.

There are actually two types of macros used within these systems. We refer to them both in this article. Do not confuse the macros within the text editor with assembler macros available for assembly language programming. They are not the same thing. The macros used within the editor are designed to simplify tedious and repetitive keystrokes. They are like Pinpoint or Beagle Bros. macros in AppleWorks. Assembler macros take the place of often repeated lines of code in your program. They are expanded to the actual code upon assembly, and can be a real time saver when writing long programs.

MMA can store text in two ways, one is compressed and one is standard. When you boot up you are set to read text files stored in compressed mode. If you type "EDIT FILE.NAME" (where FILE.NAME is the name of any text file) right after starting MMA, and the file was stored in compressed mode, then everything works fine. It loads and you see it in the editor. If you type "EDIT FILE.NAME" right after starting, and the file you attempt to edit was stored as an uncompressed file, then you go into the editor but no text, nothing, zip. You are in the editor with an empty file—or one you can't see. You must specify whether files were stored as compressed or as uncompressed. If the file was stored as uncompressed and you attempt to load it from the editor as compressed then the program crashes. Total wipe out. This problem only exists with the old ROM. The new ROM fixes this problem. So "Apple" fixed this problem. If the reverse situation occurs, that is, if you try to load a file that was stored in compressed mode as uncompressed while in the editor, then the situation is not so bad. All the lines and words run together so you can't read it. At least you can gracefully recoup from this situation and reload the file as compressed. This problem is the same for both ROM's.

APW/ORCA can load source code files both from the command shell and from a menu that appears when you exit the editor. In Merlin you must first Load the file you want to edit. One thing nice about Merlin and Micol Macro is that when you exit the editor the file is still there in memory. All you have to do to

contd.

re-enter and edit it is to type EDIT for MMA, or F in Merlin for Full Screen Editor. (You can type E also for Editor although this is not shown on the menu.)

BATCH and EXEC Files

MMA, APW, and ORCA have the capability of executing a series of shell commands that were pretyped into a text file. These files, called exec or batch files, can be executed at any time as if you had entered the sequence of commands. In APW/ORCA these files are called Exec files. In MMA they are called Batch files. Merlin doesn't have batch or exec type files. Exec files in APW/ORCA have control commands that are not available in Batch files in MMA. This gives the Exec files more power and versatility. For the heavy user in applications programming this capability is probably very important and would make a sizeable difference. For the occasional user it may not make any difference. It still remains as a plus in favor of the three that have it.

Assembling and Linking

Simple programs were written and assembled for each system. As it turns out, we could find plenty of example programs written for APW, Merlin and ORCA/M, while there were none that we could readily find for MMA. We assembled and ran the "Hodge Podge" source files from the Apple Demo Program (available in the WAP disk library) in APW and ORCA/M. (Working from a RAM disk speeds things up enormously.) We also entered programs from William Sanders's and Roger Wagner's books (See IIGS Stuff in this issue), assembled and ran them in all of the assemblers. All of the assemblers worked quickly and produced executable code. However, MMA uses its own system loader and normally produces special Micol load files that require the use of Micol's own loader. By using the ORG pseudo opcode correctly, either an absolute addressed Micol load file, a relocatable Micol load file, or a ProDOS8 SYS file may be produced. However, this implies that it would be difficult to produce a standard load file for the ProDOS16 System Loader. All the other assemblers could produce the standard Object Module Format (OMF) files that are required by the ProDOS16 System Loader. The test programs that we produced exercised only a small percentage of the 256 opcodes and the dozens of pseudo-opcodes that were available. Table 2 shows a partial listing of the pseudo-opcodes available in the four assemblers. In the case of ORCA/APW and Merlin, assembler macros from the supplied libraries were used with no problems. Since the code was short, no differences in assembly times were noticed.

Of the four, only Merlin does not allow you to run your ProDOS16 program from the shell. This means that the Merlin system must be exited in order to test your code. Merlin will run from the Finder, and programs can be tested from the Finder. The other systems will allow you to execute your programs under development from their shells, and then return you directly to the shell. APW, ORCA, and MMA can also be configured to return you to the editor at the point in the source code where an error occurs while testing it.

Assembler Macros

One of the best parts of these assembler packages is the assembler macros that are included with their disks. These macro libraries take up a lot of space on the disk, but they are well worth it. Usually all the macros were in one folder, but not always. APW's macros are in a folder called AINCLUDE. Within this folder are 29 macro files consisting of 7437 lines of code. While the number of lines of code is not an exact way to judge the quality of the macros it at least gives you an idea of size. Merlin has its macros in two folders consisting of 31 files. All but two appear to be a direct translation of APW's macro files into the Merlin macro file type structure. Merlin has 4891 lines of macro code to help you do your programming. ORCA/M, surprisingly enough, only has seven files of macros. However, one of these files has 5686 lines of code. ORCA/M has a total of 8661 lines of code of macros for your help. Unfortunately, Micol Macro doesn't come with macros to simplify your assembly language programming.

While we were looking at these packages we also looked at some differences between APW version 1.0B4 (the pre-released version) and the final version 1.0 of APW. As it turns out some of the macro files were longer in the 1.0B4 version than in the final one and some were shorter. The old version of the M16. UTILITY file had 1093 lines of macro code and the new version has 663 lines. That's about 430 lines less that you get with the final version of APW. While this probably doesn't hurt you we're sure it doesn't help. There were two files added as macros and one deleted and three increased in size; but not by very much.

These were not the only differences that we found between the old and the new version of APW. The old version has the DEBUG utility on it, which is a program used to help you debug your programs. The new version doesn't have this program. The old version has two CDA's that the new version doesn't have; these were Loader Dumper & Memory Mangler. Both are to be used in the debugging process. This is definitely a plus for those people who bought the old APW and got it updated. At least they got something for their $130 that the person spending $100 for version 1.0 didn't. These extras are available for use within APW or ORCA at extra cost from APDA.

What You Get

The packages all come with non-copy protected software and documentation. MMA comes with the software on both 3.5 and 5.25 inch disks. As mentioned, it has no macro library. MMA's manual has 102 pages in a small three ring binder and is indexed. APW comes with 507 pages of unbound, hole-punched documentation, missing final editorial corrections, final artwork, and an index. APW has two 3.5 inch disks which include the shell, assembler, and a large macro library. ORCA comes with two 3.5 inch disks and a spiral bound, complete 365 page manual. The manual is well organized and includes an index. ORCA includes a macro library which is similar to APW's. ORCA also includes a very handy reference card with all the op and pseudo op codes, shell commands, and editor commands on it. Merlin comes with a well organized 202 page spiral bound manual, also indexed, one 3.5 inch disk and two 5.25 inch disks. The 65816 assembler is on the 3.5 along with the macro library, and the 5.25's contain the DOS 3.3 and ProDOS 6502 assemblers. The flip side of one of the 5.25 inch disks contains Sorceror.FP. This program will list a disassembled and commented text file of your ROM Applesoft interpreter for your perusal. This is quite a goldmine all by itself considering the listing of this file can run nearly 150 pages. Merlin also includes a program to convert files in APW or ORCA assembly code to Merlin's format. Likewise, The Byte Works sells a converter from Merlin format to ORCA.

What You Need

APW's documentation states that it requires a IIGS or an

contd.

—— Operant Systems ——

—— HARDWARE ——

DOT-MATRIX PRINTERS—
- Panasonic 1091i (160 cps, Epson-compatible "best buy"). 219
- 1080i (120 cps, as above)..... 189
- 1092i (240 cps, Epson-compatible)..... 349
- Toshiba 321SL (216 cps draft, slickest 24-pin avail)... 519
- 341SL (wide carriage version of above)..... 725
- NEC P6 / P7 Pinwriter (24-pin high-quality)..... 475/675
- P2200 (170 cps, lowest price 24-pin to date)..... 369
- Okidata 192-Plus (200 cps, NLQ mode)..... 339
- 193-Plus (132 column version of above)..... 489
- 292/293 (200 cps, 100 cps NLQ, 18-pin)..... (call)
- Citizen Tribute 224 (200 cps, 24-pin, wide carriage)... 675

DAISYWHEEL & LASER PRINTERS—
- Citizen Premier 35 (35 cps, fastest for the money)..... 499
- Qume LetterPro PLUS (45 cps daisywheel)..... 595
- NEC Elf (16 cps, par & ser interface, NEC/Diablo emul). 419
- 8830 (55 cps daisywheel, heavy-duty)..... 1149
- Diablo 635 (55 cps daisywheel)..... 825
- H-P LaserJet Series II (512k / 1.5 meg, 8 ppm)... 1795/2195
- Okidata Laserline 6 (6 ppm, H-P Plus compatible)..... 1495
- PS Jet (Postscript upgrade for Canon/H-P lasers)..... 2150
- AST Postscript TurboLaser (8 ppm w/Postscript)..... 3095
- QMS-PS 800 Plus (8 ppm, LaserWriter compatible)..... (call)
- Epson, Quadram, Qume, TI, Canon, NEC lasers..... (call)

MODEMS—
- Hayes Smartmodem 1200A (1200/300 card for IIC+/IIe)..... 249
- Micromodem IIe (300 baud card for IIC+/IIe w/sft). 145
- Smartmodem 2400 / 1200 / 300..... 429/295/145
- Anchor Automation Express (1200/300 loaded w/ features) 139
- Lightning 24 (2400/1200/300, RS-232). 179
- Prometheus Promodem 1200G (1200/300 baud, RS-232)..... 179
- Promodem 1200A (1200/300 card w/ software).. 209
- Applied Engineering DataLink (1200/300 card w/software) 175
- US Robotics Courier 2400 (2400/1200/300 baud, RS-232).. 375
- Courier 1200 (1200/300, autodial/ans)..... 219
- Sportster (1200/300 external, best buy).... 135
- ZoomModem IIe Plus (300 baud card w/adv software)..... 119

DISK DRIVES—
- Sider II (20-meg hard disk for IIe/+/gs)..... 549
- Video Technology half-hi floppy (for IIe/c/gs)..... 125
- Applied Engineering half-hi floppy (for IIC+/e)..... 119
- Controller for 2 drives..... 55

MONITORS—
- Amdek 300G/300A (12" green/amber anti-glare, 18Mhz) 125/139
- Color 600 (13" composite/RGB color, 16 mhz)..... 369
- Taxan 115/116 (green/amber composite, 20Mhz)..... 119
- Thomson 4120 (14" composite/RGB/analog color)..... 259

INTERFACES & BUFFERS & CLOCKS—
- Practical Peripherals SeriALL (for modems or printers).. 99
- Graphicard (parallel w/ graphics). 69
- Printerface (par w/o graphics).... 59
- ProClock (PRODOS compatible)..... 109
- Grappler c/mac/gs (makes any printer Imagewriter compat) 69
- ProGrappler printer interface (parallel w/ graphics).... 85
- Buffered Grappler+ (16K to 64K buffer plus graphics)... 139
- Hotlink (hooks any parallel printer to IIc)..... 59
- Quadram Microfazer (8K to 128K printer buffer)..... 139

MEMORY EXPANSION & VIDEO BOARDS—
- ALS 80-col card (w/64K RAM, AppleWorks-compatible)..... 69
- Applied Engineering RamWorks III (64K—3 meg + 80 col). 139
- RamFactor (256k—1 meg for +/e/gs). 189
- gsRAM (256k—1.5 meg ram for gs)... 139
- Viewmaster (80-column for IIC+)..... 189
- Microtek 16K RAM card (for IIC+)..... 69

CP/M & 6502C SYSTEMS—
- Applied Engineering Z-Ram Ultra 3 (256K+, clock, CP/M). 259
- TransWarp (3.6 Mhz 6502C, 256K RAM) 225
- PC Transporter (IBM on a card!!). (call)
- Laser 128 (complete IIc compatible computer)..... 399
- 128 EX (3.6 times faster, expands to 1 meg)..... 469
- Speed Demon (6502C high-speed coprocessor)..... 159
- Applicard (6 Mhz Z-80, 64K to 192K RAM, 70-col video).. 159
- Titan Accelerator IIe (gives IIC+/e speed of IIgs)..... 229

—— SOFTWARE ——

WORD & PAGE PROCESSING—
- Word Perfect (new IIgs version available now)..... 95
- Bank Street Writer (48K / 128K versions)..... 49/55
- pfs: Write IIe (w/speller)..... 69
- MouseWrite (IIe/c/gs)..... 95
- HomeWord Plus (w/speller for IIe/c)..... 49
- Sensible Speller IV (DOS or PRODOS versions avail).. 75
- Springboard Publisher (for IIe/c)..... 85

SPREADSHEETS—
- SuperCalc 3a (super spreadsheet/graphics for IIe/c) 125
- VIP Professional (IIe & c / gs spreadsheet).... 159/195
- Multiplan (best spreadsheet for IIC+)..... 70

INFORMATION MANAGEMENT—
- dBASE II (the best Apple database, requires CP/M).. 299
- pfs: File w/Report..... 69

BUSINESS & ACCOUNTING—
- Dollars & Sense (accounting w/graphics)..... 79
- Managing Your Money (accounting + investment mgmt).. 99
- DAC-Easy Accounting..... 69
- Peachtree Back to Basics Accounting (GL/AR/AP)..... 149

COMMUNICATIONS—
- Ascii Express Professional (best DOS/PRODOS program) 79
- MouseTalk (new, w/pull-downs for e/c). 69
- CompuServe Starter Kit (password & 25 dollar credit) 25

ODDS & ENDS—
- Print Shop/Print Shop Companion/Libraries..... 36/29/19
- Newsroom/Clip Art Collections..... 42/19
- Pinpoint Desktop Accessories..... 55
- Infomerge (mailmerge for Appleworks)..... 49
- Spelling Checker (pops up in Appleworks)... 42
- Typing Tutor IV..... 35
- Kensington System Saver Fan (w/surge protector)..... 66
- CH Mach III or Kraft 3-button joystick..... 39
- Curtis Emerald Surge Protector (6 outlets & cord)... 45

- General Computer Personal LaserPrinter..... 1495
- Word Perfect (best IBM prog now for the MAC).....(call)
- Microsoft Works (word proc, calc, dbase, comm)..... 185
- Word (new version 3.01)..... 245
- Excel (best Mac spreadsheet available)... 245
- Basic Interpreter/Compiler..... 75/125

MACINTOSH
- Chart (presentation business graphics).... 85
- File (easy to use database)..... 125
- ReadySetGo! / PageMaker (latest versions)..... (call)
- dBASE MAC (from the dBASE folks)..... 315
- MacMAX (dBASE-compatible database)..... 185
- 4th Dimension (...the Silver Surfer has arrived).(call)
- Dollars & Sense (home accounting w/graphics)..... 95
- Peripheral Land 30-meg internal for SE, fastest!!!. 685
- 30-/ 50-meg SCSI drive.....649/995
- Infinity (10-meg cart, reads IBM).. 895
- Video Tech 800K external floppy..... 199
- Dove MacSnap & SIMM memory upgrades.....(call)
- SuperPaint / FullPaint..... 85/65
- Kensington Mac System Saver (fan & surge protector). 75

CALL FOR PRICES OF ITEMS NOT LISTED

—— Please Compare Our Prices ——

If you find a lower price, give us a chance to beat it.

Feel free to call for answers to technical questions.

TO ORDER: Call Jeff Dillon at (301) 434-0405

or

Write or visit:

OPERANT SYSTEMS, 7676 New Hampshire Ave, Suite 312
Langley Park, Md 20783

Md. sales add 5% tax. UPS shipping is available.
All items carry full manufacturer's warranties.

upgraded IIe with 1.25 Megs of RAM memory and two 3.5 inch drives or one 3.5 inch drive and a hard disk. The hard disk setup will help minimize the restrictions on the system due to disk space, and is probably the more efficient of the two configurations. ORCA's documentation says that it requires only 512K of RAM and a single 3.5 inch drive, but it strongly recommends a second 3.5 inch drive or a hard disk, and a megabyte of RAM on an expansion card. We suspect that APW could also be run with this minimal configuration, but would be very inefficient and frustrating. Merlin requires a minimally configured IIGS or upgraded IIe, 256K and, since the Merlin 16 assembler comes on a 3.5 inch disk, a 3.5 inch disk drive. MMA requires the simplest setup; a 256K IIGS or upgraded IIe, and a 3.5 or 5.25 inch disk drive. If you're moving to a IIGS from a II+ or IIe, and can't afford the 3.5 inch drives to start with, this may be a selling point.

Summary

Of the four packages, the two least costly were Orca/M and Micol Macro. Because of the lack of a macro library in Micol Macro's package and the fact that Micol Macro is just an assembly language environment at this time, we feel that Orca/M offers the most for the money. ORCA/M and APW are development systems that may be easily expanded to include other languages, such as TML or ORCA Pascal (See "Two Pascals for the IIGS" elsewhere in this issue) or APW C. ORCA gives almost exactly the same capability as APW but is available at less than half of what APW costs. (See prices listed below.) Beyond this, it is really hard to say that we recommend any one over the other. Merlin includes three assemblers in one package, has all the assembler macros in its library that APW has and then some, has a powerful set of macro keys inside the text editor, and it has the ability to print out the code of your ROM Applesoft. So if you're an assembly language only programmer, the retail price of $125 (around $80 mail order) will buy a system specifically designed for Apple II assembly language program development.

There are a lot of books and resources becoming available that give examples of programming the IIGS in assembly language and using the tools. It seems that, since APW is Apple's "official" development environment, most of these give examples using APW (or ORCA/M), although Merlin also has a good showing. (See IIGS Stuff this month for a partial book list.) Finding an easy-reading, simple to understand reference might, by itself, be a reason for the novice choosing between APW or ORCA/M, Micol Macro Assembler, and Merlin 8/16.

* Apple Programmers Workshop (APW) version 1.0 by Apple Computer, Inc. and The Byte Works, Inc. Price: $100.00 (+s&h) from APDA, 290 SW 43rd Street, Renton, WA 98055. Phone: (206) 251-6548

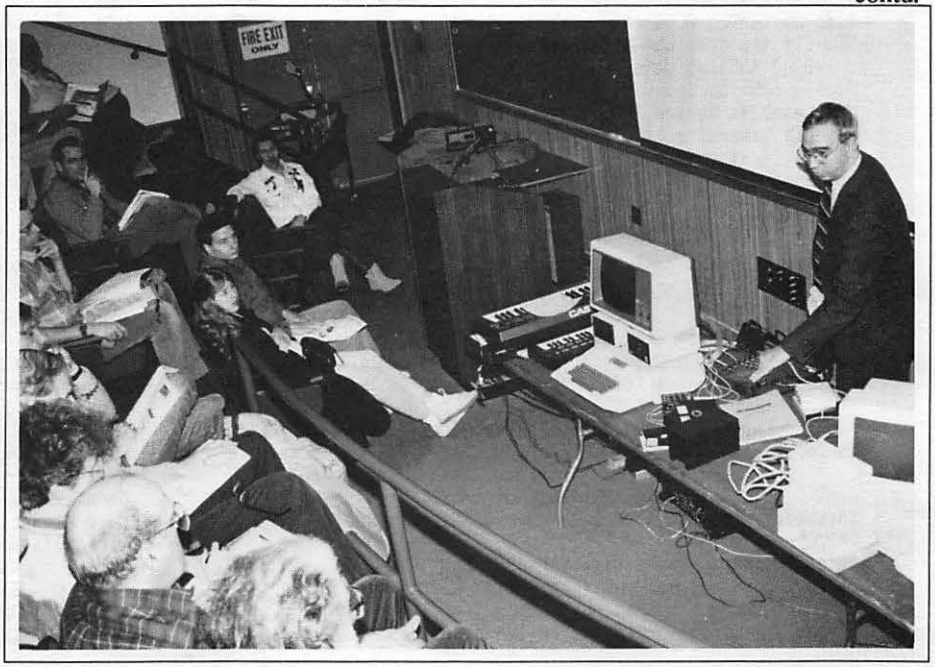
* Micol Macro Assembler version 2.01 by Micol Systems and Corpwell Data Systems price $69.95 (s&h). A group buy of this package would result in a 40 to 60 percent discount depending on the number purchased. If you're interested please contact Ted Meyer weekday evenings between 7 and 8 p.m. at (703) 893-6845.

contd.

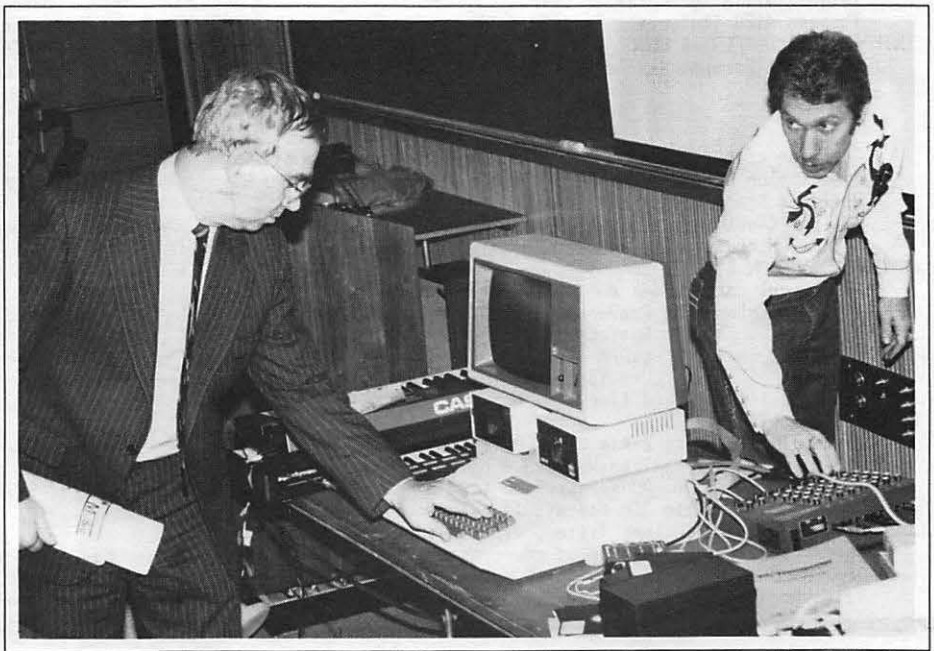
* Merlin 8/16 version 3.41 by Glen E. Bredon and Roger Wagner Publishing, Inc. 1050 Pioneer Way, Suite P, El Cajon, CA 92020. Price: $125.00 (Around $80 mail order)

* ORCA/M version 1.0 and 1.0a by The Byte Works, Inc. and Apple Computer, Inc. Price: The Byte Works has offered WAP a discount on all of their software. If you're interested in the special price of $41.97 for ORCA/M please contact Ted Meyer weekday evenings between 7 and 8 p.m. at (703) 893-6845.

contd.



Bill Bittle plays Debussy



Photos by Peter Combes

You push, I'll pull

Table 1 - Commands

APW	Micol ORCA/M	Macro	Merlin	Desription
ALIAS	ALIAS	NA	NA	user defined name
ALINK	NA	NA	LINK	link using script file
ASM65816	ASM65816	NA	NA	sets text file mode to ASM
ASML	ASML	ASSM	NA	assemble and link
ASMLG	ASMLG	NA	NA	assemble, link and execute
ASSEMBLE	ASSEMBLE	NA	NA	Open-Apl-A assemble
NA	NA	BLOAD	BLOAD	load the executable file
"fn"	"fn"	BRUN	BRUN	execute an assembled file
CANON	NA	NA	NA	canonical spelling tool
CAT	CAT	CAT	C	catalog
CHANGE	CHANGE	NA	NA	change language stamp
COMPACT	NA	NA	NA	compact load file
NA	COMPRESS	NA	NA	compress/alphabetize directories
COPY	COPY	COPY	NA	copy files/directories/disks
CREATE	CREATE	CREATE	NA	create a subdirectory
CRUNCH	CRUNCH	NA	NA	combine object modules
DEBUG	DEBUG	NA	NA	APW debugger (When implemented)
DELETE	DELETE	DELETE	DELETE	delete a file
DISABLE	DISABLE	(LOCK?)	(LOCK?)	disable file attributes
DUMPOBJ	DUMPOBJ	NA	NA	object module dumper
EDIT	EDIT	EDIT	F or E	edit a file
ENABLE	ENABLE	(UNLOCK?)	(UNLOCK?)	enable file attributes
EQUAL	NA	NA	NA	file/directory comparison utility
"fn"	"fn"	BATCH	NA	perform commands in given file
FILES	NA	NA	NA	expanded catalog display utility
FILETYPE	FILETYPE	NA	NA	change the type of a file
HELP	HELP	HELP	NA	online help
HISTORY	HISTORY	NA	NA	display last twenty commands
NA	NA	HOME	NA	clear screen, cursor to top left
INIT	INIT	FORMAT	NA	disk initializer
LINK	LINK	NA	LINK	link
MACGEN	MACGEN	NA	NA	generate a macro file
MAKEBIN	MAKEBIN	(1)	(1)	convert load file to a binary file
MAKELIB	MAKELIB	NA	NA	librarian
MOVE	MOVE	NA	NA	move files
PREFIX	PREFIX	PREFIX	PREFIX	set system prefix
QUIT	QUIT	QUIT	Q	exit from the program completely
RENAME	RENAME	RENAME	RENAME	rename files
RUN	RUN	NA	NA	compile, link and execute
SEARCH	NA	NA	NA	string search utility
SHOW UNITS	SHOW UNITS	(ONLINE)	(ONLINE)	show volumn files
NA	SWITCH	NA	NA	switch order of files
TYPE	TYPE	LIST	P/PRTR	list a file to standard out
UNALIAS	UNALIAS	NA	NA	Remove User Definition

("fn" - accomplished by typing filename)
((1) - normally assembled to binary file)

Table 2 - Some Assembler Directives (Pseudo-opcodes)

APW	Micol ORCA/M	Macro	Merlin	Description
ALIGN	ALIGN		HEX/DS/	place code at byte boundary
APPEND	APPEND	CHN	PUT	continue assembly in named file
CASE	CASE		DA/DDB/DFB	allows case sensitivity
COPY	COPY	INS	put	assemble named file and return
NA	NA	NA	CYC	show cycle times in listing
DATA	DATA	RES	DS	defines data area
DC	DC	BYT,WOR	DA,DFB,DD	Bconstant definition
DS	DS	RES	DS	variable definition (reserve mem)
EJECT	EJECT	EJT	PAG	form feed listing
END	END		END	last statement in segment
ENTRY	ENTRY		ENT	global label for alternate entry
EQU	EQU	EQU	EQU(=)	equate value and label
GEN	GEN		EXP	expand macros in listing
KEEP	KEEP		DSK/SAV	define object file
OBJ	OBJ		OBJ	define location for executable
ORG	ORG	ORG	ORG	define mode (rel or abs) & location
RENAME	RENAME		USR	rename opcodes
65C02/816	65C02/816		XC	6502,65C02,65816 specific assembly

SMOOTHTALKER: OK, BUT WHAT GOOD IS IT?

by Brian G. Mason

Title of program: SMOOTHTALKER, Version 1.0
Produced by First Byte, Inc., Long Beach, Calif.
Purchased from Babbages for $40.00 plus tax.
Requires Apple IIgs with 512K and one 3 1/2" disk drive. Printer optional.

First Byte, Inc., proclaim themselves to be "The World's Leader in Software Speech Technology". In fact, they have come out with a great deal of software for the Apple IIgs which supports this claim. Titles produced by this company include Kidtalk, which allows children to create written products and then hear them read back by the computer; Mathtalk and Math-Talk Fractions, which allow children to enter their own math problems and see graphic illustrations and hear spoken help specific to each problem; Spelling Bee, which allows a child to see and hear his or her own spelling words; and for the very young, First Letters and Words and First Shapes, which utilize a talking narrator named Ted E. Bear. Then, just for fun, there is Computer Mad Libs, which is a computer version of Mad Libs which uses the Smoothtalker speech technology to read back the humorous results.

Smoothtalker has been available in the past on the Macintosh. Now it is available for the Apple II world. I would guess that the application of the speech technology as used in programs such as those listed above is more successful than in the Smoothtalker program itself.

The manual for SmoothTalker says that the uses of the program "are limited only by your imagination." It definitely works most smoothly with text that has already been prepared and just needs to be read back. It interacts way too slowly to have the computer read along as a person types the text. This is unfortunate, for I would think one solid application would be for blind people who might like to have auditory feedback when they are typing something into the computer.

When you put the disk in the computer and turn it on, you are presented with the Apple IIgs Program Launcher, Version 2.0. You start the program by clicking on "TALKER". If you have been doing other things on the computer and just want to stick the disk in and run Smoothtalker without turning the computer off and then back on again, you can not get the program to run from the Finder on the new System Disk. It gets to the introductory screen and hangs up. You can, however, get it to run from the Launcher on the new System Disk. For those of you who have not yet updated your System Disk, it will not run from the Desktop, either.

The introductory screen provides two choices: "NEW USER" and "START PROGRAM". By clicking on the "NEW USER" selection it takes you to three screens which explain the use of the escape key, the scroll bar, and gives "programming enthusiasts" a warning that, "This version of SmoothTalker is not intended for either commercial or non-commercial embedding of speech within an application."

You are then presented with a blank document labeled "untitled" and the pull-down menu selections at the top. This is where you will create your text which SmoothTalker will read back to you. If you wish to load a file you have already created, you must first close the "untitled" document.

TALK TO ME

The main menu selections at the top of the screen are File, Edit, Speech, Gender, Dictionary, and Extras. Many of the submenu selections have Open-Apple keystroke equivalents. To have your IIgs speak the selected text, for example, you can press Open Apple-T for "talk". Many of these make sense. For example, Edit Current Dictionary is Open Apple-E, Replace Current Dictionary is Open Apple-R, and female gender is Open Apple-F. Many, however, do not make sense. For example, to cut text you use Open Apple-X, to paste text you use Open Apple-V, and male gender is Open Apple-G.

The "Extras" menu says "While I am typing, Speak -

Letter by Letter
Word by Word
Sentence by Sentence
Quiet."

When you select one of the first three, a check mark appears next to the selection. You can select more than one choice at a time. In other words, you can have the computer speak letter by letter and also speak each word once a word is formed. "Quiet" turns all of the selections off. If you ask the Apple to speak letter by letter, after you type the first letter, the disk immediately spins, and it takes about four seconds before the first letter is spoken. After the initial disk access, things proceed more quickly, but certainly not instantaneously. As you type, the computer slowly decides what letter you typed, says it, then gives the cursor back to you so you can type the next letter. Or if you have chosen to have it speak a word at a time, every time you hit the space bar you have to wait for the computer to say the word before you can begin typing the next word. While the Apple is speaking, the mouse pointer (arrow or "I") disappears from the screen. When it reappears, you can resume typing. Therefore, the easiest way to enter text is either under the "Quiet" mode, or at least a sentence at a time. Then, the program waits for a final punctuation mark to be typed before speaking. Under the "Quiet" mode, the text appeared on the screen as fast as I could type, and I can type up to 80 wpm.

Any text to be read has to be in ASCII text format, so word processing documents or spreadsheets which SmoothTalker might help proofread would first have to be converted to a ASCII text file. My wife gave me this program for our anniversary so I might use it to proofread programs I type in from magazines. They would be saved as ASCII text files and EXEC'd to convert them to BASIC programs.

CREATING DICTIONARIES

Being somewhat egocentric, the first thing I did when I tried out the program was to see how well the program would say the names of the people in my family. It had no problem whatsoever with my son's name, Winter. It did pretty well with my name (Brian) and my daughter's name (Brii-anna, which is pro-

contd.

nounced, Bree-ahna). But it mangled my wife's name, Priscilla. Of course I wanted to teach my computer to say these names correctly, so the next thing I did was explore the "Dictionary" menu choice.

Your choices here are "Edit Current", "View Current", "Replace Current", and "Create New". When Smoothtalker is first run, it loads the "System Dictionary" into memory. This becomes the "Current Dictionary". To correct the pronunciation of a word, select "Edit Current". This will bring up a window which asks for the Current Spelling and the Correct Pronunciation. You can try to get it to say the word correctly by typing an English word that might resemble the way it should sound, or you can type it phonetically using the Phoneme Codes presented in the manual. I had to resort to the latter to get it to pronounce "Priscilla" correctly. You can click on the "Say It" button to listen to what you have created. Then when you are satisfied, you can click on the "Add It" button to add it to the "Current Dictionary". There is also a "Delete It" button to remove a word from the current dictionary and a "Cancel this Session" button to leave the "Current Dictionary" without saving any of the changes made. If you use the "Quit" button, the changes are added to the Current Dictionary and Smoothtalker will prompt you for the name under which to save this dictionary.

You may have "Auxiliary Dictionaries" on your disk which you create. You might want one dictionary for words peculiar to BASIC programming, for example. (Without coaching, Smoothtalker pronounces GOTO as "Got oh".) Or, there may legal words or medical terms which would require special auxiliary dictionaries. These may be created by choosing "Create New". You are first asked if it is OK to clear the Current Dictionary in memory. If you wish to proceed, you click on "Yes". You are then presented with the same "Edit Current Dictionary" window we saw before. You do not need to worry about having to create a whole new dictionary from scratch. The basic abilities of the program are still there. You are just supplementing or adding to the basic abilities of the program. When you quit, you will have to save your new dictionary as a separate file on your disk.

When you wish to replace your current dictionary with one of your auxiliary dictionaries, or if you need to reload the system dictionary, you choose "Replace Current". You are presented with just the folders and files which might lead you to a dictionary. The others are not shown, a very helpful way to handle files. Selecting a dictionary will load it into memory and makes it available for use and further modification if desired.

CUSTOMIZING THE SPEAKING VOICE

"Gender" has the most straightforward submenu of the Main Menu selections. You can choose either male or female.

Under the "Speech" menu choice on the menu bar are five selections, "Speak Text", "Show Speech Settings Window," "Show Phonetics Window", "Re-Phoneticize Selection", and "Turn Repeat On". Clicking on "Speak Text" will cause the selected text to be spoken, or if no text is selected, the entire document. "Turn Repeat On" is a toggle which reads "Turn Repeat Off" when repeat is on. When repeat is on the selected text is spoken over and over again until "Turn Repeat Off" is clicked.

You can only have the Speech Settings Window up or the Phonetics Window up at one time. The "Re-Phoneticize Selection" choice is only active if the Phonetics Window is up. When the Phonetics Window is up, the "Show Phonetics Window" changes to "Hide Phonetics Window" and the "Show Speech Settings" choice is dimmed. When the Speech Setting window is up the two phonetics selections are dimmed.

The Speech Settings window allows you to adjust the volume, pitch, speed, tone, and voice. You may click on whether you want to "Set Entire Document", "Set a Single Selection", or "Reset Settings". The latter choice puts everything back to the default setting. The volume, pitch, and speed are variable from one to nine. The tone can be treble or bass, and the voice can be male or female. With some effort, you could prepare a dramatic reading with male and female voices. However, when I selected a portion of a sentence to be spoken in a female voice, the program crashed. Dead in the water. I was not able to duplicate the crash later on, so I am not sure what happened.

The program is only able to deal with about 250 characters or the equivalent number of phonetics at a time. This means that if you want a lengthy selection to have different settings than the default or what you have set for the main document, you need to insert the new settings in the document after every 250 characters, for the settings for the next group of characters will revert to the default or the settings you have set to rule the entire document. This also means that the program can break in the middle of a word while it recasts the next group of characters. Thus you could have the first half of a word spoken by the male voice, and the second half spoken by the female voice. Of course there are work-arounds, by inserting or deleting characters or speech or phonetics codes to make the break come in a more natural place, but the result may not be what you wanted.

With the Phonetics Window up, you are presented with a small blank window with a flashing "insert" cursor. However, if you select a word or phrase first, and then open the Phonetics Window, the word or phrase you selected will be shown in phonetic code in the window. Of course, at any time, you can press Open Apple-T to have Smoothtalker pronounce the word for you. In this window you can experiment with recoding words to make them sound the way you think they should, and then cut or copy and paste the revised pronunciation into your main document. Once in your main document, the modified phonetic text can be saved to disk. You can even open a dictionary and enter the word (not paste it, but retype it) in the dictionary editor. When you want to select other text to phoneticize, you drag your mouse across the text in the main window, then click on Re-Phoneticize Selection under the Speech Menu to have the phoneticized text appear in the Phonetics Window. The scroll bar on the right side of the screen works in which ever window the active insert cursor appears.

EDITING, FILING, AND PRINTING YOUR CREATION

The Edit selection is used for moving words around in your text or from one window to another. The selections are "Cut", "Copy", Paste", and "Pick-All". The "Pick-All" selection selects the entire document. With this menu Smoothtalker provides a very basic word processor for typing straight text.

The File menu provides you with "New", "Open", "Close", "Save", "Save As...", "Print", and "Quit". You are all probably familiar with all of these. You can not delete a file or a dictionary

contd.

from the main program or from the launcher. You would have to do that from your System Disk. The Print option opens up new dialogue boxes. The first box allows you to choose between two printer types"the Imagewriter and the LaserWriter. It also allows you to choose the port to which the document will be printed—the Appletalk port, the printer port, or the modem port. Once your selection has been made, and you click on "OK", you are presented a dialogue box for your printer. When I chose the Imagewriter, the dialog box I got next allowed me to choose paper size, the orientation of the print on the paper (whether horizontal or vertical), and whether there would be gaps between pages or not.

The dialog box uses the "I" cursor rather than the arrow for pointing to radio buttons, which is a little disconcerting at first. You do not have to reenter this information again until the next time you boot the program. The next dialog box is the only one you have to deal with each time. It asks which quality you want. There are three choices—"Better Text", "Better Color", or "Draft", the page range, whether "All" or just a certain series of pages, how many copies to print, whether the paper will be hand fed or tractor fed, and whether or not there is a color ribbon.

When you choose the LaserWriter, you get to choose the size of paper, the orientation of the print on the paper, the vertical sizing whether normal, intermediate, or condensed, the percent of reduction or enlargement, and printer effects such as smoothing and font substitution. The next dialogue box asks for the page range to be printed, the number of copies, and whether the paper is coming from a paper cassette or manual feed.

The title of the file is printed at the top of the page, including the Prefix. The text is printed exactly as it appears on the screen, complete with any phonetics that have been used. There is no opportunity to set margins. In Better Text Mode and Better Color Mode, the text is printed in 1/4" high text with 1/8" between lines. In Draft Mode, it is printed in 15 pitch (small) type. I could not get it to print an entire line in Better Text Mode. It would only print the left center portion of each line. I really do not know what the color selections are for since you can not choose to have your text print in color even with a color ribbon installed.

The program is pretty buggy. Besides the time I crashed it while changing voices, I crashed it another time when trying to print it immediately after booting up. Another time, when I chose "Pick All" from the Edit menu, it not only selected the entire text, it also opened up the Speech Settings Window. These were things that happened once, and I could not get the program to repeat the action.

When I first used the program, there was a bad echo. It seemed as if every letter was repeated twice: "d-double-you", "ai-aiy", e-eff", etc. I later discovered that the problem was caused by having the system speed set to normal from the Control Panel rather than fast.

It is certainly an interesting program with which to explore the world of phonetics. But I doubt it would be on anyone's must have list.

PROGRAM INTERFACE SIG (PI-SIG) NEWS

by Robert Golden

The members met at the Office on Monday, Feb.1, and a variety of subjects came up for discussion. Jim Winters conducted a mini-seminar on relational databases. Two of the most basic reasons given were to save space on a disk, and to organize large masses of data. He explained that relational data systems permit the use of many indexes. AppleWorks, for instance, would be seen as having one index only. The journal, *Apple Plus*, was cited in the current (February) issue as containing information on "Foundation", which may be the only relational data base applicable to the Apple II computers. Also DB Master was mentioned as being relational in the next version.

Someone mentioned that Mr. Chen, a specialist in parallel processing who had been with Cray Computers, has set up a new company, which was purchased by IBM. We speculated on how this could be applied to our own interests. First of all, parallel processing would result from the unique computing architecture now being studied, and secondly it would require a new programming language, so it wouldn't apply to present Apple computers. It was agreed that some parts of sequential processes could be done in parallel, and perhaps parallel processing can help us to re-compute mathematical equations. As Jim Winters phrased it, "We may be able to re-learn how to think in ways that parallel processing computers can do".

Moving on to Pascal and "C" languages, there was a technical give and take on the combination of C and assembly language. The creation of "segments" and their being operated on by the "Memory Manager" was touched upon.

Hard disks were brought into the discussion following comments on memory, and we were reminded that Jon Thomason has contributed "Cat-All-Log" recently to the WAP Journal. ?? At this time, the prospect for adding megabytes of memory inexpensively to the Apple IIgs is not so good, other than by hard disk. One other problem is that the new programs by their very nature of added sophistication and power, call for massive memory just for installation. It was estimated that when the HyperCard becomes available for the IIgs, 2 MB will be required for the card alone.

We unanimously decided that it was time for to campaign for the Apple IIgs, to be purchased by WAP for use in the classroom. With data to exchange, demonstrations available, and no machine, we feel the pinch!

The sudden shift to the Georgetown site for the last meeting was brought up. None of us present went, so don't know first hand what the circumstances were. Among ourselves, it was discussed as a sign of a kind of fractionization, and we discussed the trend toward smaller self-contained SIG group meetings. We wondered what the future would bring without a large, centrally located, convenient, and inexpensive meeting place. I suddenly realized how important USUHS is as a unifying factor to the Washington Apple Pi.

AN OPEN LETTER TO JEAN-LOUIS GASSÉE, VICE-PRESIDENT, APPLE COMPUTER, INC.

December 16, 1987

Dear Jean-Louis,

Word has it that the Apple //c will be shortly terminated. This would be a most unwise decision—for a number of reasons.

From its first days in early 1984, the //c has brought the magic of Apple computers to thousands of users who otherwise would never have stepped into the world of personal computers. Apple marketed it as an "appliance," something you could just plug in and it works. No fussing with cards and boards—no technical jargon to master.

True, the //c is as simple as an appliance. But it's also much more. The //c is the most personable of the Apple // family. It's sleek compact design is inviting to all users, but especially to young children who use it. Admittedly, the Apple //e has a certain amount of character; but the //c has character plus style.

The //c also has important features that take it beyond the // e. The volume control dial and headphone jack on the //c allow the computer to be used without distracting other users, or other classroom activities for that matter. The Dvorak-keyboard-option gives enlightened typists the option of dumping the senseless and antiquated QWERTY keyboard, at the push of a button. And yet another distinguishing feature is the //c's remarkable portability. The //c is a computer which can go where it needs to be used—whether that be from the master bedroom to the children's bedroom, or all the way to the top of Mount Everest. One of the most memorable photographs from the recently published book, So Far:

In the First Ten Years of Apple Computers is the picture of an Apple //c in a tent near the top of Mount Everest. Sad to say, but the //e probably couldn't make it to base camp.

But the most distinguishing feature of the //c is its price: a full $300 less than its older brother, the //e, and almost 1/3 the price of its younger sister, the Apple IIGS. (The Apple //c is currently priced at $495, with monitor, at 47th Street Photo, in New York City. The Apple //e goes for $825, with a monitor, while the Apple IIGS hovers around $1450, including monitor.)

Well, the plain truth is that many, many Apple // users do not need the hardware flexibility of the Apple//e, nor do they need the extraordinary sound and graphics of the IIGS. The Apple//e suits the needs of the hacker, the Apple pioneer. The IIGS suits the needs of those users who want the best there is in a 16 bit machine. In a perfect world, we would all have two AppleIIGS's: one for work/school, and one for home use. (And two matching Mac II's, of course.) In a less than perfect world, those who cannot afford the IIGS or //e, often settle quite comfortably for the //c.

For most day to day uses, the //c's color is more that adequate. Lively sounds come out of the //c, with the proper software. And the //c has enough computing horsepower to meet the needs of over 95% of its users.

By terminating the //c, Apple would not be eliminating a "redundant" member of the Apple // line. The //c serves an important group of Apple users: users that would have had neither the inclination, nor the money to bring home a personal computer.

Terminating the //c may be a sound marketing decision in the short run. But Apple Computer didn't build its reputation by single-mindedly pursuing short term goals. More than anyone else, Apple knows and fosters those intangibles that go into building a solid business base. Service. Reputation. Support. Commitment.

As you have said yourself, Apple is not in the business of selling computers. Apple Computer is in the business of selling a vision: a world of creative possibilities. This very vision might be seriously endangered by the decision to terminate the //c. The //c is an integral part of the Apple // family. Is this any way to treat a member of one's own family ???

The very least that should be done at this point is to solicit the opinions of the leading Apple users' groups on this matter. Any alternative course of action risks alienating another important member of the Apple // "family": over two million loyal Apple // users.

We look forward to hearing your reply in these pages.

Yours Sincerely,
Phil Shapiro

COMPUTER DEN LTD.

Save more than 30% on software, peripherals and accessories for all Apple computers, including Mac, IIGS and Laser 128.

ATTENTION][+ OWNERS:
in stock hardware & software at giveaway prices!

Call for information . We attempt to beat all locally advertised prices

COMPUTER DEN, LTD.
11716 Kemp Mill Road
Silver Spring, MD 20902
301-649-6868

Call Sunday-Thursday 10A.M. - 9P.M.
UPS Shipping Available, Quantity Discounts

BEST OF THE APPLE ITEMS FROM THE TCS

by Alexander Barnes

AW with PinPoint

KEN BISHOP ON 01/07

How do I record a session and then save it to disk if the resulting file exceeds 55K? I have a 128K IIe with 5 1/4 inch drives. Is there a way to save the file in sections after a session? Right now I just watch the "blocks used" area in the PinPoint utility and try not to let it get too big. The "window" that Pinpoint uses for the comm accessory appears to be only about 65 or 70 characters wide (and 12 or 15 lines long). That causes a msg like this (which I'm typing in at work) to wrap words unnaturally and skip lines in peculiar ways. If I save and play back from AW later, it all looks very natural, however. It's just when reading from the comm screen. I haven't tried downloading yet, and maybe this question belongs on the telecomm board, but can PinPoint record the "XMODEM" and Binary files I hear people talking about. I don't recall that in the manual. I'll look when I get off.

ALAN HOFFMAN ON 01/07

(1). PinPoint Comm records in blocks, and appends data to the end of an ever growing file. I have downloaded some long literature searches from medical databases, of up to 200 - 300K, on either a RAMDISK (S3,D2 with Ramworks) or a 800K 3.5 drive, and have never had problems. Of course, you must have Appleworks expanded with AE expander to accommodate your >55K files. Before I bought a Ram card, I used an old communications program (Easy Com-Easy Go) with a built-in document processor to split up my long files. Again, to work with files over 55K, you need expansion memory and Applied Engineering's Appleworks expander software, which expands the desktop up to 900K in my system.

(2). I have upgraded Appleworks to 2.0, Pinpoint to 2.01, and have noted that the new PinPoint Comm accessory is in 80 columns.

(3). No, PinPoint does not as of yet support XModen or Binary downloads. The best way to do this efficiently is to use TIC (Talk-is-cheap) 2.03, a remarkable shareware telecommunications program available in the download section.

Ultramacros

JOHN CONNAUGHTON ON 01/11

Are there any problems using Beagles TimeOut UltraMacros with an Applied Engineering expanded AppleWorks V. 2.0?

JON THOMASON ON 01/12

No, I'd feel safe in saying that TimeOut UltraMacros was written actually ASSUMING most people would be using AE's expansions. TimeOut doesn't run on any versions before 2.0.

TIMEMASTER H.O. Problem

JIM ENGLISH ON 01/15

Had some trouble with my Timemaster H.O. card date/time stamping AW files but after calling Applied Engineering was told to copy ProDOS8 V. 1.4 to the AW Startup disk! Anyone had a similar problem? ProDOS8 V 1.4 is available on GEnie.

TED MCGLOHN ON 01/15

Timemaster does have the right year but the problem is that all other versions of ProDOS see '88 and swing back to '82. ProDOS 1.4 will fix the bug. I had the same problem when ProDOS 1.1.1 stamped my files after Jan. 1. Just replace all ProDOS files with the latest one. Also you should download the patch to fix a bug in 1.4.

Tax Template '87

DAVID HARRIS ON 01/17

I'm a Mac user, with a relative with an Apple //e and AppleWorks. Any way I can get the tax template on a 5 1/2 inch disk? Is the file available on disk from the WAP disketeria? I know it is on the AW downloads, but I don't know how to unbunny (or whatever) those files and get them onto the larger disks, and there isn't the time now (or the inclination) to learn.

LOU PASTURA ON 01/17

There are two different tax template files—both excellent. One, by Paul Koskos, is available at the office through the disketeria. The other by Rocky Ragano, is available as a TCS Download.

CHUCK ROTHLISBERGER ON 01/20

Recently got Paul Koskos' Tax Template. Printer options are set at 3.0 inches paper length which, when coupled with other settings, results in a printing length of 2.0 inches. Any particular reason for that, or can the settings be changed to the standard 11 inches without losing anything? Looks like a good template. Finally went to this from a commercial version I purchased the past several years.

DATA BASE

KEN BISHOP ON 01/19

I've recorded to disk some files that list BBSs in the area. My PinPoint creates an AWP file out of these saved sessions. Can I now create a data base out of the resulting file? I've looked through the manual and can't find a way to do it.

JON THOMASON ON 01/19

The file must be converted (via editing, macros, or a custom program) to a format where each data field is on its separate line. It must be printed to disk in straight ASCII in this format. Then you can read it into the Data Base.

AW/PP

TOM O'HAGAN ON 01/20

Now that I have a 3 1/2 drive I installed AW, ver 2.0, Pinpoint and AE expander all on one disk. Also have ProSel on the disk. I finally used PP Ram system to get everything working but I spent eight hours playing with all sorts of configurations to get AW/PP into Ram with a method of exiting AW and re-entering it later from Ram without a reboot from the 3 1/2 drive. I can't seem to find a way to do it. It takes me 3-4 min. to boot and I would love to be able to switch in and out of AW without a reboot. Has anyone figured out how to do this?

contd.

LEE RAESLY ON 01/21
Your problem is that ProSel takes over complete control! The normal exit from AW should ask you a pathname. Even better would be Byrd's Better Bye (which should be on your AE disk). Use that ProDOS, and you can exit to any program on /RAM or any other disk. Use ESCAPE to find disks.

TimeOut SideSpread

ROBERT LAMACCHIA ON 01/22
For anyone interested in using TimeOut SideSpread by Beagle Bros (an AW add on), it is limited in comparison with Sideways. SideSpread will work with lots of interface cards and printers, but only with 8" wide printers. I have a ProGrappler with an Epson 286e on my GS, and I have to configure it for a Grappler + and an FX80. I called Beagle Bros, and they said that it will not work if you tell it the carriage is more than 8" (they did not have enough "room" inside AW to fit the necessary code for wide-carriage printers). Also, it is limited to printing sideways the number of lines that will fit on one page (given the font that you have selected). It will not paginate like Sideways. For limited sideways printing, SideSpread is ok, but for heavy duty work use Sideways (the newest version works with the GS).

Stripping Carriage Returns

PAUL SCHLOSSER ON 01/09
Could you please post your SMW macro for stripping carriage returns?

LOU PASTURA ON 01/09
I don't want to put it in the Library until you've had a chance to prove it works for yourself. If it does, let me know & I'll put it in the Library here. BTW, credit goes to Sam Bauer for coming up with this one:

<awp><sa-Rtn><oa-D><oa-Right><Left><Left><Rtn>!

PAUL SCHLOSSER ON 01/10
Lou, the macro worked great! I added <rpt> to the end of it, since I was using the macro on a long document.

Untrashing Crashed CP/M Disks

SAM SWERSKY ON 01/20
I came across a situation recently which might be of some interest to you CP/M fans. A customer of mine had crashed his Wordstar data disk (that contained two 60K document files on it). When he used Copy II+ (the Verify Disk command) to locate which tracks and sectors of his CP/M disk were corrupt, he found that all of track 3 was bad (as well as one sector on track 24). Losing track 3 on a 5 1/4" CP/M disk is bad news: that's where the system maintains the CP/M disk directory! This fellow had NONE! I came up with a quick and dirty solution that saved him a coronary and yet limited the amount of time I had to invest... it worked fairly well in this restricted case (see note at end of this msg).

Step 1— Format a fresh CP/M disk.

Step 2— Using Wordstar, create a single document file that COMPLETELY fills the newly-formatted disk (I named the file Lazarus.txt, hahaha).

Step 3— If no tracks higher than track 3 is bad, skip to Step 4, otherwise use Bag of Trick's Trax utility to reformat and save as much data from the bad disk as possible.

Caution 1: You should try to copy the bad disk using a nibble copier if at all possible!! Always try to keep your bad disk untouched as long as possible.

Caution 2: Disk drives vary in their speed, alignment, and persnicketiness. Try Disk Verifying the disk on **all** your disk drives to see which drive reads the most sectors!!!!!!!

Step 4— Use Copy II+, Locksmith, etc to copy tracks 4-35 of the "bad" disk to the disk with Lazarus.txt on it.

Step 5— Reboot CP/M, get into Wordstar and try to rearrange your data back to its pre-crash state by editing Lazarus.txt (which is going to be one very LONG text file that contains all the data on your disk).

I (or really, my customer) was lucky in that he had only two files on the disk, both text files, and both not very fragmented. The above procedure can at least get back a good deal of the raw data in such a situation (editing can be a killer in other cases). This process is a LOUSY way to get back a messed-up PROGRAM (translate: it won't work!) The moral of the story is to keep plenty of backups of ANY data that you don't want to lose.

Stopping PrintShop

JEFF DODD ON 01/10
Printshop has the power of "printing to the screen", which I'd like to use for titles when editing my videotapes. Problem is, it prints out the title, starts to blink RETURN TO CONTINUE OR ESC TO EXIT at the bottom of the screen Is there a way I can delay or hide this message until I run a sufficient amount of tape by?

JON THOMASON ON 01/10
Save the picture onto a disk. Leave PrintShop, and boot a DOS 3.3 disk. Enter a program similar to the following:

```
10 F$=" {filename} "
20 TEXT:HOME
30 PRINT CHR$(4)"BLOAD"F$",A$2000"
40 CALL-3100:POKE-16302,0
50 GET A$:TEXT
```

You should be all set. Line 10 sets filename, 20 clears text screen for various reasons, 30 loads picture into memory, 40 displays it, and 50 waits for a keypress, then returns you to BASIC. PrintShop isn't meant for video publishing.

DeluxePaint II

FRANK SORNATALE ON 01/16
I like the pictures you can draw but the size is so small, is there any way of expanding so you can get a full page picture (8 X 10)?

HARRY ERWIN ON 01/18
There are two commands, one setting the page format (320 or 640) and the other the page size. They're in the pull-down menus in the menu bar. Take a look there.

SHR Graphics

FRANK SORNATALE ON 01/27
I saw all of the IIgs graphics on file, especially the SHR graphics. I have DP II and want to know if these pictures can be brought into DP II and then printed out from there, or are they strictly for looking at on the screen. Are there any special instruction for looking at graphics or do you do the same procedure as with other binary files using BLU program to unscramble?

contd.

DALE SMITH ON 01/28
The SHR graphics are in Binary II format files; so, YES, you do have to use BLU to extract and unsqueeze the files. Then, the program SHR Convert v2.0 can be used to change the picture format, if necessary, to a format that DPII can use. I'm not sure, but I think SHR.CONVERT.BNY (version 2.0) is in GS Utils. or GS Misc. of the Downloads (Areas 13 or 16 respectively).

Download Trouble

CHARLIE BROWN ON 01/30
I tried to download one of the available graphics and view it with a paint program. I was able to successfully download file #39 from board #14 (a collection of 5 Mac graphics). I next used BLU to extract and unsqueeze the 5 SHR graphics. Then I ran each through ShrConvert 2.0—this is where I am having problems. I input each graphic using "Type $C0 compressed SHR"—this is correct because I was able to view each picture. I saved each as a "Type $C0 compressed, subtype 2", but I am not sure whether I am supposed to save them as one or two screens wide and one or two screens high. I tried each of the options with the following results: "one screen wide, one screen high" I was able to read with 816 Paint but not with DeluxePaint II (I got a message that read "Different screen format Error loading file". I was unable to read any of the other output formats using either paint program, 816 Paint or DeluxePaint II.

DIRK BAKKER ON 01/3
Charlie, you may want to try this: once you have "saved" the converted versions of the graphic you want to use in DPII (that's what I have and have had success with), first load a picture that WORKS with DPII (something from the disk or "art disk" should do) This "apparently" takes care of a first version of the palette, which somehow does not work properly when you attempt to start with the graphic you are converting. Once you have first loaded this one "OK" picture, then load the one you really want and save as a DPII file. I have found you can even load $C1 files this way without converting first.

LAWRENCE HAIDER ON 01/31
Those graphics were saved as a $C1 format from SHR.Convert, then squeezed and bunnyed with BLU2. I originally viewed them from DPII when first downloaded and converted. Your error may be arising from the fact that they are Mac pictures, and the only way of reasonably saving them is in the GS's 640x200 screen format. Try setting DPII's screen format to 640 mode and give it another go. If that doesn't work go back to SHR.Convert and save them to a $C1 format and let DPII do the the conversion to what it likes.

Zipchip

ALLAN LEVY ON 01/02
On the ARPANET (national gov. net) no one has seen a zipchip.

TOM VIER ON 01/14
Ditto on the zipchip on CI$...zip.....

ReInkers

DANIEL HANLON ON 01/09
Having purchased a IIgs last year, I find that I can't resist printing all those beautiful graphics on my ImagewriterII (in color of course). I really haven't found too much use for all those pretty pictures yet but they are fun to create and to print. The problem with this is that the IWII four color ribbons cost about $10 to $14 bucks apiece. I'm on my 4th one now in the last three months, and it doesn't take a lot of math to see that a ribbon reinker makes a lot of sense. I was wondering if anyone has had any experience with any of the reinkers being advertised. I'm a bit wary of the four color ones because it seems that it would be an awfully messy job both on me and the ribbon. From what I gathered looking at the various ads, you can get a dedicated four color inker for about $80, or one that does black ribbons for $40 that has an attachment for another $42 that will also do the four color ribbons. Any advice or suggestions (besides quit printing all those pictures) would be greatly appreciated.

MICHAEL PEARCE ON 01/09
It's true, they are a little messy, but I reinked a color ribbon & it worked just fine. However the 1st time you do it, just follow the instructions (I didn't). I re-inked the black and shouldn't have. They caution you to just let the ribbon make 1 pass (about 14 minutes) and it won't saturate the ribbon too much.

DANIEL HANLON ON 01/10
Michael, thanks for the reply. I was wondering if you had one of the inkers that was a dedicated four color reinker, or one that had an adapter to make it one. I was thinking of getting one that did both black ribbons and multicolor. I'm worried that the one with the adapter won't work as well.

MICHAEL PEARCE ON 01/10
I have both. You're right—one would work, but you have to change things around so I said to hay with it and got both. Try Ribbon Land in Pa. They are very good. Computer Friends in Oregon screwed up the order so bad, that it took 5 phone calls (long distance) to just cancel the darn order after they screwed it up. Ribbon Land is in Exton, Pa. and has a toll free number.

BRETT PARKS ON 01/11
We use a single color "MacInker" here from an outfit called "Computer Friends" out in Oregon. Use it on Epson cartridge ribbons (MX-100 style) and it works like a charm. Also used it and some blank (ie, white, no ink) ribbon only inserts to create ribbons in Red, Blue, and green (single color). As for multi-colored ribbons, that's a bit more bizaare. I Don't believe I've ever seen anything like that.

Printer Cable

BOB VELKE ON 01/19
I've found that I need to extend the length of my printer cable (/ /c -> Imagewriter). Do I have to buy a longer cable or can I just add an extension male/female RS232 cable (like from Radio Shack).

KIM BRENNAN ON 01/19
Bob, you can possibly make do with buying an extension. The problem that may crop up with this is noise. A longer cable may have been checked out to make sure that noise isn't a problem, but not necessarily. I would probably just get the extension.

contd.

ART WILSON ON 01/20
The limit on RS-232 is about 50 feet. The shorter the cable, the less likely any noise problems will occur.

Line Noise

TOM O'HAGAN ON 01/11
I've had considerable amounts of line noise while using the modem lately. I've lived at this Silver Spring address for four years and it happened once before but it stopped after a week or so. This time it has kept up for over a month. It only happens occasionally when I call TCS but happens almost constantly when I call CompuServe. It manifests itself with strings of weird character strings usually repeated ~r~r~r~r~r but includes [] { } etc. I've called CompuServe and they said they would check their number and gave me a setting to try to filter noise from their end. I called C&P and they checked my line and said it was for voice communication only and for a undisclosed extra monthly charge they would improve the line to the house for data communications. Any comments from anyone with similar problems?

JOHN CONNAUGHTON ON 01/11
Find out if they have recently begun to install the new digital light wave communication system in your central office. I have spoken to an individual who works for the TEL CO. in another area and he told me that under certain situations problems could occur. A Bell Labs programmer was unable to call up his mainframe from his house in NJ to Bell Labs. Apparently they were required to make changes. By the way I've also been told that when the new light wave digital system is fully implemented it is Bell's goal to provide both voice and data to everyone's house, eliminating the needs for a modem, Also their light wave transmission rate capacity is many MEGABITS per second. This new light wave system is really high tech.

"Talk is Cheap" Break

F. KISTNER ON 01/21
One of the guys here at work has a IIGS and subject software. He is trying to figure out how to send a "break" character, and says the documentation is useless. Does any IIGSer know?

CHRIS PEARMAN ON 01/21
To send a "break" character in Talk is Cheap, press Open Apple A.

VT100 Emulation

STAN PALEN ON 01/28
Has any one else tried the VT 100 emulation on version 379 of Kermit? I got most things working except the arrow keys which I really need. I've tried all combinations of keys including OA & CA arrows, arrows by themselves—so far nothing works. The VT 100 emulation is pretty good except that the top and bottom line get screwed up, but If I had arrow keys I could use it fine for my application, which is a full screen editor on a unix based officepower system.

CHRIS PEARMAN ON 01/28
I'm not sure if you really want to go to all this trouble, but the reason the arrow keys don't work with your system (I think) is that Kermit 379 uses an alternate set for these keys. The way you can get arrow keys is by typing the following in place of the arrow keys:

For:	Type:
Left Arrow	<ESC>[A
Right Arrow	<ESC>[B
Up Arrow	<ESC>[C
Down Arrow	<ESC>[D

I think those are the right keys anyway. If they aren't, let me know and I'll look to see what they are.

DALE SMITH ON 01/28
I haven't tried the Kermit 3.79 VT 100 emulation myself; but I have been working with another program that does have a very good implementation—full keyboard mapping and full screen emulation except for special graphics, 132 column display, and double-wide characters. The special graphics get displayed as the equivalent to ASCII lower-case letter. On the GS, the GS keyboard layout is exactly like the DEC vt-100 in physical location; on the //e and //c the implementation is very much like the vt100 implementation in Apple Access //—mainly the PF1 - PF4 keys are represented by <OA>!, <OA>@, <OA>#, and <OA>$. It is a commercial program that I have been testing and the final version should be out within a couple weeks. It's ProTERM v2.0. It also supports KERMIT and KERMIT BATCH protocols, if those file transfer protocols are important to you. There are other nice things about this program but these are the ones you're interested in at the moment.

JOHN LOCKE ON 01/31
I don't know about the GS but I have been using Kermit 379 on a//e communicating with both a vax 11/785 and a 8800 and it has been working super. The cursor moves work using <OA>-arrow. I just tested it again on the 11/785 using EDT in the full screen edit mode and it works great. One thing you might check is your set-up. Use the command "show terminal" at the kermit prompt. Make sure you are in "VT100" mode. To set the terminal, use set terminal vt100. Also check the host computer to see if it knows it's talking to a vt100.. On the dec vaxes and I think other decs with VMS or DCL the command is "show terminal". You may have to set the terminal on the host. Try set terminal/device=vt100 or use help set terminal to find the right command. good luck John Locke.

MouseTalk

CHUCK ROTHLISBERGER ON 01/31
I'm using MouseTalk purchased a year or so ago when we had a group purchase. Have a //e with Avatex 1200hc. Problem is with the printer. I have an old Apple DMP parallel printer. Try as I may, I am unable to get the MouseTalk program to drive the printer. Anybody have a similar problem? I like many of the MouseTalk features, and the program is quite easy with the pull-down menus, but I REALLY would like to be able to send some files or messages to printer.

DALE SMITH ON 01/31
I just checked the MouseTalk manual. It says to select the "Firmware Printer Driver" unless it doesn't work after installation. The manual doesn't show, and I don't remember, what the other choices are, but you should select the interface card you're using for your printer.

THE LEGACY OF DARYL ANDERSON AND THE D.A. DATASYSTEMS

by David Ottalini

Apple /// users owe a lot to Daryl Anderson, a young man whose interest in our computer never wavered even though Apple discontinued making our wonderful machine. His was one of only a small handful of companies that bothered to continue supporting the ///, and in fact bothered to ADD to the products being offered so that we could keep up with the "newer" machines. He describes his companies early days this way:

"1985 was a critical year for the /// and one when, at least early on there seemed to be few contact points for products and support. We tended to step into that gap and arrange with wavering developers and manufacturers to configure and offer their products to the /// market. Working with a few other small companies and supported by a word-of-mouth network, user groups, and the very timely /// Newsletter (which grew up to become the /// Magazine), we all made it thru '85 and expanded the locus of action enough to convince a handful of other better-capitalized companies to go into or back into the /// market."

Some of the products included a unique way of hooking up an IBM co-processor to the /// using CP/M as the bridge. He became a distributor for the Omnis /// Data Base program and improved its technical help greatly, and he fixed the Legend "S" 1 MB card so that it would work in the Apple ///.

Daryl is also a master programmer whose software programs (see below) include Power Keys, and the Tools Times Three productivity tools. He even came up with a way to improve the Titan ///+// and //e Ram drives and was working on a way to let you enter the //e emulation mode from Selector or Catalyst.

As family and other pressures mounted (including a decision to return to school), Daryl decided to sell many of his software products though Pair Software (Frank Moore) as well as through TAU, the Third Apple Users Group. But when Pair went bankrupt in early 1987 (the last issue of The Three Magazine came out in February, 1987), Anderson was left without any major royalties (Pair continues selling its products even now despite numerous business problems, but has NOT paid royalties to its developers in more than a year, including this one). That led to Daryl's decision last month to place all his software programs into the public domain.

What are some of the products that will soon be going into the public domain? Here's a list, with edited descriptions by the developer himself:

POWER KEYS

Power Keys DM+ is a program which runs in conjunction with ANY other Apple /// program and allows you to substitute single keystroke shorthand or 'macro' commands for more lengthy sequences of frequently typed characters such as product names, programming keywords, or anything you waste half your day typing over and over and over and...

In addition Power Keys DM+ itself can manage a growing collection of 'desktop utility' modules which put additional useful functions at your fingertips while running any other program. These modules currently include NotePad, QuikDial, QuikCat, ShowTime, PrintMgr, AsciTbl, QuikScrn and DiskMgr.

POWERKEYS MODULES

All are available as "background desktop utilities" at the touch of a key while running any Apple /// Program and they include (this is a partial list):

NotePad	edit, load, save, alter and view small "scratchpad" files at any time.
QuikDial	allows modem owners to dial a telephone directly from the keyboard or from a number displayed on the screen by their program.
QuikScrn	print a copy of the current text screen on your printer or send it to a disk file.
QuikCat	list the directory of files on a disk or other subdirectory at any time.
PrintMgr	send complex 'setup' codes to your printer at any time.
DiskMgr	format floppy disks and copy files right in the middle of any other program.
ShowTime	display current system date & time at the touch of a key.
AsciTbl	shows a table of Ascii character values as well as current system font.
Dialer	Phone dialer.
QuikCalc	Calculator.
FontLoad	Font switcher.
Moduload	Dynamic modula loader.
QuikCrpt	File encryptor/encoder.
FileScan	File viewer.
FileDump	File hex dumper.
TypeRite	Printer/typewriter.
LockOut	Prevents computer use by non-authorized person.

TOOLS TIMES THREE

All these programs run under Business Basic!

The Retriever deleted file recovery utility

Power Cat	disk and file librarian
Power Print	software printer buffer
Basic GTO	partial compiler and program accelerator
Basic XRF	program variable cross-referencer
Basic Utils	system utilities in Basic
Basic XT	language extensions including QuikSort

Source Window full-featured dis-assembler

Disk Window disk block editor

Data Window file examiner

Anderson also plans to put many other programs into the Public Domain including:

PC-COPY	IBM/Apple file xfer (req. hardware)
RAM+3	Enahnced Titan 3+2 Ramdisks
PCPI++	Allows running PCPI CPM from Catalyst

contd. on pg 36

ON THE TRAIL OF THE APPLE ///

by David Ottalini, Apple /// SIG Co-Chairman

The BIG NEWS this month, /// SIGers, is that Daryl Anderson of D.A. Datasystems has decided to place ALL of his excellent set of programs into the public domain! The primary reason—well, let's let him give us the reason, as described on CompuServe recently:

"Since my one commercial distributor (!) has gone the way of all flesh (or at least all California /// publisher flesh (!)) I figure all the unpaid royalties constitute at the very least a violation of the terms of our 'exclusivity' agreement and I presume full control over distribution of my stuff. So...

"I have decided to release all of the D A DataSystems commercial software to the Public Domain and to upload as much of it as possible to CompuServe over the next few months. This will include the 10 Tools Time Three packages plus Power Keys and the complete set of 17 modules and roughly a dozen other packages that were limited or custom releases or not-quite releases such as PC-COPY, RAM+3, TWO-N-FRO ///, LEGEND++. I will be uploading full user manuals and eventually, where possible, complete source code. I would be delighted to have you modify and improve and pass along to another ///er any of these programs.

"Many of you have been friendly correspondents and supporters over the 5 years since I got into the /// biz. 1987 was (as you can imagine) a terrible year professionally but a very positive one personally and I thank you all for the friendly support and for allowing me to be a contributing part of the /// community over the years. For you and the whole new batch of "I got mine for $200" ///ers this is my legacy - enjoy... -da."

While it saddens me that this had to happen, these programs are a tremendous addition to the Apple /// public domain. As a user of many of Daryl's programs, I can say that /// users have a real treat awaiting them. TAU, the Third Apple Users group, which has sold some of D.A. Datasystem's programs for some time, will add the rest as PD offerings. Sun Systems has also indicated they will offer them. Look for others to follow. Given the great body of programs, the WAP /// SIG PD library will, at this point, offer only some of the programs, probably including Power Keys, the Ram+3 for the Titan cards, Disk Window (a disk editor) and a few others. For more on Daryl Anderson and D.A. Datasystems, see my accompanying article in the Journal.

POHLMAN DISK ONE!

I am pleased to announce that the first Taylor Pohlman disk, 1017 A/B, is now ready and has been placed into the /// SIG PD library. It's a double-sided disk and contains the first five articles and associated programs from the Business Basic series in the old Softalk magazine. Again, this first disk will be self-booting with our Menu.Maker program. Future Pohlman disks (there will be a total of five) will NOT be self booting for space reasons. All will have Menu.Maker, however. So all you have to do is boot 1017 (or any other /// SIG PD Basic disk) and at the prompt place the desired disk into .D1, hit "Return" and you're set.

ON THREE NEWS

The new year brought with it a new editor for On Three magazine. He's Olaf G. Wolff, who has edited a number of other magazines and books, including many auto repair manuals. He replaces Paula Sheppard, who quit to return to Wyoming with her husband. Also lost, On Three's programmer Tim Harrington, who followed his predecessor, Rob Turner to Apple. There are no current plans for a replacement.

As for the long-promised spelling checker, On Three has announced StemSpeller ///, written by the same Australian programmer who wrote the StemWriter word processor. The best part about StemSpeller is that it can check any ASCII, Pascal Text, StemWriter OR Three EZ Pieces file! And it can save the checked file as any other text file type you desire. The Apple /// version of this program has been around since 1983 and Consorti says it took the programmer only about a month to convert it over (where was this Austrailian programmer three years ago??). Price is $69.95.

On another front, On Three has written a driver for the new Central Point Software disk controller card that allows you to use any two 400 or 800k 3.5 inch Apple-compatible disk drives (Mac, Unidrive, you name it) or 5.25 inch drive! The original controller card was way too big to fit in our ///s, but a redesign made it small enough to work. Cost for the driver is $50. You can get the controller card from Central Point or On Three.

If you havn't subscribed to On Three magazine, by the way, now is the time to do it. Their subscriptions are way down from previous years and they need the support of the /// community to continue. This is the only ///-specific commercial magazine left and we need it. Cost is $40.00 per year. Finally, as I mentioned in a previous Trail column, On Three is now carrying Dale Sykora's Trackball (a mouse substitute) and driver ($89.95), and plans to offer his SOS Driver Optimizer as well. (Hopefully it will be available by the time you read this).

As for Sykora, he continues to work on that new graphics card for the /// and GS and appears to have found a party (not On Three, however) willing to help with its manufacture. Sykora says there may also be opportunities for other projects as well!

MOVING RIGHT ALONG

Bob Cook at Sun Systems had a chance to meet our Journal Editor Bernie Urban at the recent MacWorld in San Francisco and has apparently agreed to help with upgrades for the Lisas donated to the club. Sun has been very active in the Lisa/Mac XL remarketing effort, and says it now accounts for more business than the /// line does (but /// support remains as strong as ever). Along with HFS for the Lisa (currently available), Cook says a new version of MacWorks will turn the computer into a MAC Plus, enabling it to run HyperCard and other advanced programs (with the appropriate memory).

The latest edition of Sun's Sun Times publication should also be in your hands by the time you read this (call them for a free subscription at 801-752-7631). This will, however, be the last time they can send out a publication under that name. Seems the

contd.

Chicago Sun Times didn't take too kindly to it and the paper's lawyers wrote a letter requesting a change. Soooooo—next time 'round it'll be something like "Sun Systems Recycling News" or maybe the "ST Gazette-Intelligencer".

Another source for Lisa/Mac XL owners, by the way, is The Lisa Shop, 2438 13th Ave. South, Minneapolis, MN. 55404. Phone number is 612-874-8596 and the owner is Frank Freeman. Among other things, he works on Profiles and can do hard formats (as opposed to a System Utilities "soft" format) on them. He's also the one reportedly interested in a project to exchange an 800K drive for .D1 in our ///s.

Sun continues to have the Titan ///+//e cards for sale, by the way. Cook says Titan makes them in lots of 25 for him as needed. Price has gone back up to $299.

AND AT AIM

The Association of Independent Microdealers has been operating a clearing house for software and hardware for more than a year now. Starting with the ///, the trade group added programs for the //, MAC, IBM PC and Commodore. But with one final mailing, due about now, AIM has decided to call it quits. AIM is a great way to pick up software (and some hardware) at very reasonable prices (especially because they have been more and more willing to dicker of late). If you have a need, call them at 1-800-342-5246. Since they are getting out of the outlet business, prices will be set with one idea in mind—to move merchandise. So this is the time to get that program you always thought you might like, but never really wanted to spend the money on it.

FINALLY

The Apple THREE Group International, a user group based in Norfolk, has changed its name and focus a bit. As of January, the club became Apple Users Group International. President Joe Dobrowolski says the name change was to help broaden the membership base to include other Apple users (he's also had problems getting people to resubscribe). He's already begun adding Apple II disks to his public domain library.

AGUI still offers the largest single Apple / // PD library in the world with more than 160 disks. Call for a free sample of the newsletter, News and Views at 1-804-865-7520. Dobrowolski is the Editor and Publisher as well and always tries to cram a lot of information into five or six double-sided sheets. Membership dues are $15.00.

Legacy of Daryl Anderson contd. from pg 34

LEGEND++	Autoboot 1 meg ramdisk for Legend card
TWO-N-FRO///	Run 3+2 emulation from Selector/ Catalyst
Kache+3	Disk caching speedup via ramdisk
Remote ///	Control /// via remote dialup

As I mentioned in the Trail article, these programs will be uploaded to MAUG on CompuServe using the XMODEM/ Binary 2 protocol and will also be available in the future from TAU, SUN Systems, Apple Users Group International and probably a few other groups as well. We will also offer some of the programs, but given the great number, will be more selective. Let me or Tom know which ones you would be most interested in seeing. If any of you have any of these programs and would like to donate a copy for the PD and our back-up program library, please also let me know.

I'm not sure what impact this action will have on another /// vendor, On Three, which offers the Desktop Manager, a product similar to Power Keys. DTM is a more sophisticated program that has a more professional on-screen look than Power Keys. But for many /// users, it will be hard not to resist at least trying Power Keys to get a feel for what a desktop utility is and how much more productive it can make the ///.

If you would like to write to Daryl, his address is: 3792 Windover Drive, Hamburg, NY 14075. (Ed. Note: Better still, send him a donation for each program you choose to keep and use.)

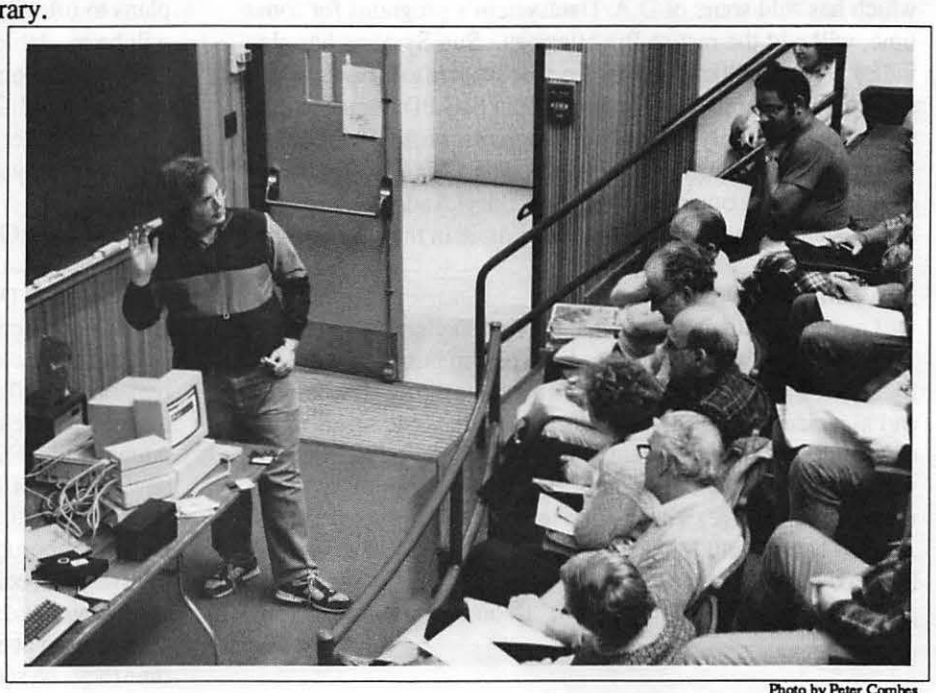
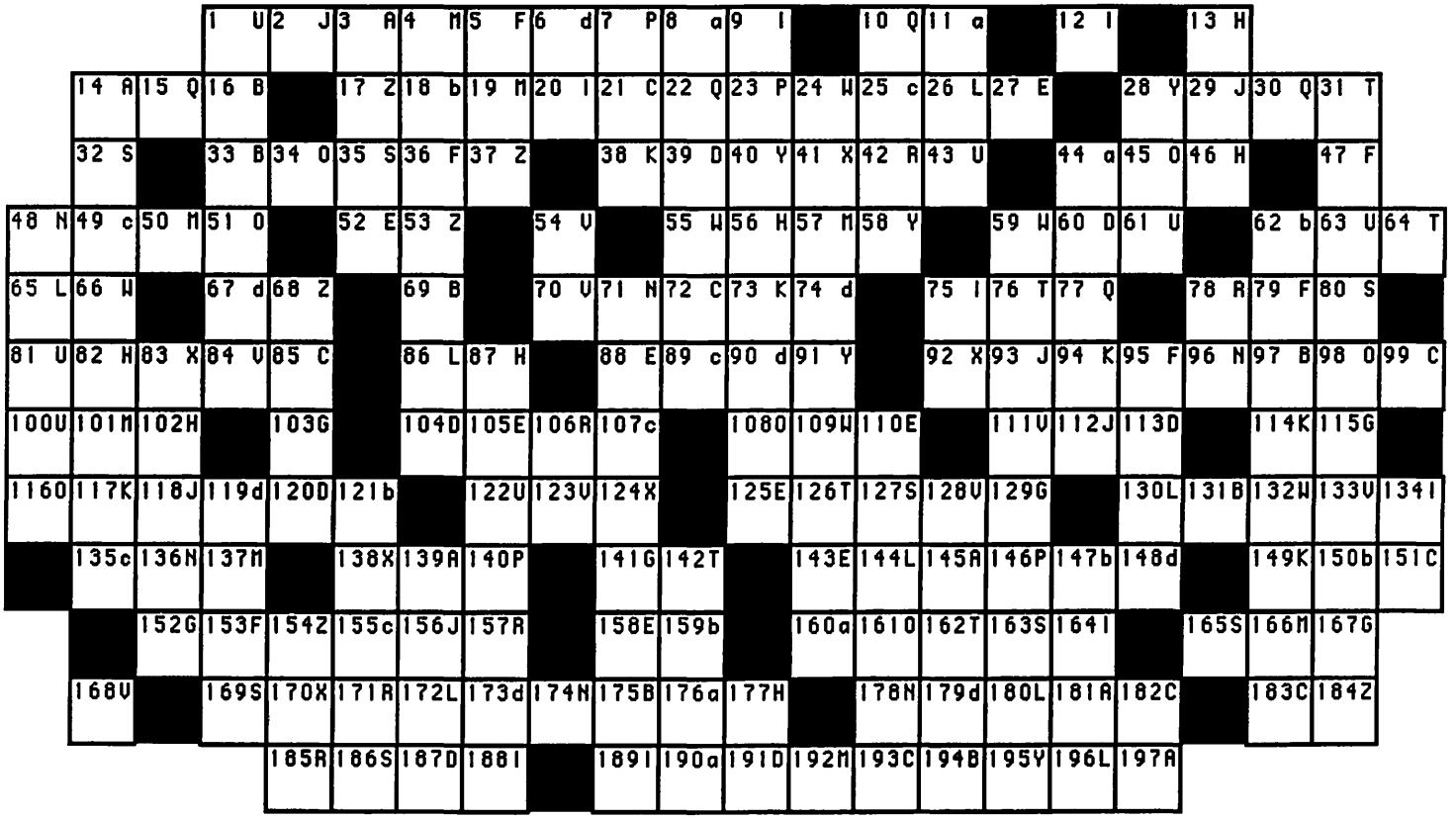


Photo by Peter Combes

David Wood pulls sound from the Future

WAPACROSTIC
by Dana J. Schwartz

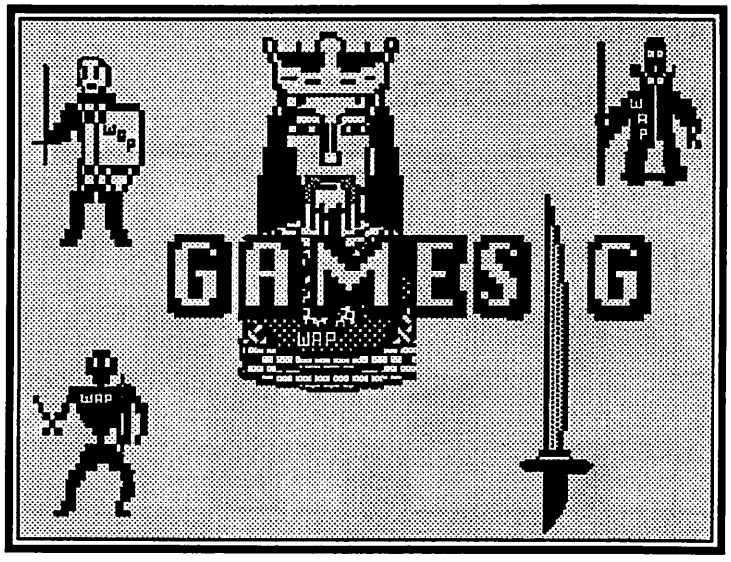
Using the Definitions, fill in Words. Transfer each letter into the corresponding square of the grid. The resulting quotation will read across. The first letters of the Words column spell out the Author's name and the Title of the work, reading down.



Definitions	Words
A. Small Quantity	197 14 181 145 139 3
B. Military March, with X	69 97 194 131 175 16 33
C. Spoken	21 183 193 85 72 99 151 182
D. Male Relatives	187 39 191 60 120 113 104
E. Immature	88 52 143 158 105 125 110 27
F. Development	95 5 153 47 36 79
G. Uniform	115 167 141 152 103 129
H. Casual	82 87 13 177 56 102 46
I. Travel for Free	188 20 12 164 189 134 75 9
J. In the Main	93 112 118 156 29 2
K. Fasten	94 114 149 117 73 38
L. Fertilizer	144 172 130 196 26 65 86 180
M. Distance Measurer	101 137 166 19 4 50 192 57
N. Numskull	136 96 174 178 48 71
O. Like a Person	51 161 116 98 45 34 108

Definitions	Words
P. Hoover Birthplace	23 146 140 7
Q. _ Arabia	22 30 15 77 10
R. Alcohol (sl)	42 185 106 78 171 157
S. Small Topper	165 35 127 169 186 163 32 80
T. Wing Feather	64 162 76 126 142 31
U. Appellation	63 81 100 122 1 61 43
V. Goes Over Again	168 133 111 54 70 123 84 128
W. Associate	55 24 66 109 132 59
X. See B	170 83 124 92 41 138
Y. Fanatical	91 195 28 40 58
Z. Golfer Type	17 154 68 53 37 184
a. Impudent	160 8 44 176 11 190
b. Corsage	159 121 147 150 18 62
c. Ahead	89 25 107 135 155 49
d. Fight Ender	74 173 179 6 148 67 90 119

GAMESIG NEWS
by Steven Payne



Finally, with no snow in the forecast, GameSIG members showed up in the usual large numbers for our monthly meeting on February 4th. We began with a brief demo of Jeff Stetekluh's new-and-improved "Robot Wars." Chairman Charles Don Hall announced that **Wizardry IV** (i.e., *The Revenge of Werdna*) is "still out," and that Infocom is releasing a Sherlock Holmes mystery together with a series of "Infocomics" (which are less games than animated comic books where you look through the panels in sequence). In addition, Sierra is planning a sequel to **Leisure Suit Larry**. Steve Jablon, who will soon be working for Origin, assures us that the Apple II version of **Ultima V** should be available by the time you read this; meanwhile, the GS and Mac versions are due in April and June respectively (so they *say!*).

In the "Games People Play" department, we once again went around the room finding out what folks were currently working on. **Maniac Mansion, Space Quest, Might and Magic, Falcon, Return of Werdna, Uninvited, Shanghai, Leisure Suit Larry, Wizardry Construction Set, Halls of Montezuma, Beyond Zork,** and **Death Lord** were among the programs mentioned. Meanwhile, the following software was distributed for review:

Talisman: Challenging the Sands of Time (Polarware, Apple II series with 128K, $19.95 list): graphic adventure set in ancient Persian empire of King Darius;

Dondra: A New Beginning... (Spectrum HoloByte, Apple II series with 64K, $39.95 list): graphic adventure with animation, on three double-sided disks, "the first in the Questmaster™ Series";

The Spy's Adventures in South America (Polarware, Apple II series with 64K, $17.95 list): latest entry in ongoing travel adventure series;

Wings of Fury (Broderbund, Apple II series with 128K, joystick required): action adventure, flying Navy F6F Hellcat;

Jewels of Darkness (Rainbird, Firebird Licensees, Mac 512K): a graphic version of the original "Colossal Cave" adventure, with two sequels.

In addition, the following programs will be passed along to other special interest groups (e.g., EdSIG or Apple Seeds) in the Washington Apple Pi for review:

The Sesame Street Crayon Series (Polarware, Apple II series with 128K, listed at $14.95 each): computerized coloring book series for children, includes "Letters for You," "Numbers Count" and "Opposites Attract";

Color Me: The Computer Coloring Kit (Mindscape, Apple II series with 128K, joystick, Koalapad or mouse required): a graphics program.

Finally, members had plenty of opportunity to share important hints on the games they are currently playing. Our next regular meeting will be on Thursday, March 3rd, at 7:30 P.M. in the main WAP Office. (By then we should have plenty of comments on **Ultima V!**)

DEFENDER OF THE CROWN: A Review
by Dave Brouwer

When I attended my first GameSIG meeting I did not expect to bring home a game for review, but I did! I also should note that I am both a Game- and Mac-Novice. With those caveats, I will attempt to describe **Defender of the Crown** and my reactions to it.

Mindscape and Master Designer Software calls the game "Cinemaware," one of its new line of interactive movies. It requires a Macintosh with at least 512K and an 800K disk drive. The action takes place in medieval England at a time when the King is dead; Saxon and Norman Lords are vying for the throne, and Robin Hood is making a name for himself.

The game begins with the selection of the Saxon Lord you will play (keeping in mind their strengths and weaknesses). You then must decide whether you want to seek conquest, go raiding, hold a tournament or build your army. By capturing a territory you can bolster your ranks and increase the size of your treasury. If you elect to raid an enemy castle, the monetary rewards may or may not be worth the risk, depending on your strength. If you hold a tournament, you must decide whether to risk your domain or your leadership ability. To win you must capture all of the Norman fortresses. (On the way don't forget Robin, but the men of Sherwood Forest will join your ranks and assist you only three times.)

The decisions of the other Lords affect your domain and options. At any time another Lord can invite you to a tournament or raid your treasury. If the Princess is kidnapped, you will have to decide whether to attempt to rescue her or ignore her cries.

All game actions are controlled by the mouse. The graphics are good. The castles and tournament setting are particularly noteworthy. The basic skills of the game, swordfighting and jousting, can be learned with some practice. You will probably agree that the rewards of rescuing the Princess are worth the risk.

contd.

A nice feature, if you are short of time, is that you can easily save the game and finish it later. The game is copy protected, but in theory you should be able to copy it on your hard disk. (I could load it on my disk, but the system crashed every time I won a swordfight or joust.)

I basically enjoyed the game. However, I would have liked to be able to quit while I was ahead when jousting, and the basic swordfighting technique could have been described in the documentation. Also, I am not sure how long the game would hold my interest. Before long I suspect I would be spending most of my game-time trying to improve my **Dark Castle** performance or learning to fly an F-16 **Falcon**. On the other hand, if a later version enabled me to improve my swordfighting or jousting as well as my leadership capability, I suspect that I would spend more time with **Defender of the Crown.**

NBA: A Review
by Reid Hutchinson

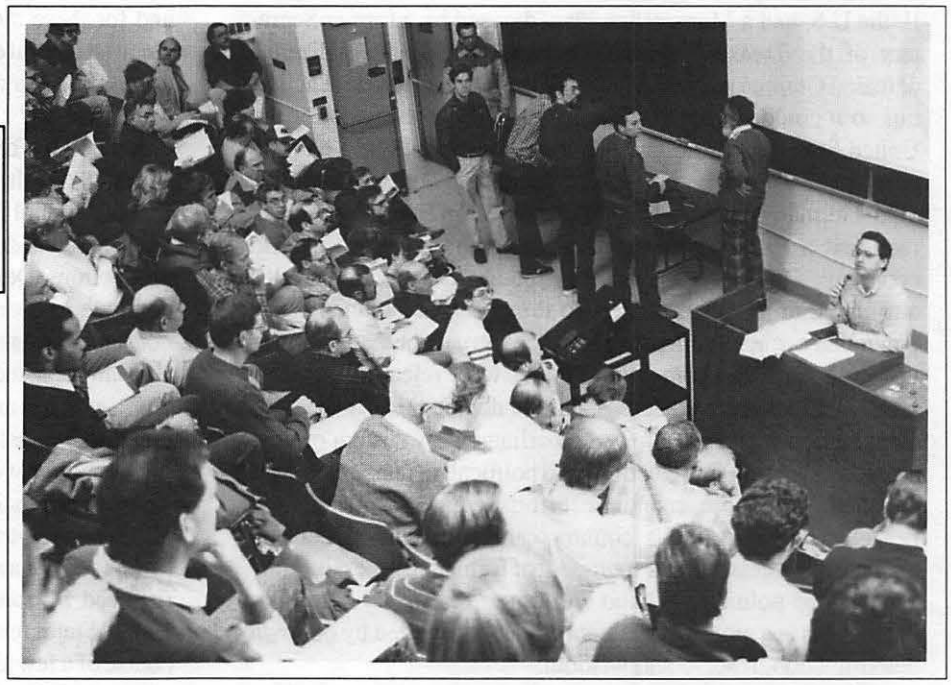
McHale takes the rebound, dribbles down the court, fakes an outside shot then passes to Bird, who drives up the lane for a quick layup. The shot is blocked by Chamberlain of the Philadelphia 76ers, who takes the ball and heads toward the other basket. HOLD ON ONE MINUTE! Larry Bird and Wilt Chamberlain never played head to head, but you can change that with Avalon Hill's new basketball computer game, **NBA** (Apple II series with 48K).

This is an animated, stat-based basketball game, with 20 teams ranging from the 1959-60 Boston Celtics to the final four of the 1985-86 season. You can play one or two players, or let the computer handle both teams and play up to 99 games for a simulation of an entire season. Stats on individual players include a position and defense rating, field goals attempted, field goals made, shooting percentage, assists, rebounding, and three-point play rating.

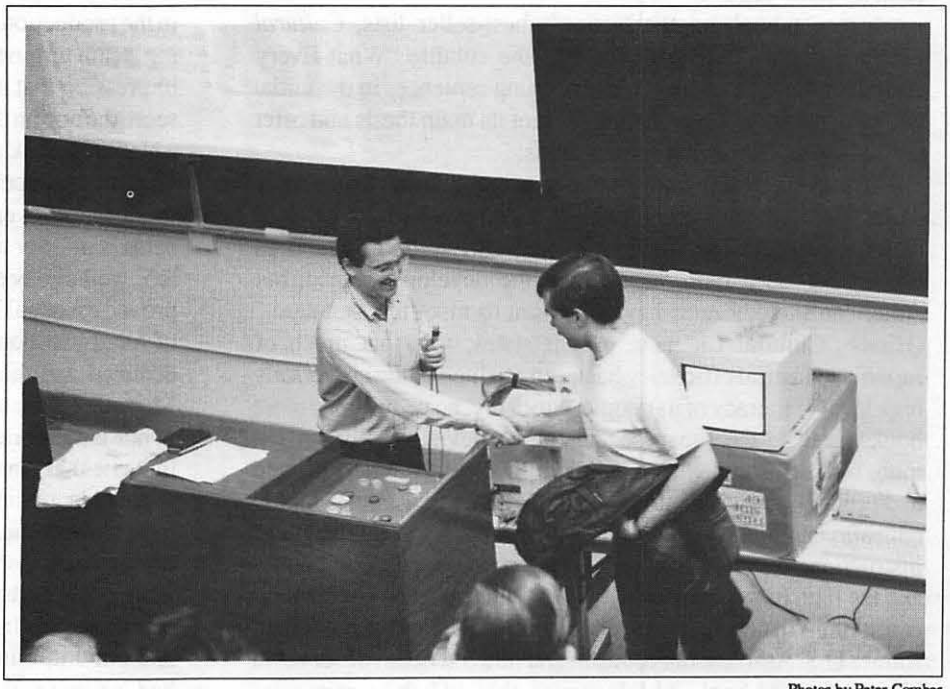
On offensive, you are given the options of shooting, passing to a teammate of your choice, or killing the clock. With the shooting option, you can try an outside shot, a drive and shoot or a three-point shot. If the shot misses, and your team gets the rebound, the options are taking the ball back out, putting it back up, rebounding aggressively or guarding against the fast break. You are given up to two choices on this. On defensive, the options range from guarding against an outside shot, lay up, attempting to seal or block the shot, or double teaming a player.

Once all options have been selected, the screen switches to an animated mode where all your selections are displayed by hi-res graphics, and you see the outcome of your coaching abilities. The play runs to a completion with a score, turnover or defensive rebound. Also included in the game is a section to update or create a statistics disk, with the option of printing team stats.

The game play is on the long side, but the action is fast and furious. The selection process slows down game play, but it gives you a chance to make sensible selections, and a better percentage of making those shots at the buzzer. Overall, I give it a 6 out of 10.



O.K. Let's start this session



Photos by Peter Combes

Tom Warrick congratulates Bob Shaffer

CALCULUS FOR A NEW CENTURY: A Final Report

by Joseph A. Hasson

A few years ago, a Presidential Commission produced a report on American education at the secondary level entitled A NATION AT RISK. One particular statement in it made a deep, lasting, worrisome impression on all who read it. It stated, in essence, that we have "shot ourselves in the foot". We have done to ourselves in education the equivalent of what we might expect would happen if the United States were invaded and occupied by a foreign enemy. One recalls that before the end of World War II, the U.S. had a Morgenthau Plan, devised by a former Secretary of the Treasury, which would have de-industrialized a defeated Germany and confined it to wholly agricultural activities so it could never again wage war. The occupation of the United States by a foreign conqueror, then, could be a chilling prospect. Fortunately, saner, wiser minds and policies prevailed. West Germany today is a bulwark of Western European democracy and a locomotive of growth and stability in the world economy. One can also claim that the Japanese miracle can be attributed, in no small degree, to the generous policies of the American occupation forces in that country. The Zaibatsu was broken up and free competitive forces were released. Orderly labor relations were made possible. A democratically-oriented Constitution was drawn up and a parliamentary system of government, based on free elections and political responsibility, was installed. Japanese economic efforts were channelled into peaceful pursuits. If this country can be so munificent and eminently successful in its treatment of former enemies, it surely can find the political will and wisdom to be equally helpful to itself. This is a matter of national choice, supported by our own determination, resolve and wisdom.

But it also implies that we attract the best people into teaching and provide for a level of remuneration that better reflects their basic social worth.

A recent book on the Nation's best-seller lists, *Cultural Literacy* by E. D. Hirsch, Jr., has the subtitle "What Every American Needs to Know." The opening sentences in the initial two paragraphs of Chapter One present its main thesis and offer the following disturbing observations:

"This book explains why we need to make some very specific educational changes in order to achieve the highest level of national literacy. The standard of literacy required by modern society has been rising throughout the developed world, but American literacy rates have not risen to meet this standard." (Hirsch, Cultural Literacy, p1.) It states, too, that much of Japan's industrial efficiency has been credited to the universally high level of literacy of its people. Probably, no people read more books than do the Japanese. Japanese television is organized more like British television, a mix of BBC-like publicly-owned and privately owned stations. One government network, highly educational in its programming, carries much foreign language instruction, mathematics courses of considerable complexity and the like. Its program quality is so high that it forces commercial stations to compete on a quality basis. Edwin O. Reischauer, former U.S. Ambassador to Japan and noted scholar, observes in his widely-read book, *The Japanese*, that, "High literacy rates and excellent educational standards are a major reason for Japan's success in meeting the challenge of a technologically more advanced West in the 19th century and for its subsequent achievement of a position of economic leadership. Nothing, in fact, is more central in Japanese society or more basic to Japan's success than its educational system." (Reischauer, Edwin O. The Japanese, p.167.)

In the United States, only two-thirds of Americans are literate and for these the average rate is too low and requires raising. Great structural changes have and continue to occur in the world economic system. The preeminence of the United States has been seriously challenged. This carries with it substantial, serious economic and political implications. At the end of World War II, the United States accounted for 40 percent of the world's Gross National Product. Currently, we account for 20 percent—a 50 percent decline in the U.S. share of the world's total production. Despite this sharp decline, our consumption levels continue to soar. In the years between 1980 and 1985, private consumption grew at an annual rate of 3 percent and government consumption increased at an annual rate of 4.2 percent. Our GNP, which is an aggregate measure of our national production, increased at just 2.5 percent per annum.

Hence, we were consuming at a considerably higher rate than we were producing. This distorted relationship lies at the heart of our soaring trade deficit. When this state of affairs is linked to the fact that a substantial share of our Federal budget deficit is financed by foreigners, we can begin to understand why the United States has become the world's biggest debtor nation in the course of a few short years. It goes far to explain why 30 percent of automobiles on U.S. highways are foreign imports. It helps us to understand why in the field of consumer electronics, it is hard to find items produced in the United States. We have lost ground in the production of heavy machinery. We have stopped producing steam turbines. These broad statements should not leave the impression that all is gloom and doom. But they should underscore the notion that in many important respects we have become a Nation at Risk not only in educating our young but also where fundamental economic factors are involved.

Surveys reveal that the mathematical attainment of our students is inferior to that of students in other countries. In the past, too, we have been able to form new intellectual capital which proved essential for economic growth to occur. But the numbers of American-born students who go on for their Ph.D.degrees has declined and the proportion of foreign students has increased. This affects the teaching of young people and the research done in our laboratories, institutes and universities. These conditions indicate that American students and our domestic pool of talent are not responding to the challenges of the modern age. Not only have we become dependent on foreign sources for our consumption and our finances, but we are also coming to depend more and more on the inflow of talent from other countries. This inflow of people is filtering into our Universities, our research institutes and our entire intellectual establishment. While this is not all bad, neither is it all good!

contd.

In the past, the American economy has displayed a capacity to grow and a resiliency that made possible easy absorption of incoming peoples from abroad. In the final analysis, all gained. We have at hand a powerful new technology—the computer—that needs to be harnessed in order to facilitate the formation of intellectual capital. Its potential has hardly begun to be realized. In the December issue of the *Washington Apple Pi Journal*, I called your attention to a synoptic report of a Colloquium, held in Washington on October 28-29, 1987. The Colloquium was devoted to an assessment of how Calculus is being taught in our Universities. The general conclusion of that meeting was that much shoring up was required if students were to be reached: if they were to be attracted to, rather than repelled from, the Calculus; if the methods of teaching were to be improved on; if the basic concepts were to be better mastered; if the relevance of the subject to the modern age of science and technology were to be demonstrated—then, Calculus teaching would have to be altered and perhaps, integrated more closely with the computer.

The full report of that Colloquium has now been published and can be obtained from the offices of the Mathematical Association of America at 1529 18th Street, N.W., Washington, D.C. 20036. Some members of WAP may wish to examine it in full. The papers which cover a wide range of related topics reflect the interests and concerns of those who attended the meeting: teachers of mathematics at various levels—four-year universities, two-year colleges, high schools; and users of mathematics—engineering, biological sciences, industrial management, computer sciences, physical and social sciences.

The decline in college enrollments of majors in mathematics is viewed with some consternation by many. The learning of mathematics is being displaced by canned computer packages where an understanding of the basic principles of the Calculus, in particular, is not required. Calculators at many levels in our educational hierarchy—down to the K through 12 levels—are displacing pencil and paper. In the opinion of many experts, that is not a wholesome development. Mechanical devices take over and perform the "nitty-gritty" of solving problems which is desirable for a subject's full comprehension. On the other hand, these devices can and should be used to assist the learning process and to minimize needless rote and repetition. Somewhere in between a golden mean exists, which is desirable to find.

The issue of the Calculus—its role in university curricula, its teaching, etc.—has given rise to an ongoing struggle on our university campuses. There are those who argue that with the rise of the computer, it is more appropriate to emphasize the teaching of Finite or Discrete Mathematics. Others have argued that the Calculus which deals with continuous functions is basic to master modern science and technology. Moreover, the Calculus is an essential requirement for higher mathematics. And, it is argued, we are regrettably turning out too few high-powered mathematicians. In fact, in some instances, our teachers of mathematics are being imported from abroad! Others argue that the Calculus and Discrete Mathematics should be coequal during the first two years of college mathematics.

It is worth noting that there are significant differences in the attitudes of Japanese and American students towards mathematics. "Japanese students think that mathematics is hard but that anyone can learn it by working enough. American students think mathematics is a knack only few are born with, and if you don't have it, extra work won't help.. (But) if American children spend their after-school hours working for spending money at fast-food franchises, it cannot be surprising that their mathematical achievement might suffer. On [one] campus, every student wants to become an investment banker—at least, they did until (October, 1987).")Paper by Thomas W. Tucker, "Calculus Tomorrow," p.17 in *Calculus for a New Century* published by by Mathematical Association of America, 1988.)

I focus on only selected papers of this Colloquium—those that deal with the relationship between the Calculus and the computer. First, a general observation. This meeting dealt only with Calculus. Other colloquia in the future may deal with other branches of mathematics. Similar meetings might be held on other subjects taught at the university. If we are, indeed, a "Nation at Risk", it is long overdue that our best minds address themselves to what should be done about it. In sum, an examination of the implications of the computer as a tool for assisting learning is underway and should continue into the future. A considerable literature on the subject is accumulating. Needless to say, the computer can and will surely have a revolutionary effect on the whole educational process. If using a library is part of that process, one should mention how the computer is affecting its workings. Not only are computers displacing the old-fashioned card catalogues; many university students with computers in their dormitory rooms can undertake literature searches by linking up to library mainframes as an important first step in the writing of term papers, theses and doing other academic chores. Anyone who has used the excellent facilities of the National Library of Medicine or the Library of Congress is well aware of the powerful research tool that the computer has become in them. The National Library of Medicine has over 20 data bases with connections all over the world. Its MEDLARS (Medical Literature Analysis and Retrieval System)—actually a family of databases—is available on line to individuals and institutions throughout the world. It has an additional 20 databases in specialized areas of health and disease. The Library of Congress has its Scorpio and Mums systems which are remarkable systems for ferreting out research materials. It has a database, updated daily, that enables one to track through every piece of legislation introduced in the Congress and to print out a summary of bills and amendments. But the role of the computer in libraries is the subject of another essay. Here we are concerned with the Colloquium on the Calculus.

One paper in its final report by Anthony Ralston of SUNY at Buffalo observes that courses in computer science depend only trivially on the calculus. Even at the graduate level, students in computer sciences have more use for discrete analysis than for calculus. This lack of a close connection between the teaching of computer sciences and calculus may reflect the failure of mathematicians to adjust their course presentations to the workings of the computer. How much mathematics does one require to be a computer scientist? (Ralston, Anthony, "Calculus and Computer Science," pp. 23-24.) He cautions that if mathematics departments do not revise and update their Calculus courses, other departments will and are offering math courses especially designed for their own disciplines.

In a second paper, it is observed that in 1983 over 25,000 bachelor degrees were awarded to students majoring in computer

contd.

science, information science of computing technology. By 1988, this figure will have increased to an estimated 50,000 students. This is about two times the number of students who will receive degrees in mathematics, statistics, chemistry and physics! Calculus is commonly required as a prerequisite to a computer science degree in most Universities. But even more important for computer scientists are Discrete Mathematics, Mathematical Logic, Set Theory, Graph Theory, and Combinatorial Mathematics. In addition, Numerical Analysis which permits approximating solutions to continuous problems with discrete methods, has an important role to play. But Linear Algebra and Calculus are prerequisites for Numerical Analysis. Hence, while Calculus may not be directly relevant for work in computers, it is the gateway to other courses which are. Simulation Techniques, Modelling, Queueing Theory are useful but not required of all Computer Science students. Differential Equations has little bearing on the core areas of Computer Science. What is required and highly desireable for Computer Science majors is work in the Theory and Analysis of Algorithms. But the development of algorithms with computers requires a knowledge of Integral Calculus. Integral Calculus is useful in setting upper and lower limits to algorithms.

I will conclude by listing some of the papers in this important Colloquium which seek more closely to relate the Calculus to the computer. Both mathematics and the computer play an obviously important role in science and technology. Both are basic to the economic health of our society. Both are essential for American products to regain their competitive edge in world markets and for continued economic growth. It is necessary to link science and technology for two major reasons. Basic science is the vehicle through which basic discoveries of the laws of nature occur. Technology is the vehicle through which those basic discoveries are converted into products that can be efficiently and competitively produced. The United States has been preeminent in the advancement of the basic sciences. There are many ways of evaluating this preeminence: The numbers and quality of science journals; the numbers of Nobel Prizes won relative to other nations. The United States has, however, been laggard in converting basic science discoveries into technological usable processes of production. There are numerous outstanding examples of this kind of failure. It is a kind of failure that has cost us dearly. The Young Report (The Report of the President's Commission on Industrial Competitiveness) recommended the establishment of a new Cabinet-level Department of Science and Technology. In addition, the Report offered thirty-two recommendations. Five of those dealt directly with matters of training and education.

The papers of this important Colloquium which dealt directly with the computer are as follows:

Ralston, Anthony. Calculus and Computer Science, pp.23-4.

Boyce, Wm. E. Calculus and the Computer in the 1990's, pp.42-3

Young, R. & Blumenthal, M. Calculus for Computing Science Students, pp. 71-4.

Kennelly, J.W., et. al. Computer Algebra Systems, pp. 78-79.

Buck, R.C. Computers and Calculus: The Second Stage, pp. 168-72.

Zarn, P. Computing in Undergraduate Mathematics, p. 23 ff.

Postscript:

Since the above material was written, I have read an article in the Sunday New York Times (2/7/88) with the headline "America Is Running Out of Time." It reports on the results of a recent American Assembly Conference (Columbia University) which reached the following major conclusion:

"Conference participants viewed Education as the No. 1 priority for improving American competitiveness. The conferees urged that special emphasis be placed on teaching math, science and language skills, as well as on the encouragement of innovation and experimentation in the classroom and better training of teachers.

"In higher education, more emphasis is needed in engineering, science and technology."

One can broadly agree with this observation—a conclusion also reached by others—e.g. Robert Reich, The Next American Frontier. However, one is impelled to enter a caveat. Americans tend inherently to react to situations when crises are upon us. Perhaps, then, we overreact. While we make adjustments to deal with a difficult situation, we should not, I think, overlook other basic values. Technical institutes and leading engineering schools have recognized that students should also be educated in the basic values of our society. This means that they should know something about history, philosophy, humanities. Second, the changes and adjustments we make should take into account that large segments of our society start from disadvantaged positions. Special attention to those segments is essential. The American Assembly puts it this way, "The inadequacies of the inner city school must be remedied."

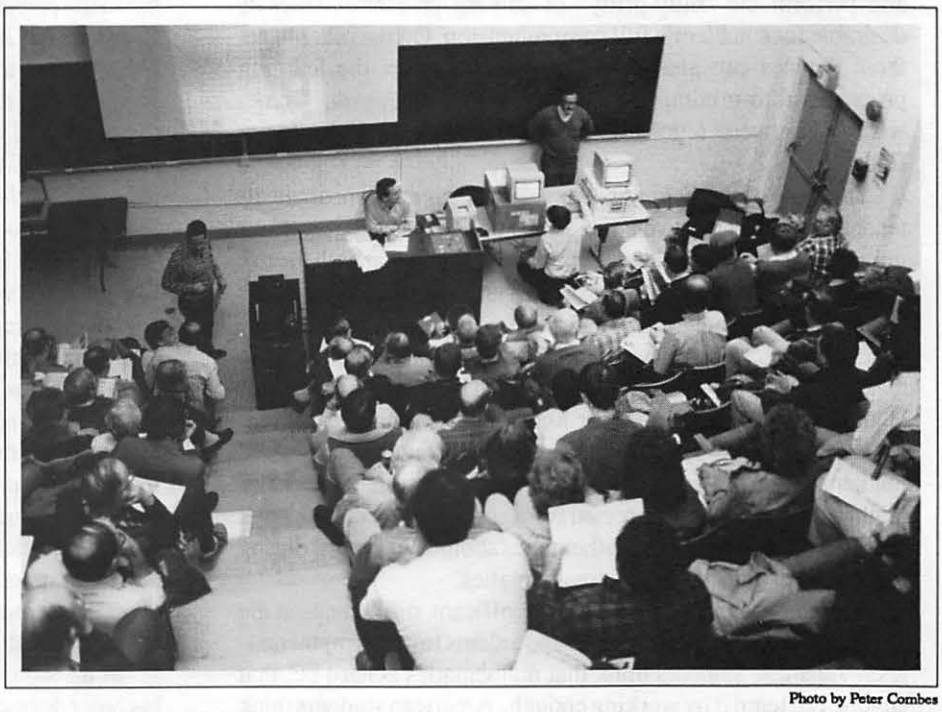


Photo by Peter Combes

Mac Developers Rich Norling (standing) and Jim Lanford (kneeling) make preparations

300 dpi Color
Overhead Transparencies

Colorizing
Print-Out Service
Color Printer Sales
Self-Service Access
Graphic Design Service

Ad Center

827-5967

Presentations that Sell

FREDERICK APPLE CORE

A SLICE OF THE WASHINGTON APPLE PI

OFFICERS & CHAIRMEN

President	- Oscar Fisher Jr.
Vice President	- Stephen Hadley
Secretary/Treasurer	- Donna Logan
Apple II Librarian	- Tony Svajlenka
Macintosh Librarian	- Doug Tallman
Group Purchase	- Harold Polk
SYSOP	- Scott Galbraith

The Frederick Apple Core meets on the second Saturday of each month in the large conference room of the Frederick Library at 110 E. Patrick Street, Frederick, MD. Meetings begin at 9:30 AM and normally last until 11:30. Programs are scheduled for both the Macintosh and the Apple II and computers of both types are provided.

If you have problems or questions concerning any program or application, you are encouraged to bring the program along and assistance will be provided. We also have extensive software libraries for both families of Apple computers as well as blank disks.

FAC Upcoming Meeting Dates:

March 12

April 9

HOTLINE MEMBERS

Scott Galbraith (II&GS)	- (301) 865-3035
Kurt Holter (Mac)	- (301) 663-4199
Bruce Taylor (Mac)	- (301) 371-6181
Stephen Hadley (Mac & Graphics)	- (301) 831-5353
Cracker Barrel BBS	- (301) 662-3131

ASK UNCLE APPLE?

Well, it would seem that no one is having any problems with their hardware or software "out there in computer land", so I have no interesting tips or tricks to comment on this month. But in light of the fact that we all have problems from time to time, in spite of the fact no has bothered to ask for help, I will comment on a problem I recently had and my solution.

I have and use an Applied Engineering Time-Master II HO clock card and have enjoyed its unfailing service for about two years. In fact, this service has been so tireless that I never really noticed its service until it stopped working correctly. It stopped working on January 1, 1988 at exactly 12 midnight. Happy New Year!

I started on New Year's Day to begin work on a letter home to my father using AppleWorks. I have eliminated the need to hit a <return> character and a <space> character while AppleWorks is booting since I run AppleWorks off of a RamFactor board powered by a RamCharger. But, on January 1st, it all got twisted up in its silicon underwear because the clock was set to January 1, 1982. So I reset the clock, but it still read January 1, 1982. So I played with various dates and found that any date before January 1, 1988 worked properly, but any date after December 31, 1987 did not. The card itself tested as good, and always gave me the correct date when I ran various test routines, but now my software would not recognize that it existed, as long as the year was set to 1988 or later.

In frustration I began to dig through my TimeMaster documentation to see if there was some sort of clue as to why this quirk existed. On page 17 of the Users Manual I found the culprit. A single sentence says it all. Quote "After 1987, it (the TimeMaster card) will restart again in 1981, even though your TimeMaster will show the correct date, ProDOS will not read the year (properly) from the HO."

I use ProDOS version 1.1.1 and have done a dozen modifications to it so that it operates as I want. Due to all these modifications, I have not bothered to switch to ProDOS 8. But, when I switched to ProDOS 8, just to see if a newer version of ProDOS had fixed the problem alluded to in the TimeMaster Users Manual, it worked. The clock was read properly, and all of my software began to work correctly. I found that the new versions of ProDOS, 1.2, 1.3 and 1.4, have fixed the year/date problem that the TimeMaster was experiencing. I also found that all of my modifications can be made to work correctly inside ProDOS 8, if you move them 200 bytes further along in the code.

Take the starting address and add 200 to find the correct new location inside the new versions of ProDOS (A$5700 becomes A$5900, A$A315 becomes A$A515, etc.). The length address will be the same, and this formula works for all the mods I've seen and use. Unfortunately I can't tell you why this formula works, but it does, and perhaps someone who knows more about the internal workings of the new versions of ProDOS can explain it to me and I'll pass it on.

Mac Corner
The Macintosh Only Store

MACCORNERS'
BEST BUYS
for all your Macintosh needs!

POWER UP
Hard disk optimizer

MFSG RETAIL: $59.95

$39.95

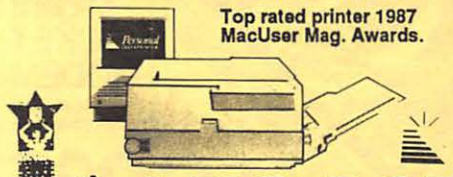
NEW!

MacNET
Communication Service

The new "Mac Link" like service that is only for the Macintosh. Use their superb software to iconically link up and access the best Mac-Related databases. Now at MacCorner!

$49.95

PERSONAL LASER PRINTER
Top rated printer 1987 MacUser Mag. Awards.



MFSG RETAIL: $2000

$1599.95

MAC ZAP
The best hard disk rescue team in the industry all in one disk!

- Rescues data crashes
- Floppy utilities included
- Works with Mac II drives
- A true pleasure to use!

$59.95

MFSG RETAIL: $89.95

NEW!

Levco SPEED BOARD
Double the speed of your SE!

This all new & affordable accelerator board by LEVCO doubles your speed (30 times faster with 68881 option!) Available in March!

MFSG RETAIL: $399.95

$349

68881 & big screen options available!

QUICKEYS
The keyboard enhancer

- Modify sets of keys
- Keystrokes able to click, drag, zoom, and more!
- Open desk accessories

$74.95

MFSG RETAIL: $99.95

NEW!

GCC HYPERDRIVE FX 80
The fastest drive in the land!

This revolutionary new drive has a RAM cache board that reduces access time to zero!

$1595

MFSG RETAIL: $2000

POWER STATION
The software control center

- Fast access to applications, documents, desk accessories
- Move between applications quickly
- Open or print multiple documents
- Includes Pyro!

$39.95

MFSG RETAIL: $59.95

NEW!

JASMINE DIRECT DRIVE 80
1987 MacUser Award Winner

An unbeatable combination of quality, performance and price. Includes 9 megs of Public Domain Shareware, & Backup SW One year Warranty.

$1399.95

NEW!

BACK PACK
by Jasmine

40 portable Megs For your Plus from the great folks at Jasmine

$1299.75

ICON IT!
Tired of pulling down menus?

- Instant access to desk accessories
- Speed-up your page making
- Fly through your favorite word processor

MFSG RETAIL: $79.95

$54.95

STORE HOURS:
Monday - Friday: 10 - 6
Thursday: 10 - 9
Saturday: 10 - 6

8653 Zetts Avenue
Gaithersburg, Maryland

948-1538

Mac Corner
The Macintosh Only Store

"Great prices, selection, and expertise are just around the corner..."

Macintosh is a trademark licensed to Apple Computer Corp.

Mac Corner
The Macintosh Only Store

MACCORNERS'
BEST BUYS
for all your Macintosh needs!

Migent POCKET MODEM
Portable state-of-the-art modem

$169.95

MFSG RETAIL: $249.99

EASYVIEW
14" large screen monitor for Macintosh.

NEW

- Eye saver
- 512 x 342 resolution
- B & W or Amber screen

$349

MFSG RETAIL: $395

BEST PRICE ANYWHERE

MEGASCREEN
For Mac SE 19" Monochrome Monitor

- Programmable resolution
- Dual screen capability
- Optional tilt-stand

$1399

MFSG RETAIL: $395

MAC BOTTOM HD-21
Most reliable hard disk on the market

- 2 yr full warranty
- Backup, spooler, utilities
- Auto parking heads

$799

MFSG RETAIL: $1195

BEST PRICE ANYWHERE

SUPERMAC SOFTWARE

TRINITRON 16" MONITOR
with SPECTRUM 1000/8 CARD

Two Page Display

- 1024 X 768 resolution
- 16.8 million color palette
- Analog RGB

FREE PIXEL PAINT with purchase of this system! A $500 Value!

MFSG RETAIL: $4198

$2598

BEST PRICE ANYWHERE

RADIUS TWO-PAGE DISPLAY
Highest quality monochrome monitor available

- Dual screen
- Tear-off menus

$1895

MFSG RETAIL: $2400

HYPER CHARGER
68020 + 1 MEG RAM

- 68020 Accelerator Board
- Includes 1 Meg of RAM
- 68881 Math Chip Option
- Big Picture Interface

$895

MFSG. RETAIL: $1399

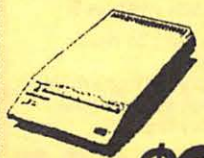
PERIPHERAL LAND 30
Economy and Quality

- 30 MB hard drive
- 1 yr warranty
- 30 MB Internal or External
- Built-in fan

$699

SCSI CABLE FOR $19.95

EMAC 2400
By Everex

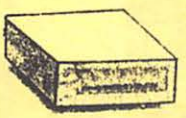


- Full Hayes® compatibility
- Built-in speakerphone
- Includes cable

MFSG RETAIL: $499

$299.99

EVEREX HD-20D
20MB's of pure power at the best of price in town!

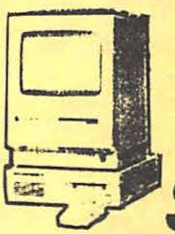


- 20 MB capacity
- SCSI intelligent interface
- Fast data transfer
- Built-in power supply
- 1 year warranty

$599

MFSG RETAIL: $999

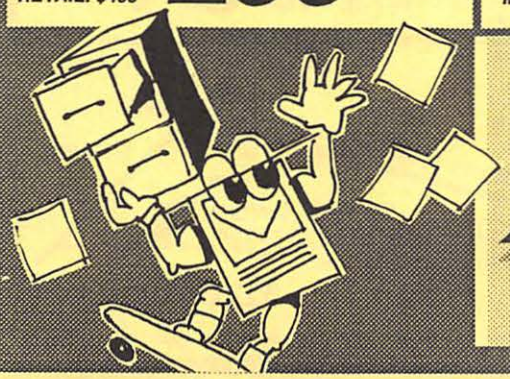
EVEREX 40+60
Professional hard disk/tape backup combination



- 40MB disk/60MB tape
- SCSI intelligent interface
- Fast data transfer
- Ideal for networks
- Zero footprint design

$1995

MFSG RETAIL: $2495



Mac Corner
The Macintosh Only Store

"Great prices, selection, and expertise are just around the corner..."

SONY DSDD
100% Certified Error Free

$17.95

MAC LUGGAGE
$69.95

MACCORNERS'

BEST BUYS

for all your Software needs!

Mac Corner
The Macintosh Only Store

IMAGE STUDIO

Provides you with your own photo editing lab!

- Retouch scanned images
- Create special effects
- Create custom images

$339

MFSG RETAIL: $499.99

SUITCASE

Font and desk accessory liberation

- No limits on amount of desk accessories
- Open any desk accessory using the keyboard

$39.95

MFSG RETAIL: $60

DISK FIT

Auto back-up & restore for your HD

- Fast, reliable, compact

MFSG RETAIL: $79

$55

BEST PRICE ANYWHERE

PIXEL PAINT

Now at MacCorner the most advanced color illustration program ever written. A must for all Mac II owners!

$299

MFSG RETAIL: $499.99

Hooray! Tax help is on its way!

MacInTax

& TaxView

- Over 30 forms
- IRS forms on screen
- On-line instruction
- Full itemization
- Print IRS approved forms

NOW IN STOCK!

$79

MFSG RETAIL: $119

Ready-Set-Go! 4.0

Most advanced DP SW on the Mac.

- Text runarounds
- Custom page sizes
- Powerful word processor
- Color Seperations ability

$339

MFSG RETAIL: $499.99

FELIX

The first post-mouse device

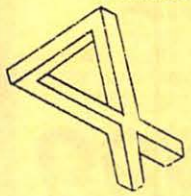
- Complete optical tracking system
- Very accurate
- Leaves room on your desk

MFSG RETAIL: $199.95

$149.95

4th DIMENSION

Database program for the Mac



- Multi-user
- Create stand-alone applications
- Full Macintosh interface

$499

MFSG RETAIL: $695

SUPER PAINT

Winner of MacUser 1987 Award
The best paint-draw program!

- 300 dpi resolution
- Object oriented & bit mapped
- Supports color on ImageWriter II

$79.95

Only While Stock Lasts!
MFSG RETAIL: $149.95

ILLUSTRATOR

Buy now & get a free upgrade to Illustrator 88

The most advanced postcript drawing program by adobe!

$349

MFSG RETAIL: $499

SCOOP

Desktop Publishing Program

- Create professional documents
- Contains paint, draw and a spelling checker

$339

MFSG RETAIL: $499.99

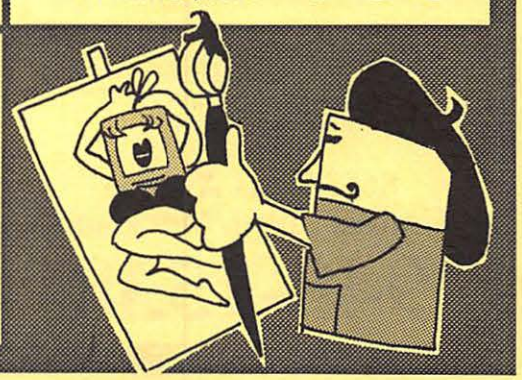
SPECIAL SALE

Disk Box 30	...$9.95
SSDD Sony	..$12.95
Dinner At Eight	...$29.95
Ribbons	...$3.99
Hypercard Book	.$24.95

Many other unadvertised specials at our showroom!

Mac Corner
The Macintosh Only Store

"Great prices, selection, and expertise are just around the corner..."



Mac Corner
The Macintosh Only Store

MACCORNERS'
BEST BUYS
for all your Mac recreation!

READ IT!
Our most popular OCR software, works with any scanner

MFSG RETAIL: $295
$219

THUNDERSCAN
Produces true halftones delivering 32 shades of gray.

- 300 dpi
- Magnification from 25 to 800%
- Supports TIFF, ESPF, and draw formats
- Special effects

MFSG RETAIL: $259.99
$199

MAC RECORDER
Your Mac will never sound the same!

Includes:
- Sound Digitizer
- Microphone & cable
- Sound Edit™ software
- HyperSound™ stackware!

MFSG RETAIL: $199
$159.95

QUARTERSTAFF
Experience a real adventure game

- Multiple players
- Digitized sound
- Real life graphics
- Advanced menus

MFSG RETAIL: $49.95
$35

FALCON
The F-16 Fighter Simulation

- Dogfight against another realistic fighter
- Realistic sounds
- Advanced electronics
- Flight characteristics of real F-16

MFSG RETAIL: $49.95
$29

APACHE STRIKE
A super 3-D action game featuring RealSound™!

- Fast paced
- Challenging
- All action is controlled by the mouse

MFSG RETAIL: $49.95
$34.95

PRACTICA MUSICA
Your personal music tutor™

- Music theory & ear training
- Beginners or advanced
- Includes headphones
- MIDI compatible

MFSG RETAIL: $125
$99

MIDI SUPER PACK!
Includes Opcode ProPlus Interface & Opcode MIDI Sequencer Software!

Make your Mac into a recording MIDI studio!

MFSG RETAIL: $495
$339

ALTERNATE REALITY
The ultimate role-playing fantasy game

- Original music
- Three dimensional scrolling
- Keyboard & joystick action

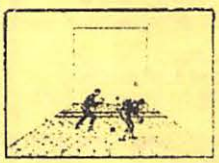
MFSG RETAIL: $39.95
$27.95

MAC GOLF
The most realistic golf match you can play with a mouse.

- True to life golfing
- A mind of its own
- Choose your challenge
- A skill sharpener

MFSG RETAIL: $69.95
$48.95

MAC RACQUETBALL
The exciting Racquetball simulator!



- Two can play
- Authentic form & technique
- Visual scores
- Authentic sound
- 3-D display of court

MFSG RETAIL: $69.95
$41.97

STORE HOURS:
Monday - Friday: 10 - 6
Thursday: 10 - 9
Saturday: 10 - 6

8653 Zetts Avenue
Gaithersburg, Maryland

948-1538

Mac Corner
The Macintosh Only Store

"Great prices, selection, and expertise are just around the corner..."

GETTING YOUR IMAGEWRITER II OUT OF A JAM

by David Morganstein

The Imagewriter II has several distinct advantages over the IW I. It is faster. It can print with a color ribbon. It can be shared over an Appletalk network (if an optional network board is installed). If it is one of the earlier models, it also has a major disadvantage—it jams. Mine did. For a year and a half Linda and I tore our hair out over the jams (and those who know me know this I can ill afford!!). Every couple of pages one side would hang up and the paper would stop feeding, even as the tractor mechanism force fed more pages down into an ever filling gap between the roller and the platen.

I was told I needed a lighter bond paper. I bought a lighter bond paper. It still jammed. I was told to keep the locking mechanism spaced properly. If the paper was "stretched" too tightly, it could cause jams. We used to use a ruler to measure the exact width to within a thirty-second of an inch. It still jammed. We were asked by an Apple authorized repairman if we had ever printed labels. "Yes", we confessed somewhat guiltily, "we had printed labels". "Ah ha", said the repairman, "don't use your printer to print labels! The sticky stuff comes off the labels onto the roller, gumming it all up, and makes the printer jam". Thirty five dollars later we took our properly cleaned Imagewriter II home and proceeded to print with it. It still jammed. (We now superstitiously avoid printing labels—heaven help us if we should ever want to use our printer to print labels).

If it didn't jam, it produced these cute little horizontal white lines through the text. Very artistic. Not very readable but very artistic. Alternatively, it would overstrike one row of dots on top of the other making one line have shorter letters. I often wondered what the recipients of our expensive computer generated letter thought of those less than full height characters—probably that they would never buy an Imagewriter II...ever...ever...

Then came Eric. Bless you Eric. I want everyone to know about Eric. He works at Clinton Computers in Rockville. Eric is an Imagewriter II genius. I brought in the printer for the umpteenth time because John Paff, the manager of the store, told me Eric had just joined his staff and he knew Imagewriter IIs. John was right. Good going! I set up my printer (the one I was about to trash) and Eric turned it on. He ran the self-test. It worked fine. He tried it again, this time looking at me slowly over his glasses. "It does jam", I said somewhat helplessly, "really..." Damn things never fail when the repairman is around. On the third try it jammed. It jammed a wonderful paper wasting jam! Just like the ones we have grown accustomed to. I never thought I'd want to see it jam but just then I wanted one—real bad.

"Oh ho", said Eric, "this is one of the older models with the mechanical paper sensor". "Oh", I replied cleverly. "Yeah", he said, "makes the printer jam all the time. Apple stopped shipping Imagewriter II's with these mechanical sensors last year. We'll put in an electrical sensor, you know the kind they use now, and that should do it." It did do it. It doesn't jam any more. I even dare it to jam, now. Go ahead, try and jam—I'll take you back to Eric and he'll fix your sensor...

ATTENTION ARCHITECTS AND CIVIL ENGINEERS !

WE ARE LOOKING FOR A FEW GOOD PEOPLE

WE NEED PRODUCT SUPPORT CONSULTANTS
FOR OUR DEALERS AND VARS
TO PROVIDE TECHNICAL ASSISTANCE

FOR ARCHITRION™

PROFESSIONAL CAD SOFTWARE
FOR ARCHITECTS AND THE BUILDING INDUSTRY
(3D, 2D, AND BILL OF MATERIALS)

FOR TRAINING INFORMATION PLEASE CONTACT:

GIMEOR, INC.
1815 H STREET, N.W.
WASHINGTON, D.C. 20006
202/CAD-HERE

DESKTOP PUBLISHING SIG MEETING REPORT—FEB. 3

by Cynthia Yockey

ImageMaker and MacDriver make boffo color slides together, while *Canvas* is a paint/draw program that needs to be stretched, according to demonstrations at the February meeting of the Desktop Publishing Special Interest Group (SIG). Also discussed at the meeting, but not demonstrated, were two new products from Virginia Systems Software Services, Inc.: SONAR Text Retrieval System, and ROUNDUP!, a utility that searches the contents of a variety of programs.

In a change of meeting format, the Q & A part of the meeting was relegated to last place and consisted of a request for an evaluation of Apple's three new laser printers, especially the middle of the line NT, against the LaserWriter Plus. According to Tom Piwowar, SIG Chairman, Apple's new printers all use the new Canon SX engine that produces heavy, blocked-up type of unacceptable quality. He added that the NT's additional half meg of memory over the LaserWriter Plus will be necessary only in rare situations when using too many typefaces on the layout. Others present said that Apple has promised to continue supporting the LaserWriter Plus for five more years, but consumables like toner cartridges may become hard to find sooner than that.

ImageMaker and MacDriver

ImageMaker is a $4,995 machine that produces high resolution color slides (or prints) from Macintosh and IBM computers (call Jeff Adams, (202) 457-9094 for a demo). You use software like *MacDraw* in conjunction with *ImageMaker MacDriver* (retail $149) to create your slide image, then use the ImageMaker as your output device.

According to a company flyer, "In the graphics mode, ImageMaker functions like a plotter, moving a beam of light across the film ... [its] multicolor capability provides 16 foreground colors for text and graphics precisely balanced with six background colors. [Text is] typeset on your slide film when a beam of light is projected through a precise outline in the font cartridge. ...The text is proportionally spaced and kerned automatically."

A service bureau that has an ImageMaker assisted with the demonstration: Laser Images, 1144 18th Street, N.W., Suite 200, Washington, D.C., phone (202) 293-7414.

SONAR and ROUNDUP!

Philip van Cleve of Virginia Systems Software Services, Inc., in Midlothian (804-739-3200), spoke about his company's new products for power word processing. (More people buy computers to process words than numbers—the era of word crunching is dawning.) We didn't see these products demonstrated, but they sound like they are well worth investigating.

Calling SONAR a text retrieval system gives you only a clue to its listed features. It can search through thousands of documents at a time, make an index by word frequency or from a list you create, analyze text for word frequency and show relationships between people, places and things. An example of the relationship feature from a company flyer says: "You could ask if there is a relationship between 'John Doe' and 'Janet Clark' [and produce] a listing like: John Doe is the cousin of Mary Smith (both born in 1952), Mary Smith is the wife of Mike Smith (married in December 1976), Mike Smith is the boss of Jane Adams, Jane Adams is also known as Janet Clark." SONAR retails for $195—imagine what Perry Mason could have done with it. VSSSI says SONAR currently supports *Word, MacWrite, MORE, WriteNow, Trapeze,* text only files, and is working on support for page layout and database software.

ROUNDUP! supports the same software as SONAR and searches the contents of files. It retails for $29.95. Both work on the MacPlus, SE and Mac II computers.

Canvas

Tom Piwowar demonstrated *Canvas*, calling it "a program I would like to like. It is comfortable to use. It is a logical extension of *MacDraw* skills and doesn't require lots of new skills like *Illustrator* does. Any time you scale an object with the shift key down, it will scale proportionally. This is a good feature. And you can slide an object off the 'paper' until you need it, like in *PageMaker*."

About *Canvas'* troubles, Piwowar said, "You don't always get on paper what you see on screen. You can shrink an object and it won't shrink as a whole, but when you stretch it off, the part that was clipped off is gone. It does have innovative features, but the company producing it is small (Deneba) and didn't implement the stuff." On the up side, he added that the bugs have the feeling of being oversights from not enough beta testing rather than fundamental flaws.

Cynthia Yockey is a Macintosh consultant and desktop publishing trainer. She is also a writer and editor with experience in journalism, public relations and advertising.

Service

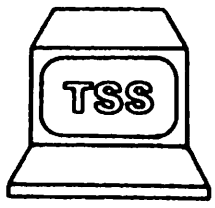
on Apple II+, Apple IIe
IBM and IBM Compatibles

We Test, Clean and Align Your
5-1/4" Floppy Disk Drives

Factory Service on
Epson and Okidata Printers
Expert Repairs on Other Brands

90 Day Warranty on All Service Work

On-Site Maintenance Agreements Available



For More Information Call
698-0347
Technical Sales & Service
2820 Dorr Ave
Fairfax, VA 22031

BOOK REVIEWS
by Robert C. Platt

This month I'm reviewing two books—one on Mac programming and the other on Apple Computer.

Macintosh Programming Secrets by Scott Knaster (Addison-Wesley, 368 p. $24.95).

Although Scott Knaster wrote Programming Secrets after his noted *"How to Write Macintosh Software"* (reviewed in Sept. '87 WAP Journal p. 53), this book should be read before "How to Write...." It is an introductory text at the level of *Macintosh Revealed.*

Scott Knaster, who was the featured speaker at the October WAP meeting, was director of technical support for the Macintosh at Apple Computers. In that role, he taught Apple's educational programs for software developers and gained an intimate knowledge of the Macintosh. His unique perspective contributes to this book as does his unconventional sense of humor.

The most valuable part of this book is Chapter 3 and the appendix which is the best presentation of the color QuickDraw routines (which are available on the Mac II) in any book that has appeared to date.

The other topics covered by the book are helpful as well. Knaster covers user interface design; the Event Manager; Launching and Quitting with the Finder; the Print Manager including bundles, signature resources, PostScript and QuickDraw comments; the Resource Manager and the Window Manager, including tiling multiple windows on the screen.

Although specific Mac ROM routines are name-dropped as necessary, Knaster talks the reader through the programming tasks conceptually rather than giving actual source code. The exception is a Pascal program to tile windows.

The book includes two humorous bonuses. First, a 12-page "Intermission" features a comic-book style guide to the Event Manager. Second, Knaster includes two versions of Mac Technical Note #110—the first was a forgery which was incorrectly attributed to him and the second was printed by Apple to counteract the first. Both are parodies of the Mac Tech Note series.

Steve Jobs: The Journey is the Reward by Jeffrey S. Young (Scott, Foresman & Co. 440 p. $18.95)

When I began this book review column, I promised the editor that I would not review books on corporate takeovers. Well, there is an appropriate exception to every rule.

Jeffrey Young is a journalist who was raised in California and London. As a co-founder of MacWorld Magazine, Young gained access to a number of Apple employees and set out to write an "insider's" account of the history of Apple. His book evolved into a biography of Steve Jobs, the erstwhile Chairman of Apple. However, his work was hampered by Jobs' refusal to give Young interviews. Instead, Young pieced his work together from talks with numerous Apple employees below Jobs or Sculley.

Reading books on Apple Computer is a lot like viewing the sneak preview of the next Rocky sequel. One breezes through the preliminary scenes waiting for the inevitable fight scene: the showdown between Jobs and Sculley.

When I read *"Odyssey: Pepsi to Apple"* by John Sculley with John Byrne, I was left with the feeling that I was getting less than the full story. During the period when Jobs had control of the newly launched Mac Division and Sculley had the Apple II Division, the reader is presented with Jobs/Sculley conversations over the future of the Mac. There is little reference to the Apple II and the morale problems which developed during that era. Although Bill Atkinson's contribution to the Mac is acknowledged in flattering terms, there is no mention of R. Lissner, the author of AppleWorks, which was then Apple's best-selling program. The account in "Odyssey" of Jobs' departure from Apple appeared one sided.

In contrast, Young brings more journalistic objectivity to the Jobs/Sculley confrontation (as well as to the numerous other confrontations reported in the book.) Young performs the valuable function of holding up a mirror to Apple so that all can see where the mistakes of the past were made. Certainly, the pie-in-the-sky market forecasts and lack of market research will not recur in the mature Apple Computer.

The other important lesson in Young's book is that Apple Computer is an institution which is much larger than any individual. It is a journey in which all Apple users as well as Apple employees have played a role, and it is a journey that is far from over.

MacSource
a mostly Mac store...
2121 Crystal Drive
Arlington, Virginia 22202
(703) 521-9292

Our prices are competitively discounted, and we continue to offer Macintosh workstation rentals, including scanning and laserprinting.

MacViewFrame

The first low-cost portable LDC computer projection display for the Macintosh. MacViewFrame takes full advantage of the crisp Macintosh screen. Simply place the MacViewFrame on a conventional overhead projector, connect it to your Macintosh with the included video adaptor and read the writing on the wall.

Dayna File
Two-way sharing of data between Macintosh and IBM PCs

Colby "Walkmac"
Portable laptop Macintosh

Reconditioned laser cartridges for $55

STOCK SIG NEWS

by Andrew D. Thompson

Despite the October crash and some subsequent daily whipsaw variations in the stock market, interest in employing Apple related hardware and software to chart market direction has steadily risen. Stock SIG members have continued to meet on the second Tuesday of each month even though the November meeting was not reported in the January WAP. A partial overview of that meeting's presentations follows.

1. REVIEW OF NOVEMBER MEETING

A. THE JAPANESE CANDLE CHARTING METHOD

One of the highlights of the November meeting was Jack Upper's presentation on the classical Japanese "candle method" of charting stock market trades, which includes opening and closing prices, price range, and whether the stock closed up or down for the day. Upper began by describing the Japanese investing environment: its enormous propensity to save, Confucian ethnic which fosters self-sufficiency, large inter-corporate holdings, high stock prices supporting a speculative attitude toward investment, and lack of hedging instruments.

As a result of these environmental factors, Upper argued, the Japanese stock market lends itself to technical analysis more so than does the U.S. market. "The Japanese candle method is more impressionistic, more sensitive to market mood." It incorporates factors which are more illustrative than the standard bar chart American chartists use to describe the U.S. market. Further, non-linear and organic analogies dominate Japanese technical discussion and there is little talk of trend lines.

One important bottom line of this approach is not only to compare the relative movements of the Japanese and U.S. markets, but to apply the candle method to the U.S. market using, for example, the Dow Jones Industrial Average.

SIG members asked that Upper keep them abreast of his cross-cultural technical analysis and provide updates at future SIG meetings.

B. SIG GETS PLUGGED INTO CABLE

Erik Severson and Vernon Kasten of the De Rand Investment Company gave the November participants extensive fundamentalist-type information on the promising future of investing in the cable industry.

2. REPORT ON THE DECEMBER STOCK SIG MEETING

On December 10th, the second Thursday of the month, Stock SIG members convened to share their various computer analyses and questions.

A. THE NOVEMBER MUTUAL FUND SUB-SIG REPORT

The November Mutual Fund Sub-SIG Meeting was held, as usual on the fourth Tuesday of the month. Participants shared information on their personal studies of short-term trading in mutual funds as well as their longer-term analyses of which funds have done best in bull and bear markets.

B. WILBUR'S REVIEW OF TECHNICAL INDICATORS

Could technical analysis have helped investors get out of the market prior to the October 19th crash? Harley Wilbur claims "yes." Admitting that hindsight is always clearer, Wilbur then proceeded to present his analyses of various technical indicators which compared 1929 and 1987. "The similarity is frightening," he said.

The 39 week moving average of the S & P 500 index gave a sell signal on the Thursday before "black Monday." The narrowing advance-decline ratio, viewed in conjunction with rising prices was a divergence which also suggested market sickness. The 30 day overbought/oversold indicator, described in the 1987 May issue of the American Association of Individual Investors (Edward P. Nicoski), dropped below 1.0 which indicates bearishly that the market is overbought.

Similarly, the trin 50 indicator which applies the Arms Index of advance/decline and up/down volume over 50 days of trading, stayed at the .84 level which is the danger zone. According to Wilbur, these technical indicators, not to be confused with cycle analysis, provide investors with some longer term criteria by which to judge their decisions.

C. ARTIFICIAL INTELLIGENCE FOR INVESTORS

Tom Beckman introduced December SIG members to artificial intelligence (AI) and how it can be used as a "strategic investment advisor." AI, Beckman explained, is the study of how to use computers to perform tasks that presently require intelligent behavior for their successful completion.

The term "AI" includes numerous disciplines ranging from expert systems, through machine learning, to robotics. Beckman's M.I.T. based project used the first approach which employs "computer programs that explicitly represent knowledge and solve problems" by converting implicit investment decisions into rules and into if-then statements. The overall purpose of the program, according to Beckman, was to have the program ask the investor questions and prompt the respondent's input which the program then evaluated. "Even when unsophistocated financial information is entered into the system, the Stategic Investment Advisor gives fairly reasonable results," Beckman said.

D. HEURISTIC PREDICTIONS OF MARKET MOVEMENTS

Peter Kasper, Chair of Stock SIG, then briefly introduced participants to his novel non-artificial intelligence approach which uses numerical analysis and linear prediction to predict future prices on the N.Y.S.E. Using data from March of 1983 through the present, Kasper presented a purely mathematical model to project tomorrow's market price. "This approach is equivalent to an inverted matrix," which, using daily data covering several hundred days, can take as long as nine hours to run on a Mac Plus. Participants asked Kasper and he agreed to make a more extensive presentation at the January meeting.

MAC MEETING REPORT, JAN. 23—High Tech Toys

by Cynthia Yockey

The good news about 24-bit color is that it's here, and the bad news is that one color slide can require 2 1/2 megs of storage plus the RAM to manipulate it, according to Jim Lanford, president of Micro Dynamics, based in Silver Spring, Maryland. Lanford demonstrated the possibilities of 24-bit color compared to the current 8-bit standard at January's Mac meeting. In addition, Lanford and developer Rich Norling discussed a cornucopia of products from MacWorld, which had been held the week before.

Business meeting

Items from the business meeting are as follows:

• Thanks in part to the efforts of Marty Milrod, MacWorld will be held in Washington, D.C., sometime in 1989 (August 27-30 is the tentative date).

• John Sculley will speak at the Federal Office Systems Exposition (March 7-9 at the D.C. Convention Center). Free tickets will be available at the WAP office and Apple dealers.

• If there is more interest, Group Purchasing will do more group purchases of books. Danny Goodman's *HyperCard Book* has been offered in the past. Let the office know if you want the book *Scott Knaster's Macintosh Programming Secr ets.*

• WAP will participate in AppleFest in Boston, an Apple II only show.

Twenty-four bit color

Comparing the two color monitors Lanford used for his presentation, it was easy to see that the emotional distinction between 8-bit and 24-bit color is the difference between "Gee whiz" and "WOW!" (Note that there are additional distinctions: financial and technical, for example.)

According to Lanford, Apple asked his company and RasterOps to be part of Apple's booth at MacWorld to display their products that are relevant to color: Micro Dynamics' storage and retrieval expertise with WORM (write once, read many) optical disks, and RasterOps' 24-bit color card. WORM drives look like a necessity for handling the enormous size of color files, and Lanford expects them to be available for individual users in the fall. As for Mac color scanners, Lanford said that Sharp is now shipping one. (Later he told me that Barney Scan is also shipping a color scanner for the PC that can be used on the Mac II with the Hurdler card from Creative Solutions.)

Applications that follow Apple's guidelines, such as *PageMaker 2.0, ImageStudio, Quark Xpress* and his own *Multi-user Archival and Retrieval System (MARS)* for optical disk storage, work with 24-bit color, Lanford said. He added that studies have shown that 16-bit color, which produces 64,000 different colors, may be all that the human eye can perceive, so 24-bit color should keep people happy for a long time. Lanford predicted that if the Macintosh hasn't captured 99 percent of the graphics industry in black and white, the Mac II will get it with color.

Lanford also noted with satisfaction that four Washington area companies had displays at MacWorld: Creative Solutions, Language Systems Corporation, New Image Technology, and his own company.

New color presentation software

Language Systems Corporation president Rich Norling demonstrated his company's new color presentation program *ColorLab* (retail $495), which creates and displays full color onscreen presentations on the Mac II.

Another new product from Language Systems that is due out in March is a FORTRAN compiler (retail $295 including the MPW shell, $200 without).

Highlights of MacWorld discussion

The basic news from MacWorld is that Apple and DEC have agreed to work together to create full connectivity between Mac micros and VAX mini-computers; AppleTalk is now the name of a protocol and LocalTalk is the name of the plugs; Apple will be selling three new laser printers; Motorola announced its 68030 chip, but Apple hasn't said when it would put them in Mac IIs; and Claris, the new Apple spin-off that is now handling the software formerly sold by Apple, such as MacWrite, is now selling upgrades to MacWrite, MacPaint, MacDraw and MacProject (call 1-800-544-8554 for info if you haven't heard from them by now). Also, there were scads of new products.

FEDERAL SIG NEWS

by Dan Adkins

John Sculley, Chairman and CEO of Apple Computer, Inc., will give the keynote address at this year's *Federal Office Systems Expo (FOSE)*. He will speak on Tuesday, March 8th, at 1 PM. 30,000 are expected to attend the FOSE computer expo, and a few thousand are expected for the conference. This year the National Trades Productions (NTP), the organizer of FOSE, has mailed FOSE pamphlets to most WAP members. These pamphlets include free admission tickets to the expo. One can also get into the expo free by showing a government ID. Mr. Sculley is also addressing local people at a breakfast on the 8th. For government employees invited to the breakfast, there is an option of paying $5 to avoid any conflict of interest.

The Apple Reston office is organizing an introduction to its support program. If your agency has need for support services and hasn't been scheduled for this session contact your National Account Manager at 264-5100.

Apple is also collecting success stories of how agencies are utilizing Macintoshes. If your agency or company (government contractors) would like to share your experience, then call or write Marva Whelan who is developing the publication. Her number is (408) 973-2620 and address is Apple Computer, 20525 Mariani Ave, MS: 36F, Cupertino, Ca 95014.

A special congratulations to Jerry Walz, Tim MaGraw and Charles Sicard for their articles in the January 8th issue of ***Government Computer News.*** Jerry Walz is being invited to a meeting organized by *MacUser.*

Apple Computer, Inc. is sending a quarterly publication, ***AppleGram,*** to its federal contacts. If you are interested in receiving this publication call (800) 732-3131.

MacNovice Column

by Ralph J. Begleiter

Mac's New "MultiFinder"

Just when you thought you had the simple Macintosh desktop figured out... just when you thought you'd conquered the path to locating and organizing your computer files on disk... along comes the latest innovation in desktops: Apple's new "MultiFinder." It's part of the new System Tools you get with every new Macintosh, or from user groups and Apple dealers. (It comes in the package Apple calls "System Tools 5.0," even though the System and Finder software inside has *different* numbers.)

Don't panic. The MultiFinder isn't anything worth sweating about. You won't have to learn a new program, and everything looks just about the same as the older Finders you're accustomed to. But there are a few changes, especially worth noting for MacNovices.

But first, a short explanation of why Apple has developed and issued this new Finder. An example is probably the best explanation. Suppose you're writing a report to the boss. You're using a word processing program (like MacWrite) to create the words and format the text. But you also like to include some pictures, diagrams and charts. So, to really complete your report, you also need to use a drawing or painting program, plus your spreadsheet software.

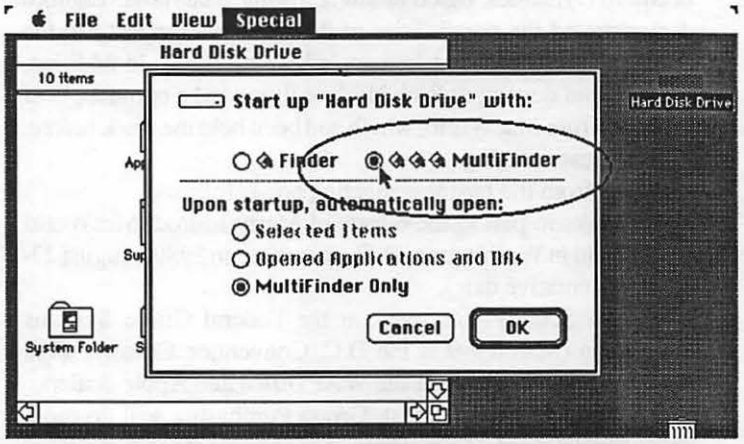
With the previous Macintosh Finders, when you were ready to insert a picture in your text, you'd have to QUIT the word processor, go to the desktop (the Finder) and OPEN the paint software. After creating the picture using that paint or draw program, you'd have to QUIT from it, and reopen the word processor to insert the picture. Same sequence for inserting charts or other items created in programs other than the word processor.

MultiFinder can change all that. *MultiFinder allows you to continue running your word processor (or any other program) while still permitting you to OPEN another application (such as paint or draw).* Therefore, you can CUT and PASTE between various programs, *without having to QUIT from each one.*

The convenience is obvious. Unfortunately, to accomplish these acrobatics, MultiFinder imposes some pretty tough requirements on your Macintosh. That creates some problems, which we'll discuss later. But first, how do you *use* it?

Copy or install the new System and Finder files to your disk. Use Apple's "Installer" if you have already customized your System file with various fonts and desk accessories. Otherwise, simply COPY the entire System Folder from the System Tools disk onto your other disks.

When you STARTUP your Macintosh using the new System (version 4.2) and Finder (version 6.0), the Finder will look the same as before. To begin using MultiFinder, look under the SPECIAL menu for the SET STARTUP command. Choose it. You'll be given a choice of starting your Mac with the regular Finder (which CANNOT run several programs at one time) or with MultiFinder. Choose MultiFinder.

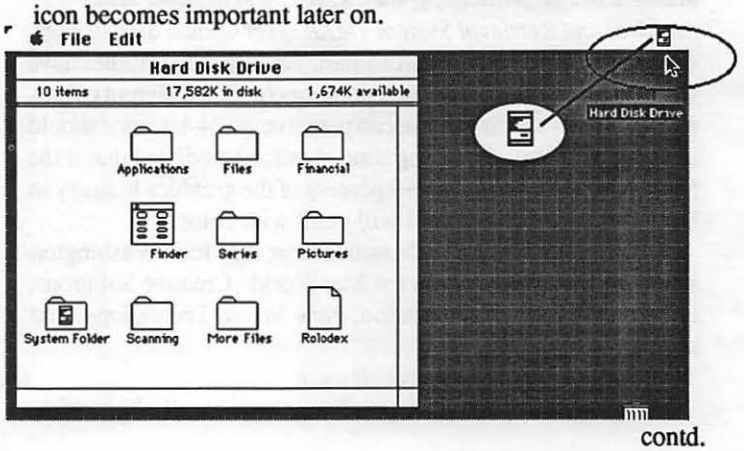


(Incidentally, while you're at this point, notice that you might also be able to select other applications as startup programs, if you wish, same as with the older Finders. The new MultiFinder modifies this procedure just a bit, requiring that the Mac startup with MultiFinder *first*, then automatically opening the other application you've chosen.)

By the way, should you decide later that you *don't* want to use MultiFinder at startup, simply choose SET STARTUP again and select "Finder" instead of "MultiFinder."

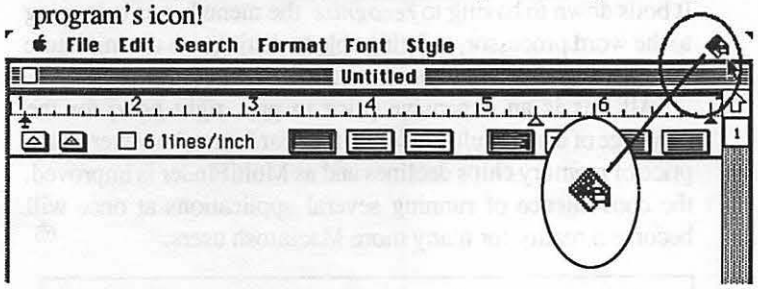
Once you've instructed your Mac to startup using MultiFinder, choose RESTART from the SPECIAL menu, which will briefly shut down your computer and restart it.

When you arrive at the desktop again, you'll hardly notice any change, but you're now running MultiFinder instead of the regular Finder. Actually, you *can* tell the difference, by looking in the extreme upper right-hand corner of your screen, up in the menu bar. See the tiny icon of a Macintosh? It tells you you're operating with the MultiFinder system. Take note, because this icon becomes important later on.



contd.

Now, here comes the magic of the MultiFinder. OPEN your word processing program. Watch your screen carefully. Check the extreme upper righthand corner of the screen. The tiny icon has now changed to a miniature version of your word processing program's icon!



And notice that the desktop *never disappears entirely as it used to*. In fact, once you've got a page from your word processor open, CLICK the mouse somewhere *off* the page, at the left or right. Suddenly, the word processor page seems to disappear, and the desktop reappears. Actually, the word processor isn't gone. It hasn't quit. It's still running... *behind* the desktop.

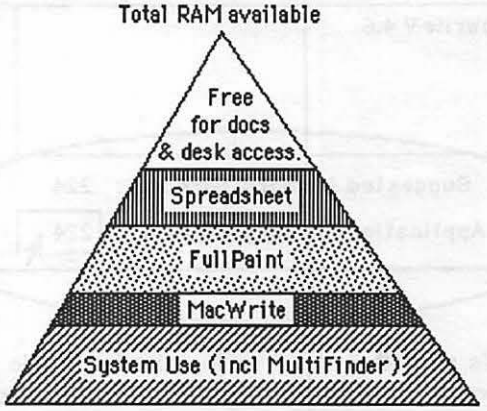
So what? Here's what: While you're on the desktop, locate and OPEN your painting software. It will appear on screen as usual, except that in the upper right-hand corner, the paint program's icon now appears in miniature. Create a little picture while you're in the paint software. SELECT it and COPY the picture into the clipboard. Now, CLICK the mouse on the tiny icon in the upper righthand corner of the screen.

Instantly, the painting program seems to disappear, and is replaced by the word processor at the front of your screen. Type a few words. Now PASTE your picture into your text. Remember you accomplished that CUT & PASTE *without quitting* either program!

Click the tiny icon again, and you'll see the desktop again. In fact, experiment a bit. Keep on CLICKING the icon. MultiFinder will switch among the three distinct applications your Macintosh is running: the word processor, the paint program and the Finder itself. (By the way, you don't have to use the miniature icon to do the switching. If you resize the various WINDOWS of your application documents so that a piece of each one is visible at all times, you can switch among applications merely by CLICKING on the document of a program other than the one you're working on. CLICK on the painting document, and suddenly the paint program comes to the fore. CLICK on the word processing document, and your writing program is activated. CLICK on the desktop and the Finder will come to the forefront.) For those of you who've used the old Apple program called "Switcher," this will seem somewhat familiar. Otherwise, it'll be a whole new world.

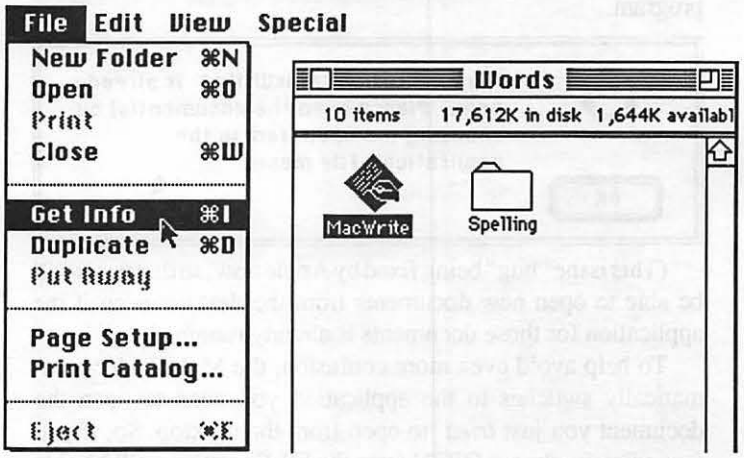
The convenience of having more than one program running at the same time is apparent. MultiFinder not only switches *between* applications, but it actually allows many programs to *continue working* while you're devoting *your* attention to something else. For instance, with a word processor and a telecommunications program running, you could be sending or receiving information from another computer in the "background," while you work in your word processor in the "foreground" of MultiFinder. Or... a spreadsheet could be accomplishing some tedious calculations on its own, while you work in another program.

Unfortunately, however, the convenience and capacity of MultiFinder to help you work is still limited by technical limits of most Macintoshes today. MultiFinder accomplishes its magic by loading various programs into the memory of your Macintosh (into the RAM). This means that *the number of different programs you may run at one time is limited by the size of your Mac's RAM*. Practically speaking, with today' large software programs for the Mac, *you'll need at least 1 megabyte (1 MB) of RAM to operate MultiFinder efficiently*. Because most programs, themselves, require some empty memory space to store the documents you create, to operate MultiFinder *productively* you'll need at least 2MB of memory.



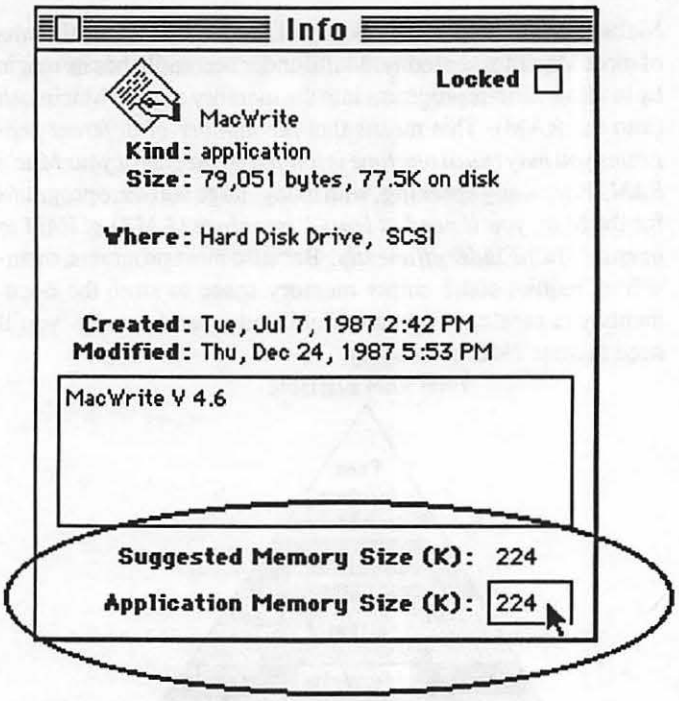
While running MultiFinder, your Macintosh must allocate chunks of memory to each application in use, causing high demand for RAM and limiting space available for large documents and use of desk accessories.

For the moment, there are some tricks you can play to maximize the space available for MultiFinder to operate. Without getting too technical, just remember that you can only run programs whose size will fit within the memory limit of your computer... and don't forget that MultiFinder itself takes some space. You can tinker with the memory usage a bit by using the GET INFO command under the FILE menu of MultiFinder. SELECT a program, such as your word processor, by CLICKING on it once. Now choose GET INFO.

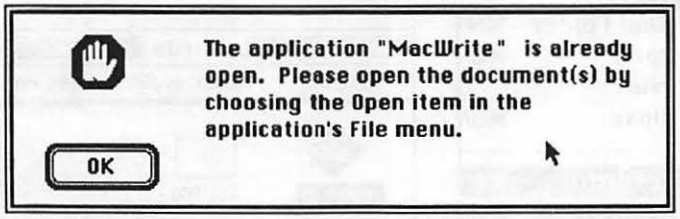


The information window which appears has a new feature at the bottom. It notes the *suggested* memory allocation to run that program, and, in a small rectangle just below that number, it allows you to set the *actual* memory allocation. If you set it too small, the program will bomb... or operate sluggishly. If you set it too high, you'll be wasting memory space which might be used by other programs under MultiFinder.)

contd.



There's one other "bug" in MultiFinder. Apple already knows about it, and a future version is expected to resolve this problem. It won't cause a bomb, but it's one of those small problems which stumps MacNovices. Imagine this situation: You've opened several applications and they're all running under MultiFinder. You're merrily switching among them. No problem. You come to the end of a particular document (let's say a business letter in the word processor). You CLOSE that document. It disappears from your screen, as it should, leaving you looking at the desktop. Now, you wish to open *another* document. You open the folder it's in—on the desktop—and you attempt to OPEN the document from within the desktop. MultiFinder messages you that the word processing application is already open; that you must open additional documents by using the OPEN command in the menu bar of the word processing program.



(This is the "bug" being fixed by Apple now, so that users will be able to open new documents from the desktop even if the application for those documents is already running.)

To help avoid even more confusion, the MultiFinder automatically switches to the application you need to open the document you just *tried* to open from the desktop. So, if you *immediately* choose OPEN from the FILE menu, you'll be able to open the word processing document. But, should you happen to CLICK first on the desktop again, MultiFinder will become the "active" application. This means even when you *do* choose OPEN from the FILE menu, it's the MultiFinder's OPEN command you're choosing, not the word processor's OPEN command. You must go searching for the word processor again, by CLICKING on the miniature icon in the upper righthand corner of the screen. And even when the word processor becomes "active," *only the menu bar will appear* since you had already CLOSED any word processing *documents* which had been open. It boils down to having to *recognize* the menu bar as belonging to the word processor, or being able to distinguish the miniature (and hard-to-discern) icon in the upper right corner.

All this is an expensive price to pay, right now, for the privilege of using MultiFinder. In the near future, however, as the price of memory chips declines and as MultiFinder is improved, the convenience of running several applications at once will become a reality for many more Macintosh users.

TO: Bernie, Gena
FROM: Ralph Begleiter
DATE: 2/5/88
SUBJECT: MacNovice Column/Photo

In a couple of days, you should receive in the mail a disk with my next two columns on them.

Since sending that disk, I found the time to digitize a photograph of myself, in case you want to add it to the MacNovice Column masthead.

This image was scanned using ThunderScan, and I've saved it for you in several different formats, including TIFF and PostScript, so that you may manipulate it any way you like to get the best result.

Don't worry, I won't feel insulted if you decide *not* to include it. But since you asked a long time ago, I thought I'd finally comply (having recently purchased ThunderScan).

Paint

Pict

Postscript

Tiff

Ed note: Thought you would like to see Ralph's different formats and how PageMaker and the LaserWriter handled them. I tried to keep the sizes the same but was constrained by what Ralph gave me. I chose one for the MacNovice masthead. Which one would you have chosen?

LOWEST PRICES - GUARANTEED

MACINTOSH SALE!

$ 2,596*

** Keyboard Extra

With 30 Meg Hard Disk

Macintosh SE with Internal Fuji 30 Meg Drive (1 yr. warr.- On Hard Disk), Hypercard, and Free Stackware.

MacScan Digitizer on Sale

$ 1195

$ 2,396*

* Keyboard Extra

Macintosh SE with Internal Rodime 20 Meg Drive (1 yr. warr.- On Hard Disk), w/ HD Software, Hypercard, and Free Stackware.

With 20 Meg Hard Disk

Flatbed Scanner from New Image Available

Upgrade //e to GS Pi Special Call!

Mac II System Sale

AVAILABLE AT BELTSVILLE STORE ONLY!

Put together a system that works the way you do.

* Monitor & Keyboard Extra

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

$ 2,699

Authorized Dealer

More For your Money

Macintosh SE with 45 Meg Fuji (1 yr. wrnty on Hard disk) including keyboard

$ 2,895

Macintosh II 60 Meg Drive $ 900

Macintosh II 80 Meg Drive $ 1095

COMPUTER AGE sm

Sales Locations

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

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

Service Center

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

Certain restrictions apply. See us for details. Offer subject to availability of product. Apple expressly reserves the right to subtitute and delete add-on products © 1987 Apple Computer, Inc.. Apple and the Apple logo are registered trademarks of Apple Computer,Inc. Macintosh , Laserwriter and The power to be your best are trademarks of Apple Computer, Inc

DEVELOPER'S VIEW... San Francisco MacWorld Exposition

by Bill Hole

The Boston MacWorld Exposition back in August had an almost crazed feeling about it. There was a tremendous level of excitement prompted by the advent of HyperCard and MultiFinder, and the new-found acceptance of the Mac by the business community brought huge crowds of both the curious and the fanatical.

The San Francisco MacWorld was less "hyper" than the Boston show, but there was still a lot of enthusiasm that reflected the Mac's growing prominence in the microcomputer world.

Micro Dynamics had our own booth at the show, and we were so busy that most of us saw very little of the show. I didn't see any of the talks or other scheduled events, but I did manage to do a quick once-over of the show floor, and was really impressed by the variety and quality of products being shown.

New Hardware

The biggest news of the show was in hardware, especially printers and displays. Apple showed its new LaserWriter II line, designed to replace the old LaserWriter line with a low-end Quickdraw printer, a mid-range PostScript device, and a fast, 68020-based printer. As for displays, it seemed like every other booth was showing off a new display card and/or monitor. The most exciting display systems were the 24-bit color systems shown by RasterOps and SuperMac.

If you haven't seen 24-bit color yet, try to see a demo. RasterOps calls their system True Color™, and that's exactly what it is. The human eye can't distinguish as many colors as are available in 24-bit mode. The available palette contains over 16 million colors, and every pixel on a big 1024 by 768 pixel display can be a different color. It's quite spectacular.

RasterOps showed a line of video cards and monitors that supported either 1 to 8 bit color or 8 and 24 bit color. The 24-bit cards were available either for a 1024 by 768 display or a standard 640 by 480 display. They are shipping now, and feature extensions to Quickdraw to support the 24-bit color (Quickdraw is currently limited to 8 bits). The RasterOps cards are also being marketed by Jasmine, of hard disk fame.

SuperMac also showed a whole line of video cards, including a 24-bit card. Unfortunately, their 24-bit card isn't shipping yet and doesn't yet fully support 24-bit Quickdraw. That means that many standard Macintosh applications won't run properly on this board in 24-bit mode. For instance, the Scrapbook won't work in 24-bit mode. The RasterOps card will display a 24-bit image in the Scrapbook and will run many existing applications, including Quark Express and PageMaker, in 24-bit mode. 24-bit images pasted into these programs are displayed in their full glory.

So be careful about buying a 24-bit card. Make sure that Quickdraw compatibility is not limited to 8-bit mode. SuperMac intends to support 24-bit QuickDraw, RasterOps already does, and Apple may extend Quickdraw itself, now that RasterOps and SuperMac have forced Apple's hand. If you need 24 bits now, RasterOps is the only way to go. If you can wait, both cards look very promising.

To get color images into the Mac II, there were 24-bit scanners from Sharp and from SuperMac, which will be marketing the BarneyScan color slide scanner.

Software

Naturally there was a ton of great software at the show. Lots of business applications, including Lotus Modern Jazz and a new spreadsheet called Wingz. Ann Arbor Softworks handed out copies of a demo version of FullWrite Professional at their booth, and started shipping the product within a few days of the show, ending one of the longest vaporware streaks in computing history.

Falcon

Several of us Micro Dynamicists bought software at the show. One of our ace programmers bought Falcon, a jet fighter simulator from Spectrum Holobyte. This is a big program, taking up two 800K disks, and requiring at least a megabyte of RAM to run. The program is not copy protected (bless you Spectrum Holobyte) and so can be installed and run on your hard disk. It supports interactive gaming over a direct serial link, but not over AppleTalk. This is a flight simulator in the MS Flight Simulator and Fokker Triplane tradition, with a high-performance aircraft and realistic digitized sounds. The sounds are so realistic that on seeing the game demoed, one of our programmers got nervous and had to leave the room.

The graphics are a mixed bag. The cockpit display is spectacular, with a very realistic heads-up display. The scenery is 3-D but rather sparse. Mountains, buildings, etc. are rendered as line drawings until you get close to them, when they are filled.

All in all a very nice game, not as realistic as MS Flight Simulator but great for zooming around and blowing things up after a hard commute on the Beltway.

MacDrums

I picked up a copy of MacDrums, a $50 package from Coda Music Software that turns your Mac into an electronic drum machine. Two versions of the program are included on the disk. One uses digitized drum sounds played through the Mac speaker—a large collection of sounds is provided for this purpose. The second allows you to control a drum machine or synthesizer over MIDI. You can use up to 16 MIDI channels to control up to 16 voices on any combination of sound sources in your system. In both programs you use the mouse to define the rhythms to be played on each instrument. It's a nice concept, and the interface is very intuitive. I could like this program a lot. But...

The program has three major flaws. The first is that the programmers chose to write to the screen directly, presumably for greater speed. This makes MacDrums unusable under MultiFinder. That's probably OK for music software since you don't want some other program running in the background and throwing off your rhythms, but it does require a reboot if you normally run MultiFinder.

Second, it does not run on a 68020-based Mac. No accelerators, no Mac II. That means that I have to reboot to turn off my Radius Accelerator, and in six months or so when I upgrade to a Mac II I won't be able to use the program at all.

contd.

Third, the disk is copy protected. It doesn't even follow the key disk scheme that at least allows you to run off your hard disk. The program must be run off the original disk, and no backup can be made. As far as I'm concerned, any level of copy protection is unacceptable, and this is the worst kind. It essentially renders this otherwise quite nice program virtually unusable.

Most serious Macintosh software these days is sold without copy protection. The only programs that are typically protected are games, although some of the best games, like Dark Castle and Falcon, are being shipped without protection. I suspect that Coda's decision to protect MacDrums is based on a perception that music software is more like game software than productivity software. The same perception may be behind the copy protection that appears on a number of other publishers' products, including those from Electronic Arts, Opcode, and Intelligent Music. I find this attitude to be a little bizarre. I take music seriously as an art form, and I think that music software, even the low-end variety, should be viewed as being in the same category as graphics and animation software, none of which is protected on the Macintosh.

If Coda and other publishers wish to have their music products perceived by the consumer as frivolous entertainment software, fine. I'll go buy some non-frivolous non-entertainment music software from someone else.

Programmer's Online Companion

Several months ago I wrote about Steve Capps' Programmers Online Companion. This Inside Macintosh reference has been upgraded to include Volume 5 of Inside Mac, and now includes a desk accessory version of the program in addition to the memory-resident version that responds to CMD-~. Now you have your choice of interfaces. In addition, POC now includes a utility that merges your previously modified database with the new expanded database so you don't have to go through a lot of contortions re-entering your own data into the POC database. Unfortunately, the merge utility didn't work properly on our database so I'll have to massage it a little. Even so, this looks like a definite improvement over the original version.

Bill Hole is the author of PostHaste™ and has served as lead programmer for Micro Dynamics MARS™ and other major software products. He is a system analyst for Micro Dynamics, Ltd., the largest Macintosh development firm in the Washington, DC area.

Congress Reorganized !

Congress Stack™
puts
Congress on HyperCard™

Staffs, Maps, Committees, Faces
Biographies, over 12,000 Names and Addresses
and more...

all linked and organized using HyperCard

10 diskettes, 18 stacks, more than 10 megabytes of
Congressional facts for only $159.95

Congress Stack runs on Macintosh Plus, SE
or II with HyperCard and a hard disk drive

Highlighted Data, Inc.
P.O. Box 17229, Washington DC 20041
(703) 241-1180

Macintosh and HyperCard are trademarks of, or licensed to, Apple Computer, Inc.

WHY USE LASER WRITER™ OUTPUT (300 DPI)?
NOW YOU CAN GET LINOTYPE L100 OUTPUT
(1270 DPI, &17 TIMES SHARPER)
AS LOW AS $5.00* PER PAGE!
* 3rd day service, 8.5x11 RC

THE PUBLISHERS SERVICE BUREAU is a **Graphic Design firm**, an **ADOBE Authorized Dealer**, and an **L100 Service Bureau** that can imageset your:

PageMaker® • XPress™ • Ready, Set, Go! 4.0™
Illustrator™ • Cricket Draw™ and many other PostScript™ applications at 1270 DPI (RC or Film)

We also offer a wide variety of services
to satisfy all of your graphic design/publishing needs such as:

B/W Stats • Halftones • Color Stats • Paste Up
Layout • Graphic Design • Scanning and Digitizing.

Select same day, 2nd or 3rd day turnaround services,
depending upon your budget and schedule.

• We also sell **ADOBE's** Illustrator™ and Typefaces. Call for Pricing

THE Publishers
SERVICE BUREAU
A Tradename of Murad Enterprises, Inc.

4900 LEESBURG PIKE
SUITE# 310
ALEXANDRIA,
VA 22302
824-8022
BBS 824-8024

"MACINATIONS"
by Robb Wolov

This column represents a voyage of sorts. Irregular in schedule, perhaps sometimes irreverent. These will be thumbnail impressions, work-arounds, hardware and software hacks as well as opinions.

I say voyage, since it will represent some of the way-stops and treasures I've stopped to picked up on my journey from hard-core MS-DOS user to "macophile". Looking from the IBM world, I hope to bring a fresh perspective. For you experienced hands, some of these pearls may be old nuggets. Some may be new for both of us. Most I hope will be at least interesting. And so let's start.

Software Prices

I hate to say I told you so, but I did in these pages not that long ago (A View of Big Blue, Nov. WAP). My prediction of rising Mac software prices has come to pass. I expected that with the growing acceptance of the Mac by the business world, we would see business and corporate level pricing. We have. I was not expecting these levels! It seems that with this latest Mac Expo, with its myriad of new program announcements and upgrades, we will see more and more $300, $400, and $600+ packages. Ironically, Borland, famous for pioneering affordable but solid programs and languages, was one of the early announcers back in the Fall of a price jump for their Reflex Plus database.

There has long been a price differential between MS-DOS and Mac software, which always seemed to penalize the IBM. Sometimes this differential was only $20 or $30 dollars for programs ported back and forth, but it was there nonetheless. I always found it hard to justify. I am told by programmers that it's just as difficult to write for either machine. Sometimes it's a bit more so in the case of the Mac, requiring additional code (in spite of the tool box) to make the final program interface more "Mac-like" to the user. As an IBM'er then, it smacked of gouging. Distributors looked like they were assuming that all PC's were owned by businesses and so were better able to bear the brunt.

The cost of the software we use to make our machines dance has always been a sensitive issue. On one hand, as individual users with limited funds, we wish the most "bang for the buck". On the other, is the "poor" programmer. This is, after all, his livelihood.

Bill Atkinson, by now attaining minor deity status after MacPaint and HyperCard, was interviewed recently at the Boston Computer Society. He too was uncomfortable with the topic but admitted that the programmer only receives about $10 of the $600 cover price of some programs. Commercial writers, if you go by Jerry Pournelle, are in a similar situation, that is, only receiving a fraction of cover costs. One difference though is that a hardcover novel does NOT retail for $695. The book writers and retailers depend on volume sales for their profits. In Mr. Pournelle's opinion there is equivalent labor by both writers: the programmer and the novelist. I couldn't say. I always get uncomfortable making apple vs orange comparisons. Then again, when was the last time you called tech support for help or an update to a James Clavell novel? You see, production and support costs for both products are NOT comparable.

Unlike hard cover textbooks and novels, business software prices have been justified by a philosophy of perceived added value. If you use a program to make money for your business by either doing a job faster, more economically, or however you define "better", then as a party to those profits the supplier of that software should get a piece of the action—in the form of higher profit margins. In a corporate setting that may seem fair—paying a few hundred to make perhaps thousands of dollars profit. The problem is that the original Mac users, the individuals who are not business or corporations, also get hit with those prices. That pricing logic dictates $500 claw hammers since a carpenter uses one to build a house selling for more than the original materials. If you get the impression that this controversy is not a simple one, you're right.

These new programs are not tiny DA's. They are big, powerful applications that less than 5 years ago would have done a Mainframe justice. I think it's unreasonable to expect these packages with their multi-volumed references and support to be priced like our old zip-lock bagged wonders of yesteryear. But, five and six hundred dollars seems a bit stiff. Perhaps if there is not the acceptance and the market penetration hoped for at these prices, we may see another company like Borland going for the economics and profits of volume sales at lower prices.

OS/2, the new operating system for the IBM world is big and expensive. The final release version will require about 1.5 Megs of RAM and will cost approximately $375. This system is targeted for Mainframe integration for corporate users. Software to run is expected to be scaled accordingly. MS(PC)-DOS using individuals are beginning to wonder where they fit into Big Blue's scheme (Hint: they don't!). I would hate to see this situation with the Mac, with all the new programs available not for the rest of us, but for the "best" of us. Only time will tell.

In the meantime, shareware is looking to serve a more critical nitch. So folks, as a plug for the shareware authors—if you use 'em, pay 'em or they won't be there when you need 'em!

Graphic Format Standards

Graphic standards are wonderful. Everyone should have their very own...and do! Or, so it seems to this poor Mac neophyte. Since I became involved with graphics for the Mac (there weren't many to speak of for the IBM) I've dined on an alphabet soup of GIF, RLE, TIFF, Postscipt, Encapsulated Postscript, PICT—and the beat may go on. Rumor has it that Apple is delaying release of their own scanner because they find current format standards wanting and are working on adding their own to the broth.

I am sure there are valid reasons why different programmers choose the ones they work with for any application, but things may be getting just a bit chaotic when you have to use GraphicWorks to open a TIFF file, restore it as a MacDraw file, open it again with SuperPaint to store it in SuperPaint format.

Here is an idea for some sharp programmer: a pure graphics translator—not easy but quite useful. You would sell a million of them. You could make it very Mac-like with a Font/DA

contd. on pg 72

Open 6 Days a Week
9 AM to 7 PM
Visa • Master Charge

MacTography
MACINTOSH SERVICES

By Appointment Only
Call (301) 424-3942
702 Twinbrook Parkway
Rockville, MD 20851

What's New At MacTography

Desk Paint
Only 50.95

At Last! A Desk Accessory that edits TIFF Files.

Edit TIFF (300 to 4,000 DPI) images at any magnification
Perfect for editing scanned files for placment into PageMaker and ReadySetGo4

Available NOW

PageMaker 2.0
Now available from Mactography

Inorder to handle all your Desktop Publishing needs, MacTography has become an authorized Aldus Reseller. As a special introductory price we are offering Macintosh Pagemaker to the first 50 customers for only

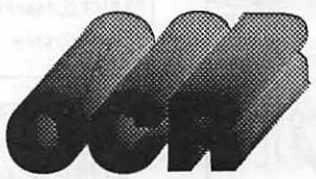
$399.00

New From New Image Technology

Those Fabulous NIT people now have a flat bed scanner. Perfect for mounted artwork and books.

OCR $425.00
MacScan $1375.00
FlatBed 1675.00

15"Monitor



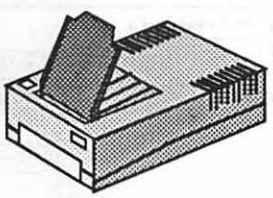
FlatBed Scanners

15" Monochrome monitor for the Mac SE

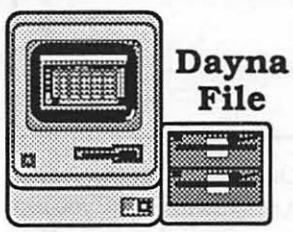
List $1150.00
Only 1025.00

Shipping after the MacWorld Show

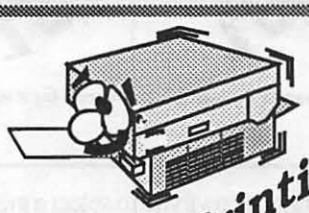
Macintosh WorkStations
3-SE's W/2.5 Meg Memory
Mac II W/5 Meg Memory and 19" 256-Color SuperMac Monitor



OCR Scanning Service And Sales



IBM to Mac File Transfer
5.25"-360 Kb
5.25"-1.2 Mb
3.5"-720 Kb
3.5-1.4 Mb

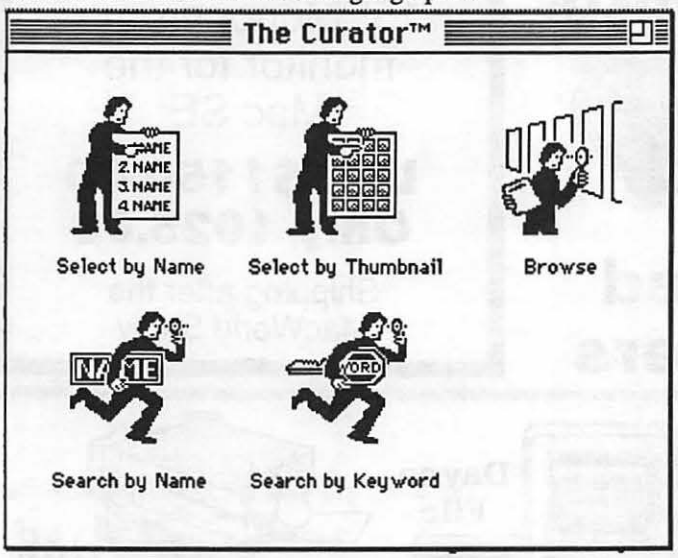


LaserPrinting Over 700 PostScript Fonts Available

Softviews by David Morganstein

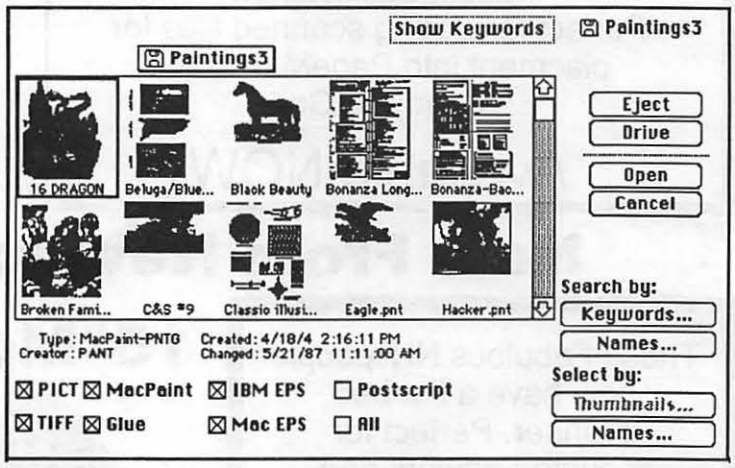
The Curator. I have been searching for a package to catalog graphics. Having tried Picturebase and Graphidex, I was still on the look-out for a program which offered features they lacked. The most important option I wanted was automatic cataloging. To be useful, the program should allow me to search through a disk full of graphics providing for a way to select the one (or the portion of one) I needed. Being able to perform this search and selection via a desk accessory would be the most useful form, although Multifinder and a couple extra SIMMs would permit the use of an application for the same purpose. Curator meets just about all of these needs; however, it does have some rough edges.

Curator comes as three pieces of software. First, there is the Curator application. This can be used to attach key words to a graphic, or search through a collection of art work. Once found, the graphic can be converted for pasting into another application. Second, there is a desk accessory version which offers the same features. Lastly, there is the Curator's Assistant which will do a fast read through a new volume of graphics and create a catalog for the entire collection. This catalog contains a "thumbnail" sketch of each graphic. You can use these small sketches via Curator or its DA to select the right graphic.

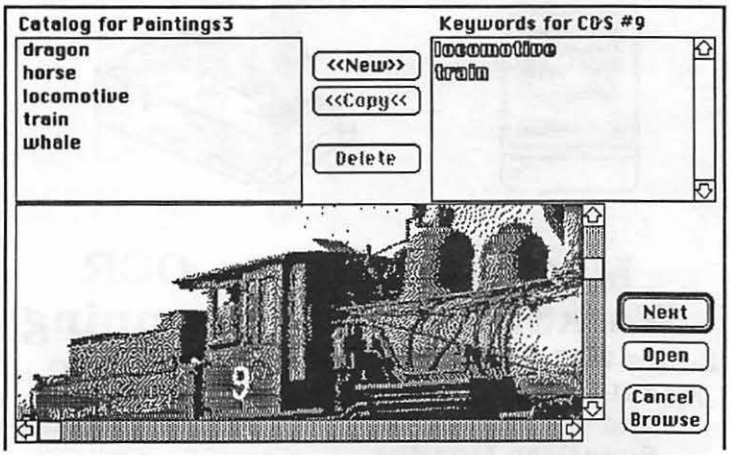


Curator allows you to select a graphic file by it's name, using a Finder window to identify and open it. Alternatively, you can do a search for a name by supplying a string to locate it. You don't need the entire name, just a couple of consecutive letters that appear in the title. Unfortunately, you cannot limit the search to selected folders, an option that would greatly speed up the process since searching a hard disk can take a while. Using the application, a search through a 60 meg hard disk on a Mac][was completed in slightly over a minute. (When searching with the DA under multifinder, Curator "ran out of memory" even though I have 2.5 megs of RAM.)

Often you will not be able to recall a file's name. Curator allows you to select by thumbnail sketch. This is one of the handiest methods though it doesn't work well on crowded graphics where the thumbnail is too small to make out any detail. If you are not familiar with thumbnail sketches, ask MacPaint to print a catalog for you. MacPaint displays these tiny 1 inch rectangular images of each file. Below you can see 10 thumbnail sketches, part of the scrollable collection of all the sketches Curator created in a diskette. 16 Dragon is the selected graphic. It's Get Info data is shown below the window.



Curator also offers a browse mode which features a scrollable portion of the graphic in full scale. The browse is done in alphabetic order only. I consider the browse option to be fairly slow as Curator moves from one graphic to the next. A message indicates that the program is updating the keyword list (a part of the browse display) each and every time you browse. In the following Browse window, you can see all the keywords in the entire volume on the left and the two keywords associated with the current graphic, C&S #9, on the right.



contd.

Given the proliferation of larger sized screens, it is disappointing that the browse window is so small and is not expandable. Once you select a file to open, however, you do get a small (2" by 2") resizable window which you can use to view the entire graphic.

Lastly, Curator offers a keyword search with which you scroll through a list of keywords and select those you want included in the search.

Unlike the two competing products, Curator can handle just about every graphic format: PICT, MacPaint, TIFF, encapsulated postscript and Glue. Given all this power I found it strange that it can not read MacDraw documents (that is, unless they have been saved in PICT format). Curator has some limited access to Picturebase collections. It can't really copy a picture stored in PictureBase but it can convert the entire collection to individual graphics (kind of "unpacking" the collection). The process is very slow, however. Unpacking 20 or so pictures took almost as many minutes on a Mac][. While Curator retains any keywords placed there using Picturebase, the unpacked files are very odd indeed. They have the plain document icon and when clicked on, launch no application. They can be opened, however, by the Curator program or DA.

I told the Solutions, International folks that Curator occasionally gives some unclear error messages. When attempting to read a "locked" file, Curator suggested there was a "disk read" error. Trying the Curator's Assistant on a 20 Meg cartridge filled with graphics, the program aborted early, leaving no indication of the problem.

The accompanying manual, while only 45 pages, tells you all you need to know about using the programs. It even includes a brief description of each of the graphic formats it supports. The DA installs using the Font/DA mover program. I access it using Suitcase.

In summary, the Curator offers cataloging services not found in two competing products, notably automatic collecting. It's major weakness is it's failure to support MacDraw documents. Solutions, International, 29 Main Street, Box 989, Montpelier, VT. 05602. (802) 229-9146.

Tax Pro 1988 Excel Templates (written by Tom Gross, WAP member). By the time you read this, there will be less than six weeks till April 15th, your day of reckoning with the IRS. If you are just beginning the arduous task of locating the needed numbers and you are an Excel user, you may be in luck! If you have not filled in the forms and added up the numbers, you may take some small pleasure in Tom Gross' Excel templates. Although the tough time of doing taxes is assembing all the figures, simplifying the drudgery of completing the forms and providing for rapid recalculation makes the whole activity a bit less onerous. In this year of "tax simplification" (or was that "Tax Preparer" Job Security?) your trusty Mac and Tom's Excel spreadsheets may make life a little less tedious.

The various tax forms and schedules are linked together so they automatically aggregate numbers from one one to another. Tom's set of templates contain the most commonly used forms and schedules: 1040, 2106 (Emp. Business Expense), 2441 (Child Care), and 3903 (Moving Expense). His package also includes the tax tables and the following schedules: A-E, R, and SE. New for this year are two supplemental sheets for listing capital gains and losses.

Where It Begins

Tom's templates are very easy to use. As you will find with competing Excel template products, Tom has locked the sheets and protected them, thus preventing you from inadvertently changing the formulas. An added advantage offered by Excel is the use of the Enter key to move the cursor between only those cells requiring your input, skipping over cells containing instructions and internal computations.

Given that I have not completed my taxes with Tom's spreadsheets, I can not vouch for Tax Pro's accuracy. Whenever you use a program to perform the final stages of computation, it is wise to pull out a trusty calculator and check the numbers one last time before mailing in the returns.

Beyond accuracy, what can you say about a tax package? First, as to documentation, the package contains a 20 page manual. The manual has a Table of Contents, an index and an evaluation form. A nice feature of Tom's spreadsheet is that the forms can be printed on a LaserWriter and sent in to the IRS without having to transcribe the numbers onto the IRS forms.

A competing package, MacInTax, offers an option not found in Tom's spreadsheet (or the Heizer templates). To complete many items in a tax form, you often have to add up a number of sub-values, for example many different charitable contributions. With MacInTax, you can double click in a cell and it will expand to an entry list. After completing the list (which can be reopened and changed later) a total is computed and carried into the original source cell.

I should point out that Tom has a lot of experience with tax templates. Tom has been marketing Excel tax templates for three years now and has many satisfied many Mac owners as his customers.

Where It Ends

Another other issue might be after purchase support. In previous years Tom has handled questions and problems when they arose. The manual tells the owner to contact Tom immediately if a problem is detected. My experience suggests that most users of spreadsheets would have little need of support other than an accuracy problem.

Before making the decision to purchase, you should know that Heizer Excel Exchange also offers a low-cost set of Excel templates, similar to Tax Pro. Having Tom nearby (he lives in Richmond) to help with some questions may be worth the few dollars you can save going the Heizer template route.

Tom's tax templates are also available in a Multiplan version.

Tax Pro, Chesapeake Software, P.O. Box 1014, Richmond, VA. 23208. Phone (804) 358-7802. A Special group purchase price of $39 + 5% sales tax is available at the WAP office (add $1 for postage and handling if you order by mail). Specify whether you want the Excel or Multiplan version. (Say David sent you...)

MACINTOSH BITS AND BYTES

by Lynn R. Trusal

Just Who Owns Whom Anyway?

Software companies come and go and you can't tell the owners without a program. Microsoft (pick a name) bought Forethought, Inc. (PowerPoint) and Apple invested in Forethought, so I guess Apple owns a piece of Microsoft or does Microsoft own a piece of Apple? Forethought also was the distributor for FileMaker Plus but its original authors, Nashoba Systems of Concord, MA will begin distributing it in October. Phoenix Technologies of MS-DOS ROM BIOS fame bought Softstyle maker of printer and plotter drivers for a wide variety of peripherals for connection to the Macintosh. Scientific Micro Systems, Inc. of Mountain View, CA first bought SuperMac Technology and then Levco, Inc. Scientific Micro Systems is not a familiar name to Macintosh owners, but they manufacture controller cards and integrated circuit chips for hard disk drives (DEC and IBM). Since both SuperMac Technology and Levco are manufactures of add-on boards for Macintoshes, both acquisitions are in line with Scientific Micro Systems current business and future growth.

Symantec (MS-DOS publisher) purchased Living Video Text (ThinkTank, MORE) and then bought Think Technologies of Bedford, MA.(programming languages). Borland (SideKick, Turbo Pascal and Reflex) bought Ansa who publishes the MS-DOS database called Paradox. Do you see a trend of MS-DOS houses buying up popular Macintosh software companies? Is that the best way to get into the Macintosh action if you don't have the programmers or the creative ideas to develop your own Macintosh software? DEST Corp. which markets an optical scanner for the Macintosh has acquired Gulfstream Microsystems (GMS) of Florida.

Apple owns 17-20% of Adobe and has benefitted by the large rise in Adobe's stock over the past year. Apple's stock in Adobe may be worth $20 million by current estimates (before the crash!).

LoDown has changed its name to Arc Laser Optical Technology or ALOT and was attempting to go public in October of 1987. The "LoDown" name will remain on its hard disk products in spite of the name change. This change sound like an acronym in search of a title. Perhaps "LoDown" should have been "HighUp?" If you aren't already confused stay tuned for more acquisitions. I only wish I had an idea for a company I could start in my garage and sell for millions several years later!

Finally, Everex Systems, Inc., just acquired privately held Abaton Technology Corp., marketer of Macintosh optical scanners and scanning software. Everex plans to maintain Abaton's retail chain distribution.

Transputer Chips?

I recently mentioned Levco's use of transputer chips manufacturer by the British firm Inmos Ltd. Levco is experimenting with these chips for use on parallel processor boards. They are capable of up to 10 MIPS (millions of instructions per second) each, while the Macintosh II is about 2 MIPS. It is theoretically possible to run a Mac II at 200 MIPS using these new chips. I recently heard that British legal authorities are using transputer chips to search through millions of fingerprint records that have been stored in memory for a match with an unknown fingerprint. A computer analyzes each fingerprint and stores its unique characteristics for later computer matching. This permits 1000 fingerprints to be analyzed per minute, which is a large boon to legal authorities who have had to painstakingly do the process by hand. Levco may be on the cutting edge of this new technology in the U.S. and it bears watching.

There are three models of the transputer chip; the T212 16 bit CPU, the T800 32-bit integer processor and a 64 bit floating-point chip. The chips are used with a programming language called Occam based on a parallel-processing system.

Atari released at COMDEX a transputer based product called Abaq which must be used with an Atari workstation. Abaq comes with a single 20 MHz Inmos transputer CPU but it can hold up to 13 processors which operate in parallel. Each CPU can operate at 10 MIPS or 1.5 megaflops and contains 4 megabytes of RAM expandable to 64 megabytes. Abaq uses a UNIX like operating system that is multiuser and multiprocessor. This product will not be available until the second quarter of 1988. Atari also announced that it will be offering new 68000 based products and a 68030 computer in 1988. Currently there is no software on the market that takes full advantage of the transputer chips!

Apple's Reorganization

Apple's sales and marketing group has been divided into three separate groups. There is now a Market Development Group, Marketing Group and a Sales Group. The Marketing Development Group will be responsible for Apple's short range plans of less than two years and for marketing and sales development in the educational, government, business and consumer markets. The Marketing Group will be responsible for long range strategic and market planning. The third division, the Sales Group will be in charge of Apple's resellers and sales planning. The later two groups will be headed by new vice-presidents that have yet to be named.

The Sales Group is in turn divided into three regions for the Eastern, Western and Midwest. The Midwest position is now vacant while the West is headed by William B. Coldrick. Just named to fill the Eastern Region is Harold D. Copperman, a 20 year veteran of IBM, where he headed marketing for higher education.

Another new addition is Joseph Schoendorf appointed as vice president of Marketing. Most recently he served as V.P. of Ungermann-Bass and before that Hewlett-Packard. He will report to Charles Bosenberg, senior vice president and group executive of U.S. sales and marketing.

(Ed. Note: Of local interest is the appointment of Lloyd Mahaffey as Director, Federal Systems Group at Apple Federal Government Operations (AFG0) in Reston.

contd.

MacInUse—The Macintosh Tracker

MacInUse 2.0 ($79 retail) is a new utility from SoftView, Inc. (4820 Adohr Lane, Suite F, Camarillo, CA 93101, 800-622-6829) which keeps track of how your Macintosh is used. In other words, it keeps a permanent record of which software is in use (even under Switcher), how long it is used, user name etc. Even time using the Finder can be tracked. It can be customized to record such things as Department, project name, and specific comments. MacInUse is compatible with MacServe so that it can invisibly track usage on a network using MacServe software. It can also be used to prepare and analyze reports on Macintosh or network usage. It is not clear if it can generate statistics or graph usage data. MacInUse can also be customized to record only usage that exceeds a certain minimum.

MacInUse will probably not be useful for the average user who has no need to track computer or software usage, but it might be very important in an office or network environment. It would allow the SYSOP to make hardware and software buy and allocation decisions based on actual usage and not on users stated preferences. We all know many people who have expensive doorstops on their desks which get little or no use. A SYSOP who has limited resources could use MacInUse to decided to take a computer from one user and give it to another based on usage. In a similar manner, software could be given to users who need it the most, rather than gathering dust on the shelf. (Source - Company literature)

ComServe

ComServe ($195 retail) is a new software product from SoftView, Inc. (4820 Adohr Lane, Suite F, Camarillo, CA 93101, 800-622-6829) that permits multiple users to share a modem or serial device. ComServe permits users to choose any serial device such as scanners or plotters on the network in a manner similar to choosing a printer using Chooser. It runs transparently in the background and does not require a hard disk or dedicated file server. ComServe is compatible with the major telecommunication programs and and works with any Hayes compatible modem operating from 300 to 9600 baud. In addition, ComServe works with MacServe, AppleShare, TOPS or HyperNet as co-resident network services. A major disadvantage is the requirement to have one software package for each shared device. I assume that means each shared serial device and not each computer on an AppleTalk network. ComServe is compatible with the Mac II, SE, Plus, 512 or Mac XL. (Source - Company literature)

How is the Macintosh Accepted in the Business World?

A recent survey of corporate buying intentions surprisingly found the Macintosh II as the second most frequently considered make and model of microcomputer considered for purchase by large buyers. It ranked just behind the IBM PS/2 Model 50 and ahead of all other IBM models. It was particularly noteworthy that interest in both the Macintosh SE and II was high in all sizes of business surveys from firms with less than 10 employees to those with 5,000 or more. Consideration of the Mac II ranged from 9% in firms of < 500 workers to 17% in sites with 5,000 or more employees.

Macintosh has gained so much acceptance in the Fortune 1000 world that it is approved for purchase in 73% of the Fortune 1000 companies and in 3% of the companies only for desk top publishing. The September 29, 1987 issue of *PC Week* contained four articles on the growth of the Macintosh in corporate America. Companies that had increased their use of the Macintosh included Reebok, General Electric, Kodak, Toys R Us, Domino's Pizza, L.L. Bean, GTE Government Systems, John Deere, and the state government of Georgia. In most instances, the first Macintoshes were brought in the back door by one or more employees. Now most of the Macs are coming in the front door!

ImageMaker

ImageMaker is a relatively new film recorder compatible with both the Macintosh and MS-DOS computers. It is made by Presentation Technologies and retails for $4995. It comes with Macintosh software called "MacDriver" which supports such programs as MacDraw, MacWrite, Word, Excel, More, and Cricket Draw. It is only compatible with graphics programs that are "object orientated." System requirements include a Macintosh 512K enhanced, Mac Plus or SE using Finder 5.3 or greater or the Mac 512K with Finder 4.1. I don't know about the Mac II! A number of types of color film may be used, including Ektachrome 100, Polaroid instant Polachrome 40 for color slides, Kodacolor 100 and Fujicolor 100 for color prints. The Polachrome output is not up to Ektachrome standards but it does offer the ability to make instant slides at the last moment.

In order to use the ImageMaker, screen fonts must be installed in the system folder which correspond to the fonts found on the removable font cartridges. The ImageMaker has a resolution of 8,000 lines which is 2 to 4 times the resolution of film recorders like the Polaroid Palate. To achieve this high resolution, there are some trade-offs. The resolution is achieved by the use of font wheels which must be inserted into the top of the ImageMaker. A light source passes through the font cartridge containing sharp images of each font, and this is imaged onto the film. A total of 8 wheels are available which correspond to Classic-Italic, Modern-Italic, Modern-Bold, Modern-Compact, Chelmsfort-Italic, Garmond-Italic and Souvenir-Italic. Why there are no Times, Courier or Helvetica fonts is mysterious. Font point sizes vary from 12 to 24, and each font cartridge contains four different fonts. The exact combination you might want to use may not be available on one cartridge. This is one drawback of the cartridge approach. The font cartridges will not support fonts that have been flipped or rotated and both outline and shadow are not available. Text may be kerned or not kerned, which is unusual in software of this type.

The ImageMaker MacDriver uses patterns in software applications to represent colors. The "pattern fixer" modifies patterns in the particular application to correspond to those on the ImageMaker MacDriver color map. The font and driver installation process is very easy to accomplish. Background colors are available in black, dark blue, light gray, medium gray, medium blue and red. Up to 16 foreground colors can be chosen and comprise the lines drawings and text of the slide.

Another limitation is the lack of support for overlapping objects that are created by such commands as "send to back" in MacDraw. It is important to note that not all features of the compatible programs are supported, such as all line thicknesses found in MacDraw. I also found that in both MacDraw and

contd.

Cricket Draw only a 3" x 5" area was available for imaging. The program recommends doing your layout in a larger version and then reducing it after it is completed.

I was not able to use the ImageMaker long enough to form a users opinion and did not make any slides that I could get developed. My conclusion is therefore based on a first impression and not an in depth review which the product deserves. The ImageMaker's price of under $5,000 is one of the cheapest film recorders available for the Macintosh. With some patience and awareness of the limitations, satisfactory results can be obtained. I personally do not like the use of font cartridges which have major limitations similar to a Hewlett-Packard LaserJet Plus laser printer. I would prefer to be able to image on film anything I could create on the Macintosh screen, but this ability only comes at more than twice the price of the ImageMaker and at one-half the resolution. The use of font cartridges, incompatibility with some Macintosh software, and limitations of compatible software make me somewhat wary of the ImageMaker. If you are interested in purchasing the ImageMaker, get a dealer to loan you one for several days and try it out with your typical applications before considering its purchase. In depth reviews should be appearing in major Macintosh magazines in the near future.

StatView—New Revision

Abacus Concepts (PO Box 3086, Berkeley, CA 94703, 405-540-1949) has announced StatView II which will be issued in December. If they meet that date, they will be the exception to the rule. StatView II is designed specifically for the Macintosh II but will run on the SE or the Plus equipped with a third-party accelerator board complete with a 68881 math co-processor. The company says the new revision offers a 30 to 50 times speed improvement by directly addressing the 68881. It also contains drawing tools and access to the color capabilities of the Mac II. The drawing tools are included so that the user will have a decreased need to put StatView statistical graphs into other graphics packages to customize them for presentation quality graphics. A new manual with comprehensive statistical descriptions is included and other additional improvements are found in this new version of StatView. The company also has under development a Generalized Linear Model program which can solve complex ANOVA, ANCOVA, and MANOVA designs and other modules which offer additional multivariant statistics.

The cost of StatView II is $495 but registered owners of StatView or Stat View 512+ can buy it for $150 if ordered before October 22, 1987. Unfortunately this offer will have expired by the time this information comes out in the Journal. (Source - Company literature)

It is interesting to note that StatView is no longer being distributed by BrainPower, Inc., of Calabasas, CA. Apparently Abacus Concepts was the original author of Stat View and they have decided to take back their statistical products and market it them themselves. They hint in their literature that this is to improve customer support and better respond to users analysis needs. This concept is becoming more prevalent in the software market as the originators of software applications are regaining distribution and support control from other companies that have been the distributor.

Downloadable Laser Fonts

Those of you who regularly use an Apple LaserWriter are undoubtedly spoiled by not only the quality and convenience of the output, but not always the speed. The original LaserWriter provided 4 font families in ROM and this was expanded to 11 total with the LaserWriter Plus. If you tried to print Macintosh screen fonts such as Geneva and New York to the LaserWriter, you quickly found that the LaserWriter would substitute ROM fonts if you chose the "substitute option" from the print dialog box. If you wanted to print actual Macintosh screen fonts without using substitutes, you were disappointed by the LaserWriters recreation of these fonts which looked like anything but LaserWriter quality.

Now third-party vendors are selling down-loadable laser fonts that look great and expand the fonts available for faster printing. CasadyWare sell fonts such as Regency Script, Calligraphy and Monterey which produce excellent results on the LaserWriter. Since they are down-loadable fonts, they must be sent to the LaserWriter using Altsys's font downloader. "Temporary" down-loading means good-for-only-one printing while "permanent" means that they will remain in RAM memory of the LaserWriter until it is turned off. Not exactly permanent by my definition of the word, but good enough. Each font family sells for about $60 retail or $49 wholesale.

I have found that PageMaker 2.0 does "automatic downloading" of some of these non-ROM laser fonts when it encounters them in a document. This has proved to be a nice plus but I don't know if other Macintosh programs also do automatic downloading of needed fonts. The required font in PageMaker was installed in the System but had not been manually downloaded or found in LaserWriter ROM.

The LaserWriter driver maintains a list of available printer fonts and if it discovers a font in a document to be printed that is not on the list, it attempts to download it. Each font intended for downloading must have both a "font" and "fond" resource in the System. This can be determined by using Resedit to examine the font resource. When a new font is found in the document, the driver cache is checked for the present of the font. If it is found, a switch is made to the correct font in the printer. If the font is not found in the printer, the Font Manager searches in the "Fond" resource for it. If no "Fond" resource is found, it creates a bitmap version of the font for printing.

Screen Versus Printer Fonts

Screen fonts and printer fonts are not the same and some important differences should be noted. Fonts designed to be displayed on the Macintosh screen are "screen fonts" while those designed for printing on the LaserWriter are called "printer fonts." The LaserWriter driver matches the screen and printer fonts to provide a WYSIWYG (what you see is what you get, most of the time!) output. Screen fonts are bit maps and a bit image of each character of the font is stored in memory. When a character is typed, each pixel (i.e., picture element) of the character is drawn on the screen as specified by the corresponding bit in memory. This takes up a lot of memory and each bit mapped font requires about 30K of RAM. Each plain or Roman font can be displayed in seven distinct styles (i.e., bold, underline, etc.) by use of the QuickDraw routines contained in ROM. "Intrinsic" fonts are defined as fonts whose characteristics are

contd.

entirely defined in a "Font" resource, while a "derived" font is one whose characteristics are partially determined by modifying an intrinsic font.

Printer fonts are not defined as bit maps but as a series of Bezier curves or B-splines. These curves are stored as mathematical constructs that form the outline of the character. The printer draws the outline and then fills it in. Advantages of this approach include, speed, easier scaling of font sizes, decreases memory requirements, and device independent font definition.

You must use DA Font mover 3.1 or later to install PostScript fonts that contain the "fond" resource which tells the Mac how to do real italics instead of the "oblique" version and also contains information about "kerned pairs." When PostScript fonts are purchased, the disk usually contains the regular font, and a bold version and an italics version. If you want true bold and italics of the Times font, you must install Times, Times Bold and Times Italics in the System. There are ways to use Resedit to not have these PostScript fonts show up in your list of fonts in Macintosh programs. Use Resedit to place a "%" in front of the font name for the bold, italics and bold italics fonts, and they will not appear in the Font menu, but the Mac will be able to create true bold and italics when you choose those options from the Style menu. This will only be true if you have 128K ROMS of the Mac Plus or later.

The issue of screen versus printer fonts is being addressed by both Adobe and Next, Inc. (Steve Jobs' second garage!). Adobe is developing "Display PostScript." Currently, Macintosh screen fonts are created by QuickDraw in ROM which do not exactly match the printer version due to differences in resolution. By using video or screen PostScript fonts, the correspondence between the viewed and printed output will be exact. Steve will make use of "display PostScript" in his new workstation to be released for the university education market some time in 1988 ?? IBM has also expressed interest in using "Display PostScript."

Lynn R. Trusal may be reached at 301-845-2651 to answer questions about material that appears in the Bits and Byte Column.

EXCEL SIG/ DISCUSSION GROUP

by Larry Feldman

A first meeting of the EXCEL SIG/Discussion Group will be held at the Pi office on Wednesday April 20th, at 7:15 PM.

Some of us doing a lot of work in Excel feel the need to ask questions of (and/or bounce ideas off) others doing the same kind of work. We would like to do this in person, rather than on the TCS or over the phone. Thus we envision the initial meetings of this group as having a Q&A, round robin format, with an emphasis on mutual support. Once it gets organized, of course, such a group can go in whatever direction it decides. David Morganstein will be available as a resource person for at least the first couple of meetings.

If this idea interests you, please call Larry Feldman at 546-9556 (day or evening) with any input you have on content or format. This will also give us a general idea of the number who might come.

THE PRICE IS RIGHT ON..

Apple™ Software		Macintosh™ Software	
Accounting			
DAC-Easy Acct.	$70	Back to Basics Sys.	$153
On Balance	70	Insight One-Write	225
Communications			
Commworks	60	Smartcom II	104
Point to Point	80	Straightalk	21
Database			
DBase II	350	Omnis 3+/Express	345
pfs: Workmates(f,r,p,w)	128	Reflex Plus	210
Education			
Computer SAT (HBJ)	28	Calculus; Physics ea.	70
Stickybear Series	ea. 26	SAT Improvemnt Sys	70
Graphics			
Create a Calendar	22	MacDraft	170
Springboard Publisher	92	Powerpoint	270
Leisure			
Beyond Zork	36	Beyond Dark Castle	35
Star Rank Boxing II	29	Chessmaster 2000	34
Programming			
Fortran Compiler (S'card)	71	Lightspeed C	110
Turbo Pascal 3.0 (CP/M)	55	Lightspeed Pascal	79
Spreadsheet			
Planner's Choice	29	Analyze	97
VIP Professional GS	205	MacCalc	97
Word Processing			
Multiscribe/GS 3.0	70	Mindwrite	185
Word Perfect/GS	100	MS Word 3.01	270

.....New, recently published software.....

APPLE		MACINTOSH	
816/Paint	48	Afinifile	57
ASCII Mousetalk	63	Bumper Sticker	43
Award Maker Plus	26	Business Class	36
California Games	29	Focal Point	70
Maniac Mansion	26	Macintax	74
Music Studio - gs	64	Nord & Bert	29
Post Card - gs	22	Pixel Paint	300
Ski Crazed	20	Ragtime 1.1	250
"Timeout Series" by		ReadySetGo 4.0	330
Beagle Brothers	Call	Superlaser Spool	99

Ask for a copy of our Apple or Macintosh catalog containing hundreds of other programs. Also, ask about our volume discount prices for 10 or more of any one item.

$3 shipping and handling per order (UPS-$4). MD residents, add 5% sales tax. No charges or COD's. Prices subject to change. Call for items not listed.

COMPUTER WARE UNLIMITED

P.O. BOX 1247 COLUMBIA, MD 21044

301/854-2346

	A
1	Excelling on Your Mac
2	Part 18
3	by
4	David Morganstein

Do you print to a LaserWriter from a Mac][? If so, you may have experienced at least one of Excel 1.04's ubiquitous "undocumented features", namely a bomb or two. All this after paying $25 for the update that was supposed to use the 68881 chip. No one said that the $25 covered compatibility with the 68020 did they? Just the 68881...hmmm. In any event, Microsoft is riding to the rescue. They now offer a "free" version 1.06 for Mac][owners that print to the LaserWriter. The rest of the world should not bother with this version as it has nothing else to offer. Wait for version 1.5, expected out in the second quarter. It will have several nice new options.

Now for a couple of quick hints. The first, for those who need to create a scatter plot, came from MacUser, March 1988. While scatter plotting has been discussed in several previous articles, a little known "undocumented" tip greatly simplifies the process. Begin by putting a text title over the second column of the X/Y data you want to plot. (See below) The first column represents the horizontal X-axis coordinate while the second the vertical Y axis coordinate. Be sure NOT to put a title over the first column, the one representing the X values. Leave this cell empty. Now select the entire rectangle, including the top row with the Y axis label and choose New Chart. Excel will produce a bar chart of a single series using the Y values. Now select the Scatter Chart option from the Gallery and Excel does the rest for you.

	A	B
1		Y
2	3	0.59
3	4	0.86
4	2	0.83
5	5	0.22
6	4	0.22
7	3	0.25
8	2	0.76
9	5	0.29
10	6	0.18
11	7	0.17

Did you ever need to format discontiguous sections of a spreadsheet in the same way? The obvious, but tedious, method is to select each area and issue a separate format command. It would be easier if you could select all the discontiguous areas at one time and then issue a single format command. Needless to say, you can. Click and drag to select a rectangular area (such as B2:B11 below). Now select non-contiguous areas by using the command key before clicking/dragging in any subsequent ones. After selecting all the relevant areas, issue a single format command.

Many people are familiar with a two-step method for repeating a formula in cells below or to the right of the one containing the formula. The cells below (or to the right) are selected after the formula is entered and then a fill down (or fill right) command is given. Actually these two steps, the formula entry and the fill, can be combined. Select the entire area where the formula is to be entered. Enter the formula in the top (or leftmost) cell as usual. Now instead of hitting just the enter key, hold down the option key as you depress the enter key. Voila, the first version of the formula is entered and the fill (down or right) follows along after.

	A	B	C	D	E	F
1		Y				
2	3	0.59		1.17		
3	4	0.86		1.72		
4	2	0.83		1.66		
5	5	0.22		0.43		
6	4	0.22		0.45		
7	3	0.25				0.51
8	2	0.76				1.53
9	5	0.29				0.57
10	6	0.18				0.36
11	7	0.17				0.34
12						

This next point is less of a quick hint and more of a "beware, undocumented features ahead!". Ever have to sort a set of rows? If you were only sorting values, you probably encountered no difficulty. How about sorting rows where some of the columns were computed fields, that is, they contained formulas. So long as the formulas referred to cells within the sort area, you probably got the job done just fine. Here comes the punch line. Did you ever try to sort rows containing a formula that referred to cells outside of the sort area? If so, you know why I am bringing this up. Excel doesn't rearrange the position of the formulas! Take a look at the following example.

D10 | =10*B1

Excelling18.1

	A	B	C	D	E	F	G	H	I
1	MD	589							
2	AL	632							
3	HA	998							
4	DC	142							
5	VA	522							
6	TN	665							
7	MA	789							
8									
9		Before Sort					After Sort		
10	MD	589	24.27	5890		AL	445	21.10	5890
11	AL	632	25.14	6320		DC	657	25.63	6320
12	HA	998	31.59	9980		HA	278	16.67	9980
13	DC	142	11.92	1420		MA	789	28.09	1420
14	VA	522	22.85	5220		MD	124	11.14	5220
15	TN	665	25.79	6650		TN	908	30.13	6650
16	MA	789	28.09	7890		YA	544	23.32	7890

contd.

I wanted to sort the four columns (A-D) in rows 10-16 where the last column was obtained as a calculation based upon data elsewhere in the sheet (B1-B7 in this case). To let you see what happens, I copied the area and pasted it into columns F-I. To do a Sort, you select the area you want sorted and issue the sort command. The dialog box which appears lets you pick up to three of the columns to sort on, as well is indicate whether the sort is to be in ascending or descending order. Looking at the result in F10:I16, you see that the first three columns (which contain either constant data or formulas which refer to cells within the sort area) are sorted as desired. The last column, which contains references to cells outside of the sort area, has not changed. Cell I10 still contains a reference to cell B1, as before the sort, not B2, the AL value. The way to make this work properly is to change the references to cells outside the area to be absolute references (e.g. B1), not relative references. Of course, this is not as easy as it sounds. The formulas in D10:D16 were obtained using a Fill Down. The formula in D10 has to be a relative one in order for the fill down to work correctly. Thus, you have to manually change the references to be absolute. Homework assignment for the reader: anyone have an easy way around this?

Last quickie: for moving around the worksheet use command-arrow key to scroll one row/column without moving the selected cell. Hitting command-option plus left/right arrow moves one screen right or left (for some reason this doesn't work with up or down a page).

SELF SERVE LASER PRINTER!!!
at
Master Copy
Desk Top Publishing

We also offer copying, laser typesetting, graphics & design, binding, and facsimile service

8601 Westwood Center Drive
Tysons Corner
(next to American Cafe)

893-7878

PC Resources by appointment **860-1100**

- **Mac ↔ IBM Connectivity**
  with the 5.25" Dayna File DOS disk drive
- **New Quality LaserCopies™**
  on **Pro-Tech™** bond, coated, color(5) & parchment(3) paper
- **3 Different Macs - 512K, 512Ke, & SE**
  you print on the same generation machine as you create
- **Toner Cartridge Recharging**
  like new, just pull the tab & print • Free pickup & delivery

Mon.-Fri. 8:30 a.m. - 5:30 p.m. • Evenings & Weekends On Request
1850 Centennial Park Drive • Reston, VA 22091

The Immediate is the Enemy of the Important!

Don't let immediate problems with personnel stand in the way of your important work.

Macintosh Help is Here!

- Extra help at our location, using our equipment during your peak periods of production.
- Expertise on new software, hardware and systems.
- Temporary services for the Macintosh.
- Training on many of the popular software packages available.
- Consulting on hardware/software configurations that will meet your needs.

We are looking for qualified Temporaries • Training Consultants • MacHackers • Business Systems Consultants

Temporaries • Training

Exclusively Macintosh Temporary Services
MACTEMPS®
(301) 926-8922

Solutions • Support

Join the many companies that are satisfied MacTemps clients:

Booz Allen • Harlan Brown and Company, Inc • The Torpedo Factory • American Anthropological Association • STSC • National Restaurant Association and many more!

©1988 NA Inc. May not be reproduced in part or in full without prior written permission.

OBJECT LOGO: A Review

by Jessica Weissman

Object Logo, by Coral Software, is cool! It is a unique and powerful language that mixes some of the richest, deepest and most exciting ideas in computer programming and how children learn. The mixture is fascinating, but extremely difficult to learn and use.

Object Logo brings the powerful pedagogical and programming ideas of Logo together with what many people consider the other revolutionary idea in programming—object-oriented languages. While you can carry out normal Logo programming in Object Logo, you might be missing the point. Object Logo lets you create objects and classes of objects, and share procedures by inheritance down the class lists. You can also access the Macintosh toolbox, and create programs which follow the Macintosh interface about as well as programs created in the latest version of Microsoft Basic.

Quite a bit of serious thought went into Object Logo. Coral Software is located in Cambridge, Massachusetts and that is not a coincidence. Object Logo has its roots in the fascinating ferment of the MIT learning laboratories, where Seymour Papert and his colleagues worked to make computers accessible to children. Turtles and procedures, pioneered by Papert, have found their place in the standard versions of Logo that are taught to many young children around the country. There are people who think that Logo embodies the right approach to programming, and they may be right. The program disk includes a paper explaining the concept of Object Logo in terms of cognitive psychology and computer science, and defending certain implementation choices in the language. This paper cites both Papert and Plato in a single footnote.

The package consists of a 300-page indexed reference manual with a single disk. The manual describes Object Logo syntax, defines each Object Logo procedure and command, provides a glossary and describes the differences between Object Logo and traditional Logo. There is no tutorial, no coverage of Logo itself, no real introductory material. In fact, the authors recommend that if you want to learn Logo, you use one of the standard Logo references. They even include an order form for these books!

What does adding objects to Logo do? In traditional Logo, you could talk to a turtle, and tell it to do things. The things you told it to do were defined as procedures, and only one procedure by a given name could exist in a given program, or workspace. If you wanted to do something just a little different, you had to copy the original procedure, alter it to do the thing you wanted it to do, and then give it a new name. (Yes, I know you can handle some of the differences by creating a new procedure that accepts parameters, but let's keep to the main point.) So, if, say, you defined a procedure to draw a house it would draw pretty much the same house all the time. If you wanted to embellish your house, or have two turtles draw slightly different houses, you were in for a lot of duplication. It was easy to lose track.

In Object Logo, you can create lots of objects, including turtles, and give them procedures to follow as part of their definition. If you don't define a new procedure for an object, it follows the same one that its class of objects follows. So if you want to have ONE of your turtles always orient itself upward at the middle of the screen when it starts a procedure, you could add a special initialization to that ONE turtle's procedures. You could still issue the same command to any turtle, and they'd all know what to do—except that the ONE special turtle would add its own special twist. Programming becomes easier when you have an orderly set of objects to give commands to. The virtues of object-oriented programming have been explained elsewhere, so I won't go on.

Besides objects, Object Logo includes other powerful extensions, such as a large number of primitives (commands) and decent access to the Mac Toolbox. Use of parameters and some other programming details have been cleaned up.

So what is using Object Logo like? Confusing. If you want to carry out traditional Logo operations, write Logo turtle graphics programs and do a little recursion, you can do it with Object Logo. Some small syntactical differences might trip you up. You might even be able to use Object Logo and one of the standard Logo books such as Apple Logo, Logo Works or Computer Science Logo Style to teach yourself or your kid Logo.

But trying to use the real potential of Object Logo is frustrating. Without any real tutorial guidance in how to use the object features of the language, Object Logo is nearly impenetrable. Object-oriented purists, moreover, will object to the fact that Object Logo does not implement message sending. Instead, it uses procedures defined for each object. Each object carries out the procedure given to it, either inheriting a procedure from some higher level object or using the version defined for itself. This decision, defended in detail in the Object Logo concept paper on the program disk, means that Object Logo stays close to regular Logo. On the balance, that is probably a good thing.

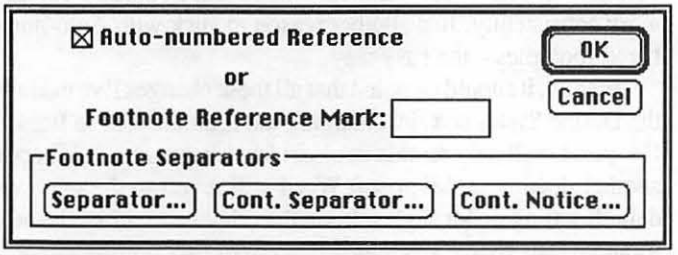
Reports are that the kids in Alan Kay's Vivarium project are using Object Logo to write the software for their computerized "fish" and environment. Probably those kids learned the language directly from Alan Kay and his assistants, some of whom have experience teaching kids Smalltalk. I have no doubt that with the proper instruction, with plenty of time to learn and with minds unpoisoned by exposure to other computer languages, creative kids could turn out marvelous programs with Object Logo. As for the rest of us, we need more documentation. If you want to devote a large chunk of your time to mind-expanding programming ideas, and if you are highly persistent and independent and able to learn from a reference manual, Object Logo may be for you. If you decide to try it, I hope you have either Alan Kay or a kid who knows Logo around the house to help you.

WORD FOOTNOTES MADE EASY

by Charles R. Geer, Jr. (with graphics by Martin Milrod)

Footnotes?! I haven't done footnotes in 20 years. But let's explore footnotes in Microsoft Word 3.01 and see what we get.

To start, place an insertion point in the text where you want your first footnote number to go (any text, anywhere, just for practice) and open Footnotes from the menu bar under Documents. Simply make sure Auto-numbered reference is checked at the top of the footnote dialogue box and hit o.k. This is the easy way.



A "1" will appear in the document where your insertion point was placed and the footnote window will open at the bottom of the page, ready for you to type in the reference after the number 1.

Word automatically places footnotes on the same page as the footnote number or reference mark.* But under Page Setup in the File menu, there were several choices for positioning footnotes: (1) bottom of page, (2) beneath text or (3) endnotes. Beneath text was checked in my copy of the program. This seems to me to be an arbitrary decision. I like "bottom of the page" better. The reference manual says:

Bottom of the page: prints footnotes flush with the bottom margin of the same page as the footnote reference mark (number).

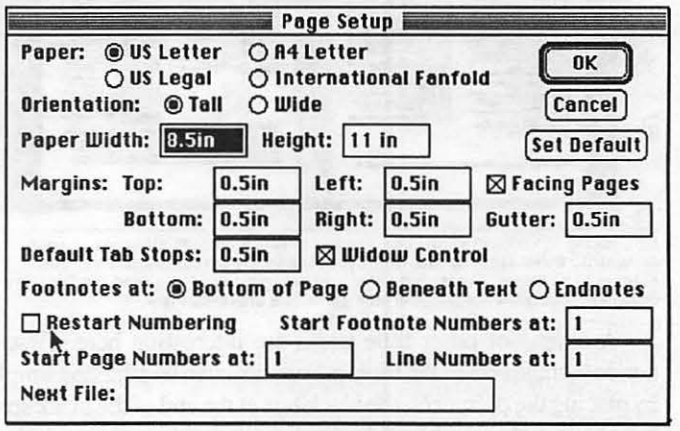
Beneath text: prints footnotes on the same page as the footnote reference mark, beginning underneath the text. This option is useful when footnotes are on the last page of a section and there is not enough text to fill the page.

Endnotes: prints footnotes at the end of each section, or at the end of the next section that has the Include Endnotes op-tion turned on in the Section dialogue box. If a document has more than one section, you can have WORD print footnotes at the end of the document by turning off the Include Endnotes option for all sec-tions but the last.[1]

Personally, I think the first option may just keep footnotes in a more uniform format. But, it should be noted that footnotes may be placed at the end of the document or at the end of a division if there is more than one. Use Division Layout to decide, says the WORD manual.[2] Couldn't find any Division Layout command. There is a "Section" command under the Format menu, which looks somewhat similar to the Division Layout window in the manual. This has a Footnotes section with only one item—a check-box to "include endnotes."

Perhaps this means that when this box is checked, as it is now, footnotes should appear at the end of the section. If this is so, I also note that there is a box checked which indicates that each page is a new section! Seems a bit convoluted to me. I just left this as is.

Another check-box item under Page Setup may cause serious footnote numbering problems, if incorrectly set. Make sure the Restart Numbering box is NOT checked.



The cursor is at the box which, when checked, restarts footnote numbering on each page. Leaving it unchecked automatically numbers footnotes throughout your document.

According to the manual[3] if this box is checked along with either the Bottom of the Page option or the Beneath the Text option, the footnotes on each page will be restarted at number 1. If this box is NOT checked, your footnotes should be numbered consecutively throughout your document.

This is neat! I had originally been working on another document for practice with footnotes. Then I decided, what the hell, I ought to be doing them here. So I listed numbers 2 and 3 above as my first two footnotes. Real proud of myself. Then I decided I ought to have another one earlier in the document. But what would happen if I tried to place a footnote number up there? Would I suddenly be starting this document with footnote #3 instead of #1. Well, first of all, I saved the document twice, once as "Footnotes" and a second time using "Save As," and calling it "Footnotes Copy" so if I loused up I could still go back to where I was.

But, what happened was interesting. When I inserted the footnote number above the other two and hit ok, it was listed as #1 and the other two were changed to 2 and 3. Just like magic! Furthermore, the two footnotes I had already written jumped down in the footnotes window at the bottom of the page giving me room to insert footnote number 1 above them.

WARNING! It's really easy to insert, delete and move footnotes around in this manner. But, it's also very easy to remove the first reference in a series making subsequent "Ibids" meaningless or wrong.

Please note, I have Auto-numbered Reference checked in the footnote dialogue box. If you prefer not to check it, you must use the Footnote reference mark and type in a number yourself. I

contd.

* This is what you get if you don't check Auto-numbered reference. Of course, you can use any number or symbol you want instead of the asterisk. Just type it into the Footnote Reference Mark box. You can use up to 10 characters. But this isn't the easy way.

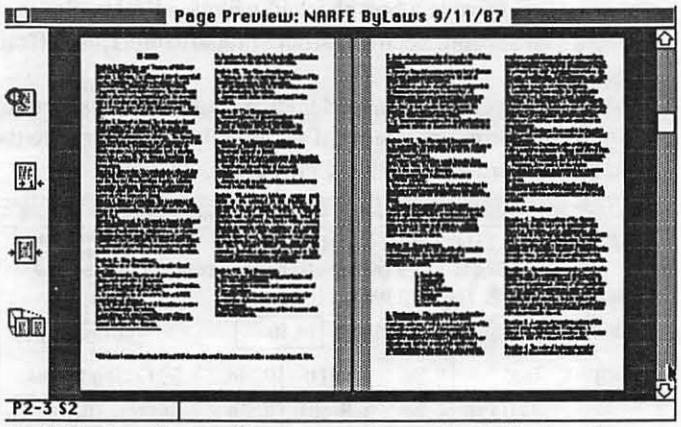
[1] Reference to Microsoft Word, "Page Setup Command," p. 268.

[2] Microsoft Word, "Complex Documents," p. 155.

[3] Reference to Microsoft Word, p. 269.

think the automatic way is much easier.

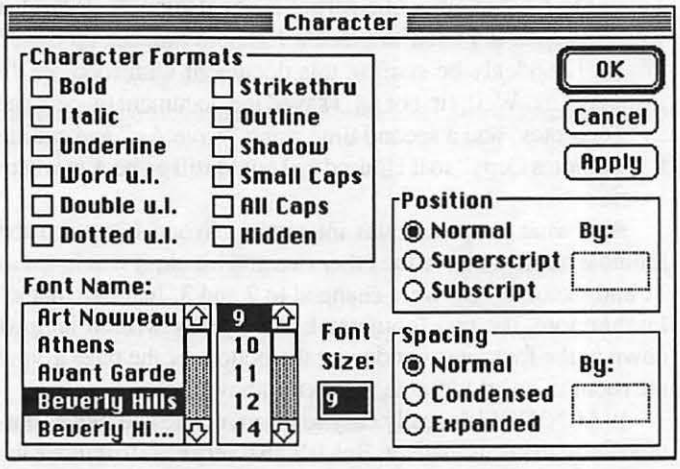
At this point, I was wondering how close I was to the end of page 1. I clicked the Page Preview command and was surprised to actually see the footnotes appear on the Preview page! Furthermore, I never noticed the scroll bar on the right side of the Page Preview window before. If you click in the gray area below the white box, you can preview each page beyond just the first two!



By clicking in vertical scroll bar, one can advance through all pages of your document. Other icons on the left-hand side of the screen, permit various actions to be taken. Please note that you are unable to fully read the "preview" document; using the magnifying icon permits a close-up view.

A couple of other little items are interesting here. First, I notice that the size of the footnote window can be adjusted simply by placing the pointer on the black box at the end of the black split bar to the right (the black bar separates the document window from the footnote window). Placing the pointer on this black box (between the two pointers) and selecting it allows you to make the footnote and the document windows larger or smaller.[4]

Now let's see how I can control the font choices in footnotes. Right now my document and footnotes are in Boston II, 10 point. But, I'd like to change both the font and the point size of the footnotes at the bottom of the page without changing the font in the text of the document. I go to the Format menu, choose Define Styles and highlight Footnote Text. Then I go to the font menu and select Beverley Hills and 9 point. Viola. All my footnotes change to Beverly Hills, 9 point.



Later I found out that Beverly Hills acted sort of weird as footnotes. When I tried to underline just Microsoft Word in the first footnote, the underline extended out past the #1 to the left margin. So I switched to Boston II and did my footnotes in 9 point. (I didn't try printing out Beverly Hills. It may be that the underline aberration only appears on the screen, not in the printed Imagewriter version. As a matter of fact, the line under the footnote references in Boston II seems to extend under the footnote reference number just a bit on my screen as well. But I note that this is not so in the printed Imagewriter version. Well, so much for WYSIWYG [What you see is what you get!]).

If I open Define Styles and select Footnotes Reference, I'm asking for trouble. When I did fool with Footnote Reference, by clicking on a font and point size, I ended up changing the entire paragraph where the reference mark appeared in the main document! Had to highlight the whole paragraph to change it back. So I thought, ok, maybe this is used to change the style of long, verbatim quotes in the main document. But I couldn't get it to work consistently. Just another reason to stick with Auto-numbered footnotes—the easy way.

Finally, it should be noted that all these changes I've made in the Define Styles box, ie. changing the footnote font to Boston II 9-point, will only remain in effect for this document. If I open another document, Microsoft Word will revert to the previous default setting under Styles. If, on the other hand, I like the new footnote font style I've created I can easily set it up as my new default setting by simply clicking on the Set Default box in the Define Styles box. All later documents will have this new style.

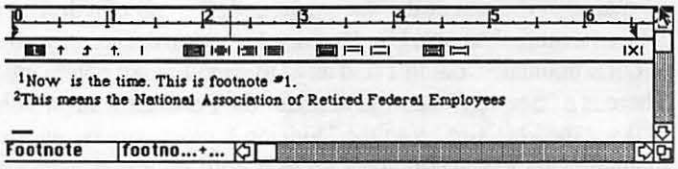
Now, if I have lots of footnotes to do, there ought to be an easier way to do this from the keyboard. I've found it.[5] You follow this sequence:

1. Position insertion point where you want footnote # to go.
2. Press Command-E.
3. Press Return.
4. Type text of footnote.
5. Press zero on the Numeric Keypad to return to main document.

Here's another neat trick. If you accidentally delete an automatic footnote reference number, you can restore without lousing up the numbering system. Just type in the text of the footnote you want then place the insertion point at the beginning of the footnote text. Press Command-E. Type in the footnote number you deleted and hit return.[6]

What if you want to delete a footnote? If you go to the footnote window and try to delete the text of the footnote, you'll be making a mistake. The footnote text will be gone but the footnote number will remain in the main document. So you have a footnote number but no reference at the bottom of the page.

The way to delete footnotes is to simply delete the number in the main document. Lo and behold, not only does the text of the footnote disappear at the bottom of the page but all the rest of the footnotes are automatically renumbered![7] By the way, if you



Note that footnotes are numerically sequenced and the "automatic numbering" creates superscript numbers. By either highlighting footnotes or using the "Style Sheets" feature of Word, you can designate font size and style which can differ from normal text. Pressing the shift key while dragging the split bar down, gives you access to all footnotes. Command-Option-Shift-S is another way to do this.

[4]Microsoft Word, p. 154.

[5]Reference to Microsoft Word, "Footnotes," pp. 60-61.

[6]Ibid., p. 61.

[7]Ibid., p. 62.

change your mind after making a deletion but before going on to something else, simply use the Undo Typing command and everything will be restored.

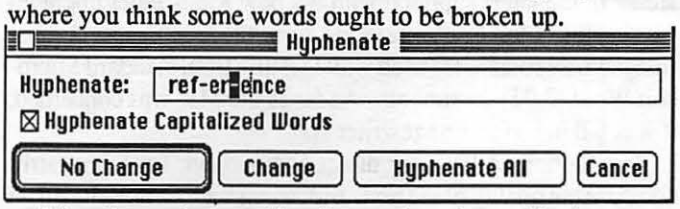
There is another option in the footnote dialogue box under the Document menu which is kind of interesting. You have three choices at the bottom: Separator, Cont. Separator or Cont. Notice. Separator refers to the line separating the text of the main document from the footnotes. If you choose, Separator and check the first box, the separator line will be preceded by the page number. Select the second box and the Separator will be preceded by the date. Select the third and it will be preceded by the time. Try them, if you don't like any of them, you can choose the last box "Same as Previous" and return to just the separator line.

Cont. Separator gives you the exact same choices except that the separator line is drawn all the way across the page from margin to margin. This kind of separator is used between the document text and the text of a footnote that carries over from the previous page.[8]

Cont. Notice is blank and gives you the option of typing your own continuation notice.[9] You would use this kind of notice to indicate that footnotes carry over to the next page.

In this document I used the default setting, the first setting called Separator, which has a short separation line.

By the way, this document has also been "hyphenated." I selected Hyphenate from the Document menu, clicked on Start Hyphenation in the dialogue box and then checked either change or no change as each word was selected. You also get options on where you think some words ought to be broken up.



I just learned something interesting about this document window. Up in the right hand corner above the arrow there is a black box called a Split Bar (just like the Split bar for the footnotes window). If you place your pointer on this bar and drag it down, you can open up two windows, one above the other. Both may be scrolled so you may look at any part of the document you are writing and display it along with the section you are currently working on.

Finally, you may open the footnote window without creating a footnote by holding down the Shift key while you use the pointer to pull down the Split Bar. If you drag it to the bottom of the page the footnote window disappears.

---

[8]Ibid., p. 58.

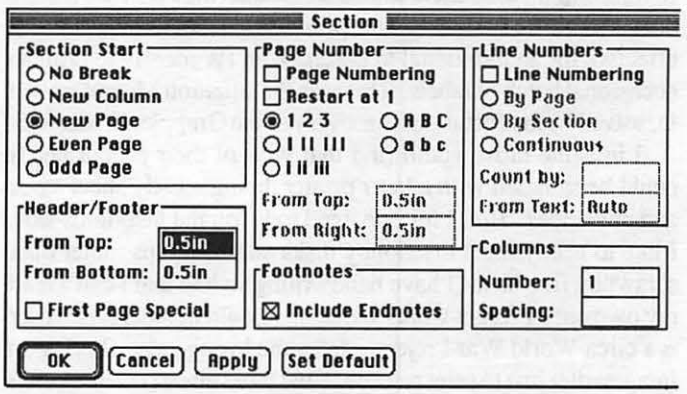
[9]Ibid., p. 64.

MORE MS WORD
by Martin Milrod

Many of us have a persistent love-hate relationship with Word. Its footnoting capabilities are extensive and—for most users—adequate. There are many other aspects of this word processor which also please, dazzle and bemuse its users. Few of us would ever have the need to understand all of the features of Word, and fewer still would have the need to understand the several different ways in which the same thing can be done.

For instance, the use of Styles (really style sheets for a Word document) is perhaps the most useful tool of Word, but it is seldom used by short-paper users. It would have resolved Mr. Geer's formatting concern about his footnotes, mentioned in the accompanying article, and would have facilitated rapid future adjustments of footnotes, headers and text. Unfortunately, its use is rather opaque and the tedious manual is neither clearly nor simply informative. (There are two good commercial books available on Word for the Mac which are soooo much better.)

The Section option, which can be found on Page 320 of the manual dealing with footnotes, also is a powerful tool which others have found to be most helpful. Other examples of features—other than footnotes, include outlining (which is very weak in my opinion), formulae construction for math and science, side-by-side paragraphing which can include graphics (desperately in need of simplification) and, most importantly, the built-in "hand-holding" between Word and many other MicroSoft products such as Excel, etc. These facilitate "linked" data which can be "quickly" updated within your document.



This Section screen allows for many alternate structures for Sections (or Chapters) within a single large document. I prefer using the header and footer capability for numbering pages rather than using the screen. And I prefer establishing each Chapter as a separate file for ease of use until the time comes to integrate all chapters into a single document to reflow all footnote numbers (and page numbers) sequentially. Unfortunately, you MUST use this screen for multiple column displays.

Above all, there are many undocumented keyboard commands within the program, which constitute alternative ways of doing things for those of us who do not want to be mouse-bound when word processing.

As of this writing, Word remains the most full-featured released word processor available for the Mac. WordPerfect for the Mac and Ashton-Tate's FullWrite Professional (both of which are in broad Beta-version release) will give Word a race for top honors, and it is my guess that Microsoft will have to upgrade its still creaky Word to meet the competition. We users will be the ultimate beneficiaries of all of this competition.

The huge installed base of Word owners, and its interchangeability of data with the "other computer" version of Word, assures MicroSoft a major position in the world of word processors for the Mac. For those of you looking for a competent word processor, you really must look at Word. It has a weak-sister version, MS Write, although its cost is too high, and I recommend Word if you need a full-featured word processor.

A CABLE FOR ALL SEASONS: The Grappler C/Mac/GS

by Robb Wolov

Laser printers are wonderful...or so I recall myself saying in these very pages. But a laser, regardless of the quality of its output, is not the appropriate tool for all applications. For example, the multipart carbon form has not been invented that will respond to a laserprinter's magic. Gummed labels, for mailing lists and other purposes can in theory be made on a laser printer, but the problems of registration of the sheets and "peel-off" through the printer's heating element are just not worth the bother. The lowly dot matrix printer can handle these jobs quite well, thank you. The problem until now has been the selection of matrix printers for the Mac.

That selection, save a few obscure Far Eastern clones, can be summed up in one word, "Imagewriter™". Due to the functioning of the Mac in the graphics mode, no printer has been quite as software compatible off the shelf as the Imagewriter (IW). For routine output, Mac users can do worse than the IW. But, if there is a laser printer available as the prime output device, it is not cost effective for an individual to purchase an IW merely to print an occasional batch of labels. This was the situation I found myself in, solved by my fortuitous discovery of the Grappler C/Mac/GS.

I imagine most would find that 98% of their printer needs could be satisfied with a laser printer, being mostly sheet stock and envelopes. But, I for one, tend to be on the fastidious side. I like to neatly label my floppy disks and back-ups rather than scrawling free hand (I have handwriting so bad that I can't read my own once I forget what I wrote!). My old manual typewriter is a circa World War I reject—from the losing side. Buying an Imagewriter just to print an occasional label made no sense (after the laserprinter I couldn't afford it anyway!). I had begun to accept that my labels would be typed or lettered by hand while eyeing my old, but mint (I did say I was fastidious), Epson FX-80.

A bullet proof design, the Epsons with their Centronics parallel inputs represent an industry standard. Let's be realistic folks, there are more Epsons and Epson workalikes than there are Imagewriters. As more former IBM'ers come over to the Mac, for nothing more than economy, they are going to want to bring their Epsons with them. This has not been possible until now.

There have been faltering attempts to marry Centronics parallel printers to the Mac. Epson sells a parallel to serial conversion board for the FX series of printers. Both Epson and SoftStyle have written device drivers and conversion programs such as Epstart to run on the Mac once the printer has been modified for serial input. I have had no personal experience with these combinations but reputation was that the results were mixed. Text only output would print—most of the time. Graphics—forget it! So was the state of affairs until Orange Micro stepped in.

Orange Micro of Anaheim California, has had a long history of producing products to interface the outside world with various Apple Computers. The original Grappler was a plug-in board for the Apple // to marry Epson type printers. The Grappler C, predecessor to the current product was designed to marry an Epson printer to an Apple //c. The newly released Grappler C/Mac/GS as its name implies, is a universal parallel interface system to marry any Centronics parallel device to either an Apple //c, Mac or Apple GS.

The Grappler C/Mac/GS is a "smart cable", a system composed of a special cable with a sealed, externally powered module containing firmware which emulates the Imagewriter. Roughly the size of a deck of playing cards with micro dip switches for selecting the exact model of printer, installing the Grappler was no more involved than plugging in any other printer cable. A separate AC/DC converter plugs into this firmware module to power the "brains" of the cable. There are software utilities that are required to be run with the //c and GS, but the firmware/cable alone is all that is required for the Mac.

I can only comment on the use of this cable with the combination of the Mac and the Epson FX-80. The functioning of this system of "smart cable" and Centronics printer was totally transparent to the Mac. The standard Imagewriter driver (version 2.6, the latest supplied with the new Multifinder upgrade) was used and the printer selected from the Chooser as always. Imagewriter fonts were used while testing from standard Microsoft Word (3.01) documents. As far as the Mac was concerned, it was talking to an Imagewriter II.

Not having an IWII for direct comparison, I can not fairly compare the quality of the text. But, using such fonts as Palencia (v 2.2) and Beverly Hills, both famous for high text quality on the Imagewriter, the output from the "impostor IW" was pleasing to the eye.

The hardest test, and frankly my reason for trying the Grappler was running myDiskLabeler™ (v 2.6.2) from Williams & Macias. This program makes some very attractive labels for your collection of 3 1/2" floppies and tests all modes of the emulator. With the option of printing either small or large icons as well as pertinent text information, it requires precise physical registration of the blank label sheets by the printer. Text, graphics and precise carriage movements, myDiskLabeler was a real workout for the Grappler. There was no excitement. Things just worked. As far as my Mac was concerned, it was talking to an Imagewriter II and that was that.

No, I have not tried to emulate a color IWII. Theoretically it should be possible if multicolor ribbons for the Epson are in the same sequence and spacing as the IW ribbons. But, if you are really squeezing this much from an emulator, than maybe you really should be thinking of a real Imagewriter.

The Grappler is officially compatible with the Epson FX and FX+ series and compatibles, as well as the RX, MX, LQ, LX, EX and JX. The Okidata Microline series (192,193 & 292), The Star Gemini series (SG,SD,SR and 10X) as well as the C. Itoh C310XPR are all supported.

contd. on pg 72

ANOTHER EPISODE FROM MacENGLAND

by Adrien and Siew Youell
19 Barnsley Close, Mytchett, Ash Vale, (Old) Hampshire GU12 5RH , UK. (0252–520456)

The question on everyones lips is, "Will Sir Caspar Weinberger ask for the Governorship of Granada when The Queen invests him with the Knight Grand Cross of the Order of the British Empire at Buckingham Palace on February 22?" The (London) Daily Telegraph reported February 2 that he was totally surprised and tremendously honoured, and unaware that there was such an award. Sir Caspar may have been a little bemused to discover he is a knight in the evening of his day. It reminds me of my cousin's remark that she wondered if our uncle would return from London on the late ferry after the King's sword play, in his (k)night clothes. In WAπ terms you can take this to be computer chatter on the adventure game front—Come in Judge Ron Wartow.

On the serious front let's talk about REAL computing, Computer Capability Ltd (of 12 Bexley Street, Windsor, Berkshire SL4 5BP; 0753–841659). Philip Bath has managed a British and International coup producing a 20 Mb miniQisk for £420 sterling which is driving this article, a bargain by British pricing standards. I have lusted after a hard drive for years. I remember clearly when I was WAπ VicePresident, at a HardDisk meeting Jon Hardis exhorted us to discard ideas of hard drives unless we really needed them. I didn't and still do not, but love the passion. I love the access light which is the dot on the i in Qisk. Philip really bundles only HD Back–Up but this gem is the first east of Newfoundland under £500. It talks to Plus, SE and II, and he makes them in increments up to 140 Mb, under the Mac footprint,with Yale locks and device switches, and a 10 Mb 'floppy'. The miniQisk has a 2.1 interleave on the Plus and 1.1 on SE and II.

I now command the first totally computerised British Laboratory, Army or civilian. The Departments that are computerised and directly linked to the patient database are—Histopathology, Microbiology, Hematology, Serology, Blood Transfusion and Chemistry which are all the laboratory departments most patients need in their medical career.

In outline the system is a network of four processors of 20Mb drive capacity, local file servers (LFS) in each pathology discipline, linked to a Central File Server (CFS) of 80Mb, with an on–board back–up tape streamer, a linked Admin 20Mb LFS and a 6th Communications server (to download patient demographics from the hospital PDP). A separate Personal Computer (Wyse 240 PC) in my office is also networked as a requestor/receiver, and can be used as a stand–alone PC. The PC has a 20Mb hard drive with IBM compatible MS–DOS and C–DOS partitions. The network operating system is CP/M Digital Research Concurrent–DOS version 5.2 and Arcnet, and allows multi–tasking with multiple users and virtual consoles, and any node on the network can communicate. Each processor has a nearby dot matrix printer and there is one Laser Printer. One Haematology and three Biochemistry analysers are interfaced to the network, sending results directly to the patient database. We have not yet tested archiving but expect to use 20Mb removable cartridges. Although hardware and software enhancements are still to follow I confess I am thrilled with the power of the system. Concurrent is a great operating system. I like the 'windows' and am getting quite proficient with virtual consoles, "PIPALL" and "NET E:=A: 05::" etc.

Naturally I am distressed that it is not Macintosh but I wish to link my Plus to share files on the PC compatible. TOPS is not necessary as I only want a one–to–one link. Will the available products link a Mac to my hybrid machine in Concurrent DOS, running *NewWord*, an upgrade of *WordStar*? I have been recommended 'MacLink Plus' which constitutes a cable from the serial port on the Wyse 240 to the Modem port on the Mac, and software 'translators' advertised to transfer files from various MS–DOS to appropriate Mac applications. This sounds a bit like 'QuickShare Board' reviewed by Robb Wolov in the February 1988 Journal. But what about Concurrent? I am hoping to get a demo kit to plug in and test, before purchase. Any advice would be appreciated.

There is only time for a few asides. We especially enjoy David Morganstein's and Lynn Trusal's articles, and the cut and thrust of Ray Hobbs, Bill Hole, Jim Lanford, Rich Norling and Bill Baldridge. Thank you Cynthia Yockey for taking over the Meeting Report. Marty and Dave, I will purchase some of your disk goodies when I am over in mid–February for a distressingly short week; too short even for Tom and Rochelle Warrick to buy me supper. Thank you all for friendship, and your articles. John Lewis, Editor of Mac Times UK was green with envy of our associations with WAπ and congratulated Bernie and Gena on the wonderful production (AY note: How do you keep it up, Ed.?).

The first thing our US friends should know is that Apple and Macintosh are very big in UK and the second thing is that we are definitely second cousins, as regards distribution of soft– and hardware (late and costly). We like US products but you know we 'make' British software and there are now some very inventive VAR's and originators of Mac products. However I was horrified before Christmas to get a special offer telephone about *4th Dimension* listed at £645 (that's big money); I could get a 2–day course reduced to £100! I was so flabbergasted I forgot to respond that I thought it was supposed to be so Mac–ish that support was academic. (Computer courses have only existed here in the last 6 months and have they taken lessons from you?).

We have a playful kitten whose delight is to hide our 'mice', and too often we are scrabbling under chairs to retrieve Kevin's mum's mouse covers! With a British 'localised' system on my US Plus and a UK keyboard on Siew's 512KE using a UK System I get very confused—sometime we must get together; my shift 3 produces a £, her £ is option 3; I must pick–up a US System update. I was absolutely amazed to find that Cheltenham College, a moderately famous boy's school (AY Note: ashamed of yourself?), has a complete Mac networked system, unlike Winchester College (Patrick's school, he's 13) which has British

contd.

BBC's (so out-of-date they probably started with the School in 1382) (AY note: just shut up). Britain is not dead or even sleeping. You just do not hear enough of us.

Adrien Youell is a British Army pathologist, proud Ex-Vice President of WAπ, Mac evangelist and pays for his software. If you have any complaints pay the sun-god, denigrate the rain-god and go play on a grey day.

Macinations contd. from pg 56

mover-like dialog box to select which formats to convert. With both Apple and Taxan to soon release their QuickDraw based laser printers to join General Computer's Personal Laser Printer, Postscript to QuickDraw capabilities would be nice. You could update it as new formats appear.

In the meantime, for you PLP users, Brad Pritchett of the Boston Computer Society suggests using "Glue" or the updated "SuperGlue" as a "preprocessor" for any of the QuickDraw only printers. These programs are print-to-disk utilities which convert and store files as pure QuickDraw commands to be pasted into other documents. I have found this technique useful with SuperPaint—until Silicon Beach Software gets around to releasing a long overdue update which is promised to support the PLP.

A Cable For All Seasons contd. from pg 70

The Grappler C/Mac/GS is in quite short supply. Orange Micro has admitted to being back ordered to the point were some have started to believe this to be a vapor product. Rest assured it is real. It retails for $99.95 but you should find street prices and mail order closer to $70.00.

I suggest you only purchase such a product on approval after testing with YOUR equipment. But, if you have an old but still worthy parallel printer gathering dust and the idea of a second Imagewriter for occasional use sounds handy, than the latest Grappler is worth a look.

DELTA 3.2 MEDICAL RECORD SYSTEM

Subject: DELTA 3.2—an OMNIS III-based medical appointment scheduler, medical record database/statistics package (with a full billing/insurance form module)—(a) to request help (b) to offer free installation.

The Delta 3.2 package has been developed by Dr. Kevin Kavanagh, an ENT surgeon at the University of Tennessee, and is in use at a small number of clinics in that area. It was demonstrated at the recent SCAMC conference in DC. I am National Users' Group Chairman. We would like (a) to solicit help or interest from WAP members—and add to our mailing list; (b) to locate one or more clinics or practices who have Mac (OMNIS III capable) equipment (or are willing to buy such), and who would like free installation and maintenance. (Arrangements have been made with Blyth Software as regards the OMNIS III.) Additionally, all Federally-funded clinics/researchers may obtain the appointment scheduling and database statistics modules with a minimum of paperwork. Please write or call Alan J. Truelove, 3326 Elm Terrace, Falls Church VA 22042 (703) 560-6987 home or (202) 629-5567 digital beeper.

LETTER TO THE EDITOR

Dear Editor,

Jefferis Peterson's article, "Mortality" (January), is a well-written chronicle of the trials of the pioneering Mac owner. Undoubtedly, Mr. Peterson's tale of the pain that accompanies being left behind by the endless advance of technology strikes a familiar note in the hearts of personal computer owners everywhere. Having accepted the fact that he cannot keep up forever, Mr. Peterson states that he has found peace. While I envy him that peace, I take exception to his statements about those who have not been so blessed, saying that "these Yuppies" will someday "have to be content with less and not more." To label all those who try to keep up with the evolving technology as Yuppies, whose primary interest is to "always have the latest and the greatest", seems to me to overlook both the importance of the function these people serve and the greater foolishness being perpetrated by the computer manufacturers.

Indeed, it is surprising that as one of the original Mac owners, Mr. Peterson does not have more respect for those who jump at every piece of innovative software or hardware that comes down the line. Without these people there would be no personal computers, and there would certainly be no Macintosh. I believe that for the majority of these people, owning the new technology is not so much a goal in itself as it is a way of expressing endorsement for an innovative idea. For them, a new piece of software or hardware is desirable because it is different, not because it is a status symbol. The original Macintosh is a good example of this. The fact is, that despite its user-friendliness, the 128K Mac was little more than a toy when compared with DOS machines. Nonetheless, thousands flocked to buy the newcomer because they recognized the novelty of the interface and what it could mean. This hardly makes them Yuppies.

Furthermore, the constant flood of technology and the large amounts of money that people are putting out to keep up with it has little or nothing to do with the user at all. Instead, it is caused by the equipment and software manufacturers, who not only discontinue whole product lines on what seems to be a biannual basis, but who also have the gall to cease support for the old product lines once they are discontinued. Computers are tools, just like any other machine. By changing the tools so rapidly, the manufacturers are doing more harm than good. The process of constantly upgrading the technology is analogous to the major light bulb manufacturers getting together and deciding to change th size of a standard light bulb socket each time someone comes up with a more compact design for one. For many, the process of struggling to keep up with the latest technology is a matter of survival in the computer field, rathen than a matter of always wanting more. It is the fluctuating goods and services that go with computers that entice us to continue on the constant upgrade path, not a 20% improvement in the speed of math calculations.

Richard Ogata

(Ed. Note: Mr. Peterson's reaction to these comments during a hurried phone conversation with him is one of substantial agreement with the points raised. He suggests that Mr. Ogata should construe his article as being tongue-in-cheek and not a serious criticism of those who try to keep up. He too feels that current business practices may be conducive to this need to do so.)

HYPERCARD NEWS

by Robert C. Platt

The HyperCard SIG meets at 11:30 a.m. on the Saturday of the main WAP meeting. New members are always welcome and we are pleased that over 70 people have attended at least one of our meetings.

For our next meeting, we are inviting you to bring your favorite stack for a brief demonstration. It could be one that you wrote or downloaded. We are also looking for volunteers to present their impressions of various commercial stacks which they have purchased. Come to our meetings and share your discoveries!

Tutorials. In addition to SIG meetings, we have organized a three session sequence of tutorials on HyperCard and HyperTalk. See the back of the WAP Journal for details. Enroll early, as they are filling up fast.

Version 1.1. Apple has released HyperCard version 1.1. It contains the following changes:

- A date conversion resource "DATE.0" will accomodate varying formats for displaying dates in foreign countries.
- The * and # signs can be used in the DIAL command.
- Version 1.1 handles large stacks and scripted repetitive operations more reliably that version 1.0.1.
- The user preferences card in the home stack can now set the *textarrows* properly. When FALSE, the four arrow keys can only be used to navigate the stack. When TRUE, the arrow keys with the option key held down must be used to navigate the stack.
- Two new Hypertalk commands were added for Mult- ifinder compatibility on small screen Macs: Show and Hide Card Window.
- Undo'ing the Delete Card menu option is now supported.

WAP (as well as Apple Dealers) is licensed to distribute 1.1 as an upgrade to people who own 1.0.1

Menu Card. Bill Baldridge and I have developed a 150K stack for promoting WAP to prospective members. We will upload it to local bulletin board systems and will make it available to local Apple dealers.

One part of the stack presents each SIG on a different card. These SIG cards can be accessed through links from several different places. In addition, a menu card lists all SIGs with buttons for selecting the SIG of interest directly. For the menu to be meaningful to the user, the user should be able to have those SIGs which have already been read, marked as such. The following script in the background of all the individual SIG cards achieves this goal.

The first step was to name each SIG card. A field on the menu card was created next to each SIG menu item and was given the *same field name* as the SIG *card* name. The following script marked each SIG as it was read:

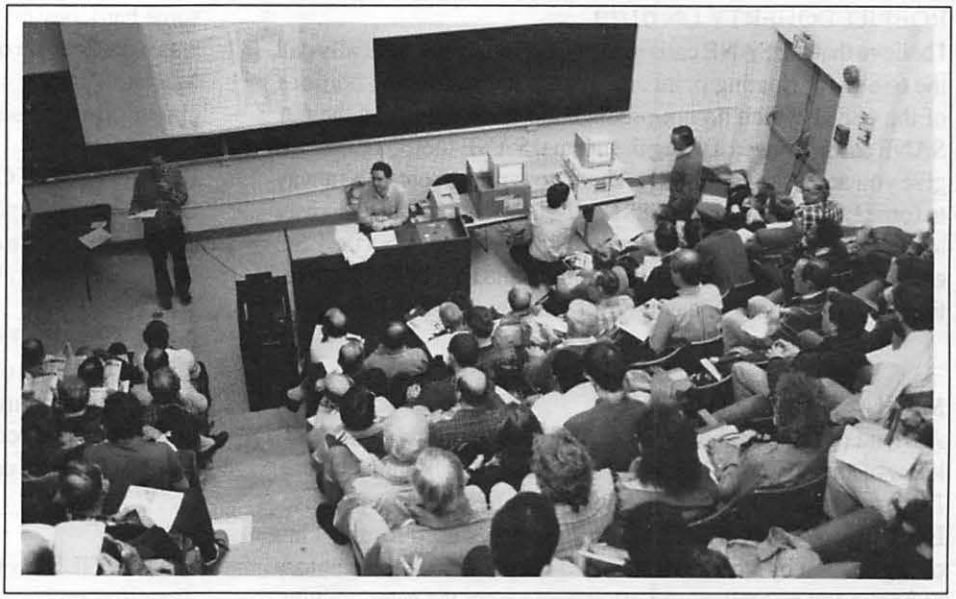
```
on openCard
  put word 2 of name of this card into N
  delete char 1 of N
  delete last char of N
  put "•" into card field N of card SIGS
end openCard
```

The "name of this card" returns a value that looks like:

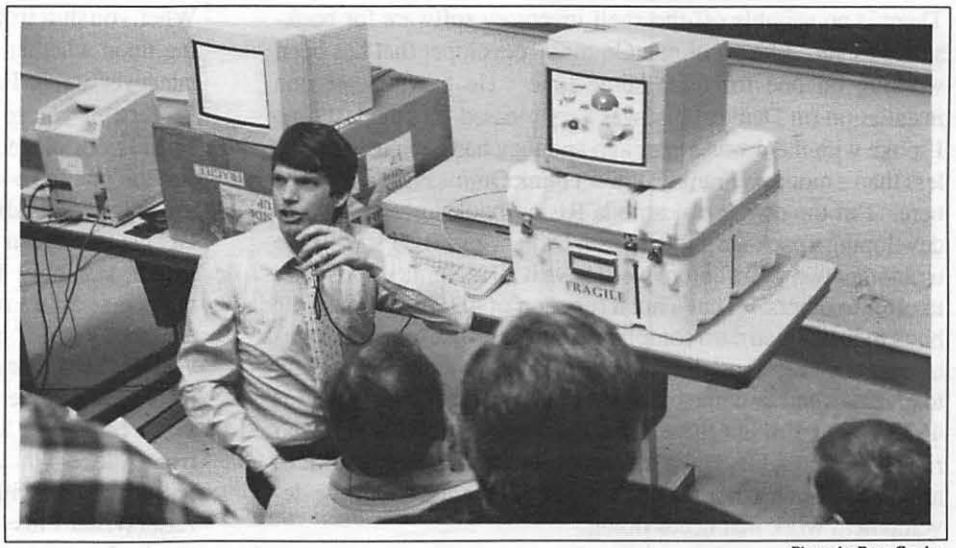
```
card "myname"
```

To change this value to just myname, the second word must be selected and the two quote marks stripped off.

Note that the bullets will remain in these fields between uses. Hence, I inserted a simple script which moved empty into these field on openStack.



How does our WAP Stack grow?



Photos by Peter Combes

Jim Lanford talks 24-bit color

BEST OF THE MAC ITEMS FROM THE TCS

by Dan Hughes

C Programming

HARRY ERWIN ON 01/11

The APDA release of APW C has finally come out (= MPW C). I intend to use object-based programming on a simulation project. Anyone have experience in this area? I think I can kludge it in PCC C.

RICHARD MARTIN ON 01/18

Which compilers support the Mac II 68020/68881? I don't think Lightspeed does (the version I have doesn't, and I'm not aware of any upgrade past 1.13). MPW does, I suppose, but I'd rather use LSC (since I already have it, and like it just fine—even though it's a bit crazy with Multifinder).

ROBERT DOHERTY ON 01/19

I believe that the SANE calls in the Mac II rom automatically call the 68881 for floating point and in addition bypass the portions of the 68881 which do not produce the same results as the old SANE calls. Thus just using the normal SANE toolbox calls will give you access to the 68881. There does not appear to be a way to force LSC to use inline 68881 calls, however, and also no way to force use of 68020 specific code. I haven't tried it, but the LSC embedded assembler might recognize 68881 and 68020 operations, in which case you could roll your own in-line calls.

Data Bases

MICHAEL MAFFEO ON 01/07

A friend of mine is about to open a bookstore and asked me if I knew of any inventory software for the Macintosh, which I don't. I suppose you could use a relational data base for this purpose. Does anyone know if the Macintosh is being used for this kind of application by stores? He needs to keep track of the inventory of books and miscellaneous other items from the sales counter.

DEACON MACCUBBIN ON 01/07

There is no suitable off-the-shelf inventory software for bookstores as yet. I know of one Omnis3+ developer that has been working on one for quite some time. He has at least one installation (in Denver) that was very pleased (but the last time I spoke with them was a year ago and they had been using it for less than a month). Frankly, I don't think Omnis is the way to go here. I'm the owner of Lambda Rising bookstores and we're developing a package under Fourth Dimension. BUT it will take us another two years before we'll have it all integrated and ready to offer to others. (That's not a function of 4D; it's because the book industry is so darn complicated!) We do use Macs throughout our business, though, and you're welcome to tell your friend to give us a call or come by and see our system. (The number is 462-6969; if I'm not there, have them ask for Paul Webb who runs ou r network.) There's no question in my mind that Macs are the ideal computer for bookstores, but there's still some development work that needs doing.

Desk Accessories

DAVID KREISBERG ON 12/31

Is there a version of Talking Moose that works with current (recent) systems? I keep getting a bomb w/ O2 as the ID.

ELIZABETH WIDGLEY ON 01/16

Where can I find information on the phonetic language used by the talking moose, and the program SpeechLab mentioned in the moose documentation?

ROBERT DOHERTY ON 01/19

The Macintalk Development Kit is available from APDA (Apple Programmer's and Development Association) for $2 (I think). It contains SpeechLab as well as an Exception editor, and some hardcopy on the use of the phonemes in Macintalk. There was a packed file on Genie which contained an early version of Macintalk, along with the rest of this stuff. (Genie is a commercial information service run by GE).

BRAD FLIPPIN ON 01/19

Could someone tell me what this "Moose" thing is all about? I see a lot of message traffic on it. Obviously it is some sort of DA. What does it do? Where do you get it?

PAUL CHERNOFF ON 01/20

Talking Moose is one of computerdom's best software efforts. In the middle of running a program, an animated moose will appear in the upper left corner and start saying the most inane things. Not MultiFinder compatible.

Desktop Publishing

SCOTT TILDEN ON 01/21

The different "sizes" for fonts, are related to the system file you use. The FOND resources have a lot to do with it—they control the font metrics-specification of spacing between characters. When you shift from system to system these may change depending upon whether or not you installed a proper font using the latest version of Font/DA mover. My suggestions:

First, if you're not sure you have the latest fonts, rip them suckers out of your system and reinstall them all off the best version you have—probably right off a laser font disk. Second, if you're serious about DTP and if you're working off a hard disk, DO get the screen versions of the variations of the fonts. If you install, say, only TIMES in the system, the Mac makes some mathematical transformations to display bold and italics. These are "pretty good" in terms of size. However, if the "real" screen versions are in the system, the Mac will use those and the screen resolution will be MUCH better and MUCH more accurate—much better WYSIWYG. Get the "real" screen fonts directly from Adobe—they have an unpublished special of (I think it's) $50 for a disk with all the screen versions of LaserWriter and LaserWriter Plus fonts. You can also get 'em from friends and service bureaus.

Finally, anyone serious about DTP should IMMEDIATELY

contd.

ante up to buy SUITCASE. It's wonderful. I rip every possible font out of the system using the FONT/DA mover (just highlight ALL the fonts and click delete; the Mac will beep and tell you which fonts it won't let you take away from it). Then, I put every font and screen version into two big nice inert little font packages that sit in a specially labeled folder in the system file. They are then automatically installed in the system every time I boot. It's great and there's no more unwieldy 1.2-meg system file.

Sorry—one more thing I remembered about using screen fonts. When you choose BOLD or ITAL once the screen fonts are loaded you don't need to choose the BOLD or ITALIC versions which (unfortunately) do show up on what ends up being a very long scrolling font menu. In fact, it is BETTER for you to use, say, plain TIMES and then highlight and use the menu or command-I to change to italics (command-shift-I). The Mac will use the real screen font but you don't have to hop around the menu finding all the different versions. (Also, some day you may want to open the file on a system that doesn't have the wide range of screen fonts available.)

Education and Entertainment

FERNANDO SALAZAR ON 01/11

Anyone working on ALTERNATE REALITY:The City? I've been playing on and off the past 1-2 months, my character is 6th level. My question is: when do things start happening? I've found all but 2 guilds, but I can't join any; a few say "Your (strength,intelligence, etc.) is too low to join", but most say they are not taking members. And as I recall the guilds that said they might accept members with high enough stats were evil guilds like the Assassins. I've been trying to keep my character (mostly) good, but the evidently more immediate rewards of evil are beginning to look tempting. Also, the manual mentions finding "treasures"—hordes of goodies—so where are they? Prices are so high for weapons, my character will be in his 90s before he can buy a short sword. Another instance where assaulting the citizenry of Xebec might be the best solution. The only part I have remaining to map is the Stellar Maze—there better be some treasure inside!! But all in all, I have to say I like the game. Not having to kill everything you meet is a nice change in a FRP game. I'd appreciate just knowing if the game changes SOMETIME. Or possibly, we have to wait for "The Dungeon"?

STEVEN PAYNE ON 01/14

Unfortunately, according to GameSIG Chairman Charles Don Hall, not much does happen in ALTERNATE REALITY:THE CITY. You don't even need it for ALTERNATE REALITY: THE DUNGEON, though you can transfer your characters. Give him a call at the number listed in the front of the Journal, or see his review of THE DUNGEON in the February issue.

Graphics & Design Software

ROBERT DOHERTY ON 01/21

I've noticed an anomaly in the color output from SP. As background, we have a Mac II connected to a HP7475A plotter using MacPlots II to drive the plotter. MacPlots II will accept PICT format files, so we tried saving an SP document, to which we had added colors, to a PICT file, and used MP II to dump this to our plotter. The colors really got screwed up, so we started hacking around in the PICT file output by SP. What we found was, that SP was recording the wrong color numbers, e.g., for red, it put out the code for magenta, for blue, the code for cyan, and for magenta, the code for blue. The code was correct for green, black, white and yellow, and cyan wasn't one of the choices on the SP color bar. Has anyone else seen anomalies in the SP color renditions?

BILL BALDRIDGE ON 01/22

I haven't the foggiest. I would tend to suspect SuperPaint is just attempting to use the analog equivalents for a color display, assuming most people would be just displaying and not printing the output...which is obviously in error in this case. The only suggestion I can make is to either contact Silicon Beach directly, and ask if there is a version of SP which outputs correctly to a color plotter (instead of a color display), or to export your SP document to a program where you can properly output it, or to rearrange the pens on your plotter to "adapt" to SuperPaint's non-standard. Seems you should at least inform Silicon Beach of your problem, so maybe they can put in a menu choice for output to a color plotter. There aren't too many programs out there which support color plotters directly.

Hard Disks

DAVID BELL ON 01/08

Now here is a general and perhaps difficult question(s). I have a 512Ke with two 800K drives. Oh, boy. I would like to upgrade memory and see about hard disk purchase. Something like 20 or 40 Meg. Any suggestions? And, I don't know what else I would need to do. Need I not a place to attach my hard disk? So, I believe, that I am going to HAVE TO get a memory upgrade (or something—a 'machine-change operation' to a Mac Plus') before I can get a hard drive. Ok, so where can I get upgrades? I have checked Clinton and with their 25% discount, things look ok. Anything I have forgotten that I should know?

DEACON MACCUBBIN ON 01/09

You'll need to get a SCSI port for your 512E. You can get the standard Mac+ upgrade (which also increases memory to 1 meg.) or you can get a third party upgrade and a third party SCSI port. There are lots of options, but I usually recommend Apple's (maybe I'm too paranoid but SOME third party stuff is unconventional and I never have the time to pick through all the information; I KNOW Apple's will work right.) For a hard disk, get a Jasmine. You'll have to order it direct from Jasmine, but their hardware is superb, very low cost and fully guaranteed for 1 year (and you can return it within 30 days for a full refund, no questions asked). I've got a total of eleven Jasmine hard disks now (one 80 meg., one 50 meg., the rest 20s) and have been very pleased with them. (You also get about 10 megs. worth of PD and shareware programs on each disk.) Jasmine's support has been excellent, too. If you're planning on running HyperCard and/or MultiFinder, you'll need to get even more than 1 meg. of RAM. Memory chips are in very short supply right now so you'll have to shop around to find some.

Hypercard

DAN HUGHES ON 01/08

I have created three buttons on my home card that launch applications via the "Talk to Me" stack, so the Mac says "Now

contd.

running 'name of program', Master." One of the button scripts is as follows:

```
on mouseup
set lockscreen to true
set cursor to 4
go to card id 50561 of stack "Talk to me"
click at 103,283 (Mac says it's running program)
open pl30:WriteNow:WriteNow
end mouseup
```

This works beautifully, but upon quitting WriteNow and returning to Home card, I lose my userlevel. It goes from 5 to 2! And I have to look at the "Talk to Me" card. My resume script on the Home stack is:

```
on resume
set lockscreen to true
set lockmessages to true
gethomeinfo
go home
end resume
```

I tried adding set userlevel to 5, but I am still put back into level 2! What's wrong here?

BILL BALDRIDGE ON 01/10
I'd check the script of either the Card or Stack (or Background, for that matter) of the Talk to Me stack. It probably resets user level somewhere.

JOHN VANBEEKUM ON 01/08
Once more, with feeling... Here are several items gleaned from Macintosh Today (issue 12/21):

• Pressing the Option and Tab keys will toggle the tear-off paint palette to appear on the screen in whatever position it was last moved to.

• Compacting in Hypercard does not do anything to the graphics, rather it rearranges the cards on disk for faster browsing. "A common practice is to add a doMenu Compact Stack to be executed as the user leaves the stack."

• Two undocumented commands that may help with a compacting script are "the diskspace" and "the stackspace". The first will generate a number that is the amount of space left on the disk in bytes. The second will generate a number that is the size of the current stack, also in bytes. If you wanted to be clever, you could have the stack compact only when there was a certain amount of disk space left, or at certain stack sizes. They add, "Thanks to Bill Atkinson for the tip."

BILL STEVENS ON 01/15
I fear that I've committed the unpardonable HC sin: I've set the stack protection of a stack to private access, no password, and userlevel to typing. The result is that there is no correct password, and (as far as I can tell) there is no way of resetting the private access flag so that I can get into the stack. I would very much appreciate any suggestions that could help me save my stack.

HOLGER SOMMER ON 01/11
Get a stack call Yam-something—it deprotects stacks. If it is not here I will upload it.

JESSICA WEISSMAN ON 01/16
Hypercard slows down drastically when you have a lot of buttons. I have a stack (an elementary math game) which is implemented using about 60 buttons. The first 50 represent the numbers from 1 to 50, and I implemented them as buttons ONLY because it is easy to mark the "taken" numbers by highlighting the corresponding button. What I need is either a way to speed up the performance with so many buttons active, OR a good way to have multiple squares which can fill and unfill easily. Filling is easy—just click inside the square with the paint tool. UNFILLING is a pain in the bazungie, because you can't refill with white paint. Does anyone have an idea? I could try multiple fields, but I think that slows down just as much as multiple buttons. By the way, is it more efficient to have the buttons on the card or on the background? I mean efficient in terms of execution time, since this is a one card stack and I don't save any design effort by putting the buttons in the background. Any tips on Hypercard efficiency would be appreciated.

BILL BALDRIDGE ON 01/15
If your squares are all the same size, you could make a square of the same size that's white and just paste it over top of the target square. If you're doing this in a script, you'll have to know the screen coordinates of each square, of course. And I don't think putting the buttons on the background will speed things up significantly.

JESSICA WEISSMAN ON 01/18
Thanks. I forgot about being able to paste a filled-white square. And I have an algorithm for finding the coordinates of the square from the ID of the number, though of course it runs slowly. I'll test to see whether keeping the coordinates in a field is better than using the algorithm and report the results here.

MICHAEL ASTOR ON 01/18
Does anyone know of a way to incorporate custom menu bars in HyperCard. I know that may sound like a strange request, but I am curious. I wrote a script to show a field (the menu choices) when the mouse button is pressed. But the only message that seems to get sent is a MouseStillDown, and MouseEnter and MouseLeave don't get sent to other buttons. Also, I am sure the question has come up before, but how can I add sounds to my Hypercard stacks?

BILL BALDRIDGE ON 01/19
There is a stack in the d/l area called MENU (something or other) which adds menu items on request. If you can't find it let me know, and I'll upload a fresh copy (but it should be there). And adding sounds can be done either one of two ways, via RESCOPY (in d/l area) or SOUNDMANAGER (also in d/l area). P.S. I also remember a stack (but forget the name) which will convert a sound to a resource. This is the final link between all the sound disks in the Mac disk library and HyperCard.

LLOYD SWIFT ON 01/21
I've had no trouble at all with the Plus speaker dialing the phone. I have, however, had a problem with using the phone dialer which came with hypercard (accessed from my address rolodex). When I click a number on the rolodex, that number is transferred to "telephone" which dials it through my modem. I have two problems:

contd.

THE FAST, EASY AND SMART WAY TO ORDER APPLE'S LATEST ADVANCEMENTS

Get the newest and hottest product intros . . . call Falcon Microsystems

Falcon Microsystems is an Apple® specialist. That's the reason we were selected for exclusive management of Apple's GSA Schedule C GS00K-87-AGS-6086.

It's why we travel in search of product introductions from Apple and third party suppliers. We've got the very latest productivity tools, like Apple's new LaserWriter® II series of printers. Apple's complete product line...and an array of peripheral equipment. Our volume and vast inventory assure prompt shipment of all components and software.

There's more. Total support for Apple computer solutions. A technical hotline... installation... training... on-site warranty and maintenance... plus consulting service – everything you need. All from a single source. Falcon Microsystems... your Apple specialist.

It's the newest, the fastest, the most powerful business computer Apple makes. And it's at Falcon Microsystems now. It's the new Macintosh II – with remarkable features inside and out. Starting with a microprocessor that runs at four times the speed of most other business computers. And six internal expansion slots that make it easier than ever before to customize solutions.

FALCON MICROSYSTEMS

1801 McCormick Drive
Landover, MD 20785-5326
(301) 341-0146

Apple Authorized Federal Government Reseller

Apple, the Apple logo and LaserWriter are registered trademarks of Apple Computer, Inc. Macintosh is a trademark of Apple Computer, Inc.

1. Sometimes, but not always, the modem doesn't transfer the call to my phone fast enough and the person called says "Hello", "Hello", "HELLO!" to the modem while I can't answer.

2. When I get a busy signal and decide to hang up my phone, the modem doesn't hang up and thirty seconds later redials whether I want it to or not. I haven't found anything in the telephone stack to change to get rid of these problems. Any help?

MICHAEL MAFFEO ON 01/24
Here's a script for anyone who has tried out the Hypercard developer's stack. There's a script in there to quickly get at your scripts to edit them (under the "script editing" listing of the "scripts" button). I found that it didn't quite go far enough, and something I think was even missing from it. It didn't quite work when I tried it, although I don't remember why right now. In any case, here's a script that will give you access to ALL scripts easily:

```
on mouseup
    if (first word of the name of the target) is "card" or
     (first word of the name of the target) is "bkgnd" then
if the optionKey is down then
if the shiftKey is down then
edit script of this stack
else
edit script of this background
end if
end if
if the shiftKey is down then
edit script of target
end if
end if
end mouseup
```

With this script placed in your home stack, clicking on the background will bring up the script to:

1) the card if you hold down the shift key
2) the background if you hold down the option key
3) the stack if you hold down both the shift and option keys

The script in the developer's stack won't let you get at the script to the stack. This one does. Any button you want to be able to edit quickly with this script installed, just put "if the shiftKey is down then pass mouseUp" as the second line of the button (right after "on mouseUp"). Then, clicking on the button while you hold down the shift key will bring up the script. You could do the same for a field which has a script.

By the way, does anyone know a way to change what hypercard puts into a new button when you open the script? It would be nice to have it put the line "if the shiftKey is down then pass mouseUp" in there, since I put it in just about every new button I make now. It already puts "on mouseUp" and "end mouseUp" in there for you, so there must be a way, although it may be too complicated to do with ResEdit or FEdit.

Other Hardware

STEPHEN STERN ON 01/23
Feb 88 MacWorld indicates many early 128K & 512K Macs had defective flyback transformers on the analog board. The symptom is a flickering and shimmering screen. (I got it). Is Apple offering free repairs? Is there any reputable shop that will just replace the flyback transformer, rather than the whole analog board? MacWorld indicates the defective flyback can be spotted as having a black suction cup attached to the right side of the monitor. However, if the suction cup is clear, trace the cable to its connector; if it is white you may also have a problem. Needless to say. DO NOT TOUCH THE SUCTION CUP OR WIRE, YOU MAY GET A 40,000 volt shock.

DAVID GURSKY ON 01/23
It could also be that the fuse for the transformer is loose. If you tighten the fuse holder, the problem ought to go away. (I know, I have the problem..)

Miscellaneous Programming

STEVE SCHNEIDER ON 01/22
I am now trying to self teach Assembly. I need just a wee bit 'o help! I bought Consulair's 68000 Development System (Formerly Apple's MDS complete with the official old apple manuals.) I am using Weston's "The Complete Book of MacIntosh Assembly Language Programming, Vol 1. I tried to do his initial simple program as follows:

```
(Comments)
Include Traps.D
_ExitToShell
```

When I assembled the program I get this error message:

```
"_ExitToShell
Multiply Defined label: (GobbledyGook)
```

Can anybody point me in the right direction? Can anybody suggest a book with a lot of real good, small, simple examples? Thanks.

RICH NORLING ON 01/23
Did you type "_ExitToShell" at the very beginning of the line as you did in your message here? If so, the assembler thought you meant it to be a label. Make sure you type a space or TAB before each assembler instruction. I usually press the TAB key twice to get the instructions indented far enough so the labels really show up. Most assemblers assume that anything starting at the very beginning of a line is meant to be a label.

THOMAS M WITTE,ON 01/11
How does one find the latest versions of programs? Do we keep a list on this board? Also my office is looking at Macs for the future. Given a long lead time (12-48 months) what does Apple offer for the future. Will it all be Mac IIs or will there still be little Macs? For info my office would have over 100 mixed units (IBM/Apple/etc) on a local area net. Any comment on hardware to be purchased now? i.e. SE vs + or II.

JOHN PAFF ON 01/12
For a list of latest software versions, try the latest (quarterly) issue of Macintosh Buyer's Guide. It provides a one or two page list of titles, mini reviews and latest version numbers. For hardware recommendations: I think it is safe to say that the "little " macs will be around for the 1-4 years you have delineated. I think the Mac II would be the best choice because of its flexibility—the six expansion slots will allow for maximum flexibility—both as to upgrade (68030) path and as to connectivity—i.e., Ethertalk or Novell type network cards. The "architecture" of the Mac II allows any expansion card to "own" the bus, so

contd.

whatever co-processor card that will become available can, in effect, become the "motherboard", or primary processor—with the old "motherboard" transformed into just another card in "slot 0". As a result, the II will be hard to "outdate". When a Motorola 78000 chip becomes available, you will be able to transform your II's into 78000 machines. Networking Apples and IBMs by means of ethertalk boards is an excellent way to go, but there are numerous other choices available to you. The best choice depends on the applications; what hardware you already have an investment in; the anticipated growth; and last, but not least, your budget.

Pascal Programming

BRAD FLIPPIN ON 01/26

I downloaded the resource compiler V1.1. The problem I have is that when I select command-R (open resource) it cannot open one. In fact, no resources of any kind are displayed in the scrolling region. Like some kind of filter is keeping them from being displayed. I have used the Tools 2.06 and that works fine. It give me decompiled Rez code, but I would like to get decompiled RMaker code.

CHARLES VASS ON 01/29

OK, this is what I've discovered about miniEdit. I've compiled it under both versions 1.0 and 1.11 of LSP with similar results. However, I found that if you type some text into the "A Sample" window that first appears, Cut it, then Paste it back everything works fine after that. Strange, to say the least, but it works. I called Think and the guy on the phone said he has heard of this problem before but has never traced it down. He said his first guess would be that there is a pointer or handle being referred to that doesn't exist. This may be a good project for the PIG to get into. As far as RDecompiler 1.1 is concerned, it will only see files of type 'APPL' (applications). The author did not allow for it to see .rsrc files. So, can use ResEdit or other type editor (FKEY Directory 1.51 comes to mind) to change the files type code to 'APPL' and RDecompiler will "see" it. Another trick is when you compile your resources with RMaker head it as follows:

MySample
????APPL

RDecompiler will see its file then.

Printers

LARRY STEDMAN ON 01/24

Is there a way of keeping the "resources, etc" associated with the print command in memory? I am often printing a page or two and find it a real nuisance to select print and wait while the system software loads it yet again from the disk. I also don't like the wear and tear on the disk. I am used to instantaneous response from other computers. (I'm printing in draft mode, this question does not refer to the MAC's creating a graphics page image before printing, but rather that large dialog box where you select print options and then click on print).

BILL BALDRIDGE ON 01/27

I'd say you have three options: 1) Get the full 4 meg upgrade, and then you can set up a 2 meg RAM disk and just dump your whole system folder into RAM and watch things fly; 2) Get a hard disk; 3) Get one of the "other computers."

JERRY OPPENHEIMER ON 01/20

I keep reading that this is definitely the year Apple will release the laptop Mac. Article in Tuesday's Science of the Times, the most current Infoworld, and Macintosh Today and in the rumor column of Feb. Macuser. And I just went out and bought a Zenith z181 (great display, fast etc.). But I'll snap up a Mac portable the day it arrives. Anyone for or against this rumor being true?

JOHN PAFF ON 01/23

There will definitely be a mac laptop—but when? that is the question. I have heard that there will be No NEW CPU's out/ available in 1988. I have read that the intro depends on finding a suitable screen i.e., sufficiently high resolution and sufficiently low power consumption. My guess is that Apple doesn't want to have an IBM-like "clamshell" fiasco on it's hands and so will bide it's time until it develops a superior product.

Software Misc.

CHARLES SICARD ON 01/29

MacIntax87 is finally being shipped. However, the 1040EZ form does not calculate the tax. We are told to wait another two weeks for the fix and form 2210 which was not included. Other than that it looks great, especially on a laser printer. MacMoney 3.0 is still not shipped and is due "any day now". You can use your present MacMoney version and 3.0 will open your data when it arrives. If you are planning to buy MacMoney do it now at the lower price and get the 3.0 up grade free.

BERNIE URBAN ON 01/27

Tom Gross has revised his tax template for the 1987 taxes. As last year, it is available as a Multiplan template or as an Excel template. The WAP price is $39 + tax (+$1 postage and handling for mail orders). According to InfoWorld it is a "value leader". David Morganstein will be reviewing it in the next Pi Journal. Suggested retail price is $49.95. The disk is called Tax Pro 88.

Tech Notes

JOHN PAFF ON 01/07

As Bill has pointed out, heat is the enemy of electronic components. Solder joints are affected and this has caused some problems particularly with the connections to the deflection yoke (the electromagnetic coil of wire that helps guide the beam to the screen. In the case of the Mac, the problem most typically appears to be a heat induced drying and subsequent breakdown of the insulation used in the high voltage transformer which provides the high voltage for the Mac's "picture tube". This empirical experience is supported by an article which appeared in Mac Tutor Magazine some time last year on the subject. The older Macs rely on convection (a chimney effect) for cooling. This was thought adequate by Apple. But the advent and use of more memory, internal and "hotplate" style drives shaped to fit underneath the Mac have added to the strain. Combine this with dust and the natural inclination of people to "temporarily" rest books or other objects on top of their Macs, thereby covering up the ventilation holes and you have a recipe for disaster. A fan or other "system saver" is probably the best investment you will ever make in your Mac.

contd.

Telecommunications

BRAD FLIPPIN ON 01/08

Question:I am using RR 10.3. I prepare a message as a text only file. I then get on the board and enter the message, give the title, get the "go ahead", bring up the command-Y selection screen, select the file, double click on it, and when it downloads into the BBS editor, half of it is lost. It ends up a mess.I know this works because I do it on the Ashton-Tate BBS and I get fine results. Anyone have any suggestions, because I don't like to waste phone time hand typing.

HOLGER SOMMER ON 01/08

Brad , here is a better way to get a textfile to any BBS : Since RR "pastes to the Modem" (look under edit) set your textfile transfer delay time (file item in menu bar) for each character to 2 (2/60 sec). This gives the TCS time to get the characters string organized. Select one of your favored editor DA's like MockWrite or 7Edit and pick cut the text from the file you prepared (copy leaves a copy for you of course). Go back to the RR window and PASTE it TO THE MODEM. Command-W brings back the editor window and you can copy another section. Caution.... the lines should be only 70 characters and all empty lines should have some non-printing characters like "space" or Tab—it works like a charm. BTW: it works the other way too—copy from the modem is my favored way to collect messages selectively. All my character graphics were done this way.

MICHAEL ASTOR ON 01/16

Does anyone out there have any advice to offer on hooking Mac SE's to a MicroVax II. We will have an ethernet backbone, and I am curious to know what hardware and software configuration seem to work the best. I am considering either Kinetics EtherPort SE's and pacers pcLink, or perhaps the AppleTalk gateway. And also, the Dove/CommUnity product.

BILL BALDRIDGE ON 01/17

You might check out AlisaTalk, also, from Alisa Systems of Pasadena, CA. It is an AppleTalk APPL running on Vaxen hosts. It should also work on the MicroVAX, as DEC's network topology is generic, one-size-fits-all.

Utilities

DAVID HARRIS ON 01/15

Having just had a bad disk scare, does anyone have recommendations for file recovery programs? I have heard of FEdit Plus, MacZap, and First Aid Kit (not to be confused with Apple's Disk First Aid). At the moment I am running floppies only on a Mac Plus. Comparisons please...

JOHN VANBEEKUM ON 01/15

Buy Copy II Mac (v.7.1) and Fedit Plus. Both of these utilities are inexpensive and come with excellent docs which guide you through their use and explain more than you want to know about the Mac file and systems. These are the two I use and know about. I'm sure the other programs are equally beneficial but someone else will have to fill you in.

RICHARD BROSNAHAN ON 01/16

I would NOT recommend Fedit Plus. The current version does not fully support HFS and the upgrade has been promised for 8 months now. I ordered the upgrade 6 months ago and did not get a status report until 4 months later and only then when I had The United States Postal Service intervene. I would recommend keeping my distance from Fedit, since support is worse than nonexistent. Copy II Mac is excellent, as far as I am concerned, by the way.

Word Processors

BOB MASSO ON 01/15

A friend wishes to find a German spell checker, or a spell checker with a German spelling dictionary. He currently uses MacWrite for WP. Does anyone out there know how he can lay his hands on something like this?

BILL QUALLS ON 01/23

I haven't read or heard about a German language spelling checker being offered by an American company. My guess is that your friend will have to find a source in Europe. I'd recommend three things: (1) look through one of those Macintosh Buyer's Guides that many bookstores carry; (2) contact Apple Computer for European source; and/or (3) contact Linguistics Software (106RHighland St., South Highland, MA 01982. Linguistics Software sells several foreign language word processors, and they might know of a source. I'm sure such a product exists.

The Mac Fed SIG

TIM MCGRAW ON 01/06

If you haven't already received it yet check out Government Computer News Jan. 8 issue with a spotlight section on Apple in Government, and particularly Page 41 with an article by our own SYSOP Jerry Walz. Nice job, Jerry, and a lot of good info. I guess when you have 5 Mbyte RAM available "a small amount of procurement law" is only relative. Now if you could boil down the FIRMR into a 32-page plain-English pamphlet, "What Every Federal IRM Director Should Know," we'd all be a lot better off! And right there, across from Jerry's article, is the ongoing Apple vs. IBM debate, Apple view by yours truly. I would only like to take this opportunity to point out that: 1) GCN prints nearly EVERY letter to the editor received. If you have any feelings, pro or con, about the section or the paper in general, please write. 2) GCN *FREELY* grants reprint rights to non-profit groups and government agencies. This means you can get a letter that will allow you to print/photocopy an article and distribute it to as many people as you like. GCN grants similar reprint rights to industry for a small fee ($40, I think). For more info call Cecilia or Laurie at 445-3495, and tell them Tim sent ya!

GS DISKETERIA NEWS

by David Todd

Stretch those software dollars by contributing to the Disketeria. Donate a disk and receive one in return. Imortalize your program creations in magnetic media and watch the Disketeria grow. Several WAP members have programs on this month's disks. If you pull a program off a BBS please try to download the source code if that is an option. We will accept them either way. Now that the GS has Startup sounds and custom System beeps (see disks below), we can take advantage of Mac sounds. You can donate Mac sounds to the GS library, however we already have access to the sounds currently in the Mac library.

Some of the programs in the Disketeria are shareware. This is a try before buy system. You're on your honor to send in the fee if you like the program enough to keep it. In doing so you will encourage authors to release other low cost products through this channel.

We have three new disks this month. The first contains many new DA's and utilities, the second and third contain sounds.

/WAP2013 Odd Bits II

(In the **/Desk.Accs** folder):

Punc.NDA—Puncture. Pierce a hole in your desktop screen. Source code in /Source.

Breathe—NDA for screen theatrics. Docs

CPU—CDA that allows you to save a custom control panel setting for each bootup disk. Source code in /Source. Docs

Grass.NDA—Grow grass on your desktop. Gardening for those of us who can vaguely remember the sun.

Area.Codes—CDA of all the area codes in the US.

Meltup—A modification of Meltdown NDA. Code in /Source.

Anaclock—Analog clock NDA. Has a habit of growing extra hands.

BGMusic—Background Music NDA. Loop through a digitized sound while at the desktop. Docs.

DPII.Help—A set of NDA help screens for Deluxe Paint II

(In the **/Games** folder):

Fourinarow—Try to get 4 colored circles in a row on an 8x8 grid. Docs

(In the **/Util** folder):

Macdown—Extract downloaded MacBinary files and decompress Packit format. Docs

Fontview (shareware)—Allows viewing of the font sets currently on your disk.

P8CDA (shareware)—Load in CDA's when booting under Prodos 8. Docs

Finder.Fixer—Analyze and edit the prefix path that finder searches for your application.

Desktopfix2—Allows you to change the background color of your desktop. Docs

Diversiscope (shareware $20)—Turns your MDIdeas digitizer into an oscilloscope.

Play—A command to add to APW to play sounds within the shell.

(In the **/Graphics** folder):

Cubination—Spinning, bouncing multicolored cube. Show it to your Amiga friends and deflate their bouncing ball.

Sgt.Pepper—Digitized Beatle cover. Ported over from another computer.

Cube.Pickup—Modular Paint bush for Deluxe Paint II or 816 paint.

(In the **/GS.Basic.Stuff** folder—requires GS BASIC):

Metro—Text game. You're a courier trying to navigate the DC Metro system. Watch out for those street punks.

MetroMap—SHR map of DC Metro system

Loan.stuff—Calculate loans. If I put $300 down on an 80 meg hard disk...

Print—GSBasic routine for output to the printer.

(In the **/Sysbeep** folder):

Sysbeep—An Initialization file that modifies your error beep to a digitized sound of your choosing. Docs.

SB.Configure—Lets you choose the playback speed of your systembeep.

Beep—A digitized sound. Other sounds in /Sounds folder.

(In the **/Startpic** folder):

StartPic—An Initialization file that shows a SHR picture while ProDOS 16 is booting. If you have more than one picture in your folder, a different picture will display the next time you boot. Docs

Shr.off—used to turn the SHR screen off if you are using a text screen based program selector.

Picture.A.—Bootup screen.

(In the **/StartupSound** folder):

StartSound.—An Initialization file that plays a digitized sound while ProDOS 16 is booting. If you have more than one sound in your folder, a different sound will play the next time you boot. Docs

SS.Configure—Use to set the playback speed of your startup sound(s).

Sound.A—A digitized greeting. Other sounds in /Sounds folder.

(In the **/Sounds** folder—descriptive titles followed by playback speed):

Boom.220
Doorbell.450
AYAAAH.220
MGM.Lion.200
Scotty.200
Scream.200

(In the **/SHRConvert** folder):

SHRConvert 2.0 (shareware $15)—This is the full working version. Several expanded features. Help screens and Finder Icons.

SHRCONV.Finder—Used to launch SHRConvert from Finder.

(In the **/Source** folder—for Pascal and Assembly programmers only):

Contains TML code for Analog clock, Breathe, Meltup, and Puncture. Assembly code for CPU and StartupPic.

contd. on pg 85

MAC DISKETERIA NEWS

by Martin Milrod & David Weikert

This month we are issuing 11 disks including one Fun and Games, one Sounds, one Paintings, one Fonts, one Desk Accessories, four StackWare and two Mac II series. This month's submissions are brought to you by Rick Chapman, Brook Grayson, William Jones, Bob Soule and Dave Weikert and the efforts of all the duplicators listed under the masthead. The folder information is parenthesized and, where appropriate, precedes the listing of program contents. Programs and files are printed in bold with shareware information printed in bold italic print.

Warning: Loose Disk Labels

Some of the disks produced in the last two months seem to be losing their labels, possibly due to a residue of mold release compound on the plastic disk case. Whatever the reason, you are cautioned to either remove the offending labels or tape them down before they get stuck in the disk drive of your Mac, and you get stuck with an expensive repair.

More StackWare and Mac II Disks

Brook Grayson, librarian of the HyperCard SIG, has released four more disks of StackWare. Rick Chapman has released three Mac II disks, two of which are available this month. All StackWare and Mac II disks are being issued in the 800K disk format. By the way, Brook could use some help in testing, assembling and annotating StackWare disks. You need to know HyperCard, have a knack for informative writing and be willing to dedicate about 15 to 25 hours per month. Call Brook at (703) 569-8255 in the evenings before 10:30 PM. We particularly need someone with an interest in games and somebody with a knowledge of and interest in chess, as there are a number of stacks in these categories.

Help Requested, Help Received

We are still receiving responses to our request for volunteers to help in testing, assembling and annotating the ImageWriter Fonts and LaserWriter Fonts series. We will list the volunteers next month.

Oops, We Goofed

The description for Disk 19.04: StackWare 4, inadvertently omitted from last month's article, is included herein for your information. The description is included on Disk 19.03, as there was no space on Disk 19.04, Monster Hunt, for either the program notes or the usual hidden INIT file that identifies the disk as being from Washington Apple Pi .

Mac Disk 143: Games XXVI
Black Wizard, Dungeons, & Utaan

Utaan Attack // A challenging shoot-em-up space game in which an endless number of enemy saucers, smart rockets, satellites, and Nova Cruisers attack your space ship in progressively more difficult patterns. Fire your laser with the mouse but, remember, three hits and you're dead! ***Shareware—$9.***

(MacD&D *f*) MacD&D Plus (V.0.6) This program is not a game, but rather a data base program designed to help you play Dungeons & Dragons. In the author's own words "This program was designed to help take the drudgery off the Dungeon Master (DM.) What it basically does is keep a simple data base of all the characters and NPCs, display what each character needs to roll on the 20-sided die to "hit" another character, allow the DM to adjust the hit points and Psionic points, and provide a die roller." **AD&D Data** is the data base file that can be opened with the MacD&D program. **About MacD&D** is a six-page MacWrite file containing illustrated directions for using the MacD&D program. ***Shareware—$10.***

(Black Wizard *f*) The Black Wizard This is an adventure game created with Silicon Beach's World Builder program. Containing only a dozen scenes, the game still managed to thwart all my efforts. I did get far enough to learn the value of the advice offered in the instructions Search often, and rest often! You start in a brick room that appears impossible to get out of, so here's a hint to get you started Use the "Open" command. **Wizard Instruct. (Text)** is a brief set of instructions in text form. Open the file by using your word processors "import" option.

Mac Disk 144: Sounds VI Still More Sounds

More sounds for your listening pleasure. Convert any of these to beep sounds with the **Beep.Init** on Disk 99 or 120. Make them into start up sounds with the **a SoundInit** on Disk 120 or the **SoundInit** on Disk 109. Play the sounds with **SoundPlay** on this disk or with **Super Play 4.0** or **SoundPlay.DA** on Disk 102.

Admiral, there be whales here! This would be a great start up sound to go with a startup screen from the Herman Melville novel, *Moby Dick.*

Correct! 1 It sounds exactly like you would expect the computer would say it.

Bring out your Dead The forlorn call during the black plague (or could this just be just for fun from Monty Python?).

Crash! Excuse the expletive at the end but this slow motion fall was just too good to pass up.

Computer! The computer says "Com-pu-ter!".

(Eddie Murphy *f*) BeepSound and **StartupSound** A short and a long version of an expletive free Eddie Murphy routine.

SoundPlay This player for digitized sounds doesn't take up much space.

Mac Disk 145: Paintings IX Mostly Clip Art

This disk contains a series of MacPaint compatible files, most of which are useable as clip art.

(Animals Clip Art *f*) Animals, Bear/Raccoon, Bulldog and **teddy1.**

(Art Sampler *f*) Text file **ReadMe;** paintings **discus thrower, man, Mt.Rushmore, peacock, tiger** and **Tower of Pisa.**

(Disney Clip Art *f*) Chipmunks, Disney Clip-art, Disney ClipArt #1, Donald&Daisy, Mickey and Minnie and **Mickey Mouse.**

contd.

(Statues *f*) Scanned images **Minuteman** and **Statue of Liberty**; either of these would make nice startup screens.

(**Utamaro Clip Art** *f*) has **UTAMARO Art-1, Art-2, Art-3, Art-4** and **Art-5**, classic Japanese drawings of women.

Mac Disk 146: Fonts XIII
Clairvaux and Bike Fonts

For you font lovers out there, here are three new fonts for your ImageWriter. Clairvaux is a high-quality typeface in a league with Beverly Hills, Boston II, and Palencia. The bike font is specially designed to help create bicycle cue sheets. Agua Mundo is a decorative font. The MacPaint screen shot shown below illustrates the general forms of the fonts on this disk, although their appearance is better when installed in your System and printed by the ImageWriter. To install the fonts in your System file, use Apple's Font/DA Mover program. Or, if you are using a program like Suitcase™ or Font/DA Juggler, simply copy the font suitcases into your System folder.

(**Agua Mundo Font** *f*) **Agua Mundo.font** The authors describe this one as a "casual, fun font". It's available in 12 and 14 points. **Agua Mundo.doc** contains three pages of MacWrite documentation. ***Shareware—$10.***

(**Bike Font** *f*) **Bike Font** (by Daniel C. Adkins, a member of the Washington Apple Pi). If you're a dedicated bicycle hobbyist who makes bicycle cue sheets or route descriptions, this is the font you've been waiting for. The option keys produce special route symbols, as shown in the sample above. Available here in 12 and 14 points, the "full implementation" is available as shareware. The font is also available in a LaserWriter/Postscript version. **Shareware ReadMe** is a two-page Word document that describes the Bike font. **Key Test** is a MacWrite document that shows the Bike font symbols. ***Shareware—$15 ($50 for Postscript version).***

(**Clairvaux** *f*) **Clairvaux 2.3** Described as the "ultimate ImageWriter font" by the author, it is probably a fair claim to say that Clairvaux is one of the four "superfonts" available for the Macintosh today—along with Beverly Hills, Boston II, and Palencia. (For comparison, users may want to check the other "superfonts" on Mac Disks 44, 97, and 113.) Available in sizes of 9, 10, 12, 14, 18, 20, 24, 28, 36, and 48 points, Clairvaux is a proportionately spaced, variable-width font with straight serifs and dense and angled letters. It blends elements from Palatino and Post Medieval Light and is designed to be both stylish and legible. Clairvaux includes many special characters, including mathematical symbols and fractions. Clairvaux Caps, which is available in 14, 18, 24, 28, 36, and 48 points, includes only capital letters and is designed for creating large initial letters to delineate sections of a document. **Docs.McWrt** is an excellent, 12-page MacWrite document that describes the Clairvaux font in words and pictures. The documentation includes diagrams showing the Clairvaux character set, background information about the font, a glossary of printing terms, and several general tips for good printing with the Macintosh. For proper spacing, install Clairvaux in your System before printing the manual. **Clairvaux Docs** is the same documentation in the form of a Word file. **Quick Introduction** is a Word document of instructions. ***Shareware—$10.***

Clairvaux-New York Available in 9, 10, 12, 14, 18, 20, & 24 points.

Agua Mundo 12 (12, 24 Points)

Bike 12 (12, 14 Points)
Bike Option Keys:

Clairvaux 12 (9, 10, 12, 14, 18, 20, 24, 28, 36, 48 Points)
Clairvaux Caps (14, 18, 24, 28, 36, 48 Points)

Mac Disk 2.11: DAs 11 Desk Accessories

WAP disks 2.01 - 2.10 collected and collated desk accessories from earlier WAP disks. Now that series continues with additional desk accessories and related applications, new or revised.

(**DA Utility** *f*) **DA Utility** A small program by which desk accessories may be renumbered and renamed. Useful, for instance, to renumber an application's private desk accessories.

(**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.

(**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.***

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.***

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.***

(Draw *f*) **Draw 2.5** A very Mac-like drawing program as a desk accessory. ***Shareware—$30.***

Mac Disk 19.04: StackWare 4 Monster Hunt

Monster Hunt You are a great game hunter in search of a mythical monster... Sound familiar? **But wait**—wonderful graphics, no guessing the limited but idiosyncratic vocabulary of the computer, a game where you smoothly move from scene to scene as if you were there. This is *not* the adventure game I've grown to love and hate. It is a lovely game. So far I have been killed twice, but then I've just started. Be there or be square!! ***Shareware—$10.***

Mac Disk 19.05: StackWare 5 For Children

These stacks have been written for small children and suit the purpose well. However, the first two offerings are for everyone. I can't decide if they are picture stories or adventure games for

contd.

children. Both contain wonderful graphics and animation.

Inigo Gets Out Follow the adventures and misadventures of a fluffy black cat on a day in the great outdoors. See if you can get her home again. **Your Faithful Camel** Let your faithful camel lead you through the hot, scorching desert to find the treasure of the Pharo's. Please send in your $5 so we can get the next installment, "To the North Pole". ***Shareware—$5.***

Funnin' Bill Just click on his head, it's fun!

Flash/V1.2 FlashCards is a series of lessons designed to teach your child to read. The first two lessons are included. A card with a word printed on it is flashed on the screen. If you have MacinTalk in your system folder the Mac will say the word. The next seven lessons expand into sentences and the alphabet. To get the full version send $10.

(Easy Addition *f*) The child is presented with an equation, answer box and a clowns face. Type an answer in the box and click the clown's nose. For a correct answer you get music and a new equation. If the answer is wrong the clown makes a 'boing' sound, the correct answer flashes on the screen. Try again. ***Shareware—$5.***

Mac Disk 19.06: StackWare 6
Monty Python's Flying Stack

Monty 1, Monty 2 and Monty 3 The three stacks on this disk contain many memorable sound clips from Monty Python's Flying Circus. Who can forget such show stoppers as "Bring out your dead" and "Nobody expects the Spanish Inquisition". Each stack consists of 10 sound (snd) resources which can be copied into other stacks using ResEdit, Sound Mover or Sound Manager. Play the clips either by clicking the buttons on the first card or on the keyboard where you can vary the speed of playback. All the author wants in return is a picture postcard of your home town.

Mac Disk 19.07: StackWare 7
Tutorials for Applications

Two examples of StackWare support for other Mac applications are included on this disk. The GraphicWorks stack is an abbreviated tutorial which introduces the basic concepts of the package and gives a taste of the art that can be produced. The Adobe Illustrator example is a cross indexed glossary introducing the software and basic tools. These stacks are most useful for previewing the software or for the new user.

GraphicWorks 1.1 This is a quick guided tour of the software. You are led by the hand (literally) through manipulation a GraphicWorks document. It also contains lists of features, compatible applications and a brief note on postscript and scanners. The example graphics are lovely.

(AI Guide *f*) AI Guide Stack, AI Stack Notes The stack is entitled *Adobe Illustrator Quick Reference Guide*. Access the information through a subject index or an example of the drawing window. Brief explanations are provided for the basic tools and techniques.

Mac Disk 19.08: StackWare 8 The AIDS Stacks

On this disk are two stacks on Acquired Immune Deficiency Syndrome (AIDS). AIDS is a disease that came to the American public's attention in the early 1980s. It is a deadly and frightening disease. For that reason detailed, clear information on the subject is needed. **The AIDS Stack** is a rich fund of information, professionally presented. The opening graphics are impressive as are those in the **AIDS Clock.** The index is divided into basic information, common questions, an extensive glossary, AIDS related symptoms, organizations to contact by state and various statistics. The discussion on spread and prevention of the disease avoids both euphemism and sensationalism. This is the first stack that I have seen that coherently shows the power of HyperCard as an information medium. I'm sure it won't be the last. ***Shareware—$20 donation to Being Alive.***

Mac II Disk 20.06: Color

This disk contains some nice programs for exercising all those color pixels on your Mac II. HyperCard programmers with a Mac II will want to look at the Color stack, while solitaire addicts will like Color Canfield. This disk even include five color fonts. The disk is filled out with five useless but fun color image generators and a couple of Grayview pictures.

Color is a stack containing an External Command (XCMD) for HyperCard. XCMDs are extensions to HyperCard's built-in programming language. **Color** will allow you to control the foreground and background colors of HyperCard. Though **Color** doesn't give you full control of the color capabilities of the Mac II, it does give you the ability to use color until HyperCard is upgraded to support it. There are limits to what you can do, but then you didn't have any color in HyperCard before.

Color Canfield A colorized version of the popular solitaire card game. A fine example of the not so old adage Colorize software, not movies!

(Colorfonts *f*) Colorfonts This file contains 5 new color fonts for the Mac II, including Patriot 34, Embossed 32, Shades 31, Zebra 33 and Vice 36. Few programs handle these fonts correctly at this point and there is no apparent way of printing these fonts, but they do look nice on the screen. **Colorfonts Doc** Documentation on the installation and use of color fonts.

(Color Fluff *f*) This folder contains five nearly useless programs which are still fun to watch and play with. **Random Art** A simple program that can create random abstract "art" on the screen. This program will run on a Mac Plus, but can make use of the gray scales available on the Mac II. Now if I get the Hirshorn interested in some of these pictures. **Worms** Creates color worms that will crawl around on the screen. This program will also run on the Mac Plus, but the worms are in full color on the Mac II. Continues to work in the background under MultiFinder! **Spectra, Color Bounce** and **Rainbow** Three programs that create striking color designs on the Mac II screen.

(Grayview Pics *f*) As an extra bonus we have thrown in two Grayview pictures called **Mac II** and **Bloom** (as in Bloom County). Use Grayview on Mac Disk 20.02 or Image .35 on Mac Disk 20.08 (a future release) to view these pictures.

Mac II Disk 20.07: Graphics 3

This disk contains yet more Mac II graphics programs. Giffer has been updated to fix a few bugs. Pixel Paint Viewer will read and display the files created by a popular new Mac II paint application. Guess which one. Finally DGIFConvertor is not really a Mac II application, but will allow Mac II owners to share your artwork with other Mac owners.

(Giffer 1.0 *f*) Giffer 1.0 This is an update of the program

contd.

appearing on Mac Disk 20.01. Giffer is a program that allows you to display and modify GIF, ThunderScan and Quantized Digiview image files on the Mac II. GIF is a general machine-independent graphics format that is popular on CompuServe. The program is easy to use and works well with MultiFinder. Editing features include contrast and brightness changes, image scaling, and individual scan line shifting (a useful feature when cleaning up ThunderScan images. Be sure to set your system to display multiple bits (16 or 256 as appropriate) before using this program (use the monitor function in the control panel). **Giffer 1.0 Docs** is the documentation for Giffer 1.0. ***Shareware—$20.***

(PixelPaint Viewer *f*) PixelPaint Viewer A program to display pictures created by Pixel Paint, a commercially available painting program designed specifically for the Mac II. **PixelPaint Viewer.p** is the Pascal source code for Pixel Paint Viewer. **Colored Opus, Final Froggy, Goblet** are three Pixel Paint pictures.

(GIF Convertor *f*) DGIFConvertor Version 0.9d2. GIF Converter is a utility program for Macintosh computers which allows you to convert between various graphics formats, especially Compuserve's Graphics Interchange Standard or GIF for short. You may use GIFConverter to view and save graphics images in GIF, MacPaint, Thunderscan, or PICT format. The program will convert a grayscale picture into a standard MacPaint picture using the Floyd and Steinberg dithering algorithm. This program works on any Mac with a 128K ROM, but is included here to enable Mac II owners to create images that are useable by other Mac owners. Images may be printed in color, even if you don't have a Mac II. **GIFConvertor Doc** is the documentation for DGIFConvertor.

GS Disketeria News contd. from pg 81

/WAP2014 SOUNDS I

Contains digitized sounds that may be used with Startup Sound and Sysbeep.

Sound Studio—This is a playback program for Binary sounds. It will play the sounds that Jukebox (on /Wap2008) will not.

Type.Changer—Changes a file's type. If you don't have Jukebox you may use this as a workaround to change text sound files into bin files that will play on Sound Studio.

(In the **/Sounds** folder):

/Startrek—Sounds contains 16 trek sounds.

/Beep—Contains 16 beeps.

Welcome.to.the.Machine.200
Hal.450
Stooge.220
Klaxon.220
Appleboy.220
Alfred.220
Honk.600
Tiger.286
Hiccup.600
Whump.600

/WAP2015 Sounds II Nostalgia

This disk will also be available at the Feb meeting. Famous one-liners from old movies and TV shows. A full description will appear in next month's Journal. Sorry about that chief.

INDEX TO ADVERTISERS

Ad Center 43
AppleFest 14, 15
Clinton Computer 1
Computer Age 53
Computer Den Ltd. 29
Computer Ware Unlimited 63
Falcon Microsystems 77
Family Computer Center ..... Inside Front
Gimeor, Inc 45
Highlighted Data, Inc 55
Landmark Computer Laboratories 17
MacCorner ..... Insert, Back Cover
MacTemps 65
MacTography 57
MacSource 47
Master Copy Inc 65
Nexo Distribution 13
Operant Systems 23
PC Resources 65
PLS Inc 10
Publishers Service Bureau 55
Satellite Scientific 9
Software Ventures ..... Inside Back
Technical Sales & Service 46
Tempest Products Inc 2
VF Associates 11

INDEX TO AUTHORS

Adkins, Dan 49
Barnes, Alexander 30
Begleiter, Ralph J 50
Brouwer, Dave 38
Cave, Katherine M 9
Feldman, Larry 63
Field, Bruce F 12
Geer Jr, Charles R 67
Golden, Robert 28
Hasson, Joseph A 40
Hole, Bill 54
Hughes, Dan 74
Hutchinson, Reid 39
Koskos, Paul 9
Mason, Brian G 26
Meyer, Ted 16, 18, 20
Milrod, Martin 67, 69, 82
Morganstein, David ...45, 58, 64
Oringel, Bob 10
Ottalini, David 34, 35
Payne, Steven 38
Platt, Robert 12, 19, 47, 73
Schwartz, Dana J 37
Shapiro, Phil 29
Thompson, Andrew D 48
Todd, David 81
Trusal, Lynn R 60
Warrick, Tom 4
Weikert, Dave 82
Weissman, Jessica 66
Wolov, Robb 56, 70
Yockey, Cynthia 46, 49
Youell, Adrien & Siew 71

WASHINGTON APPLE PI, LTD.

8227 Woodmont Avenue, Suite 201
Bethesda, MD 20814

Membership Application Form

Membership dues in Washington Apple Pi are $32.00 for the first year and $25.00 per year thereafter (regular U.S.), beginning in the month joined. Applicants are asked to fill in the following form as completely as possible. Information gained here will help the club serve you better. Please be sure to check the appropriate box concerning release of your name and information through the membership directory. You may elect to have your Journal sent by First Class mail instead of the usual bulk mail by checking the appropriate box and enclosing the additional postage.

NAME _____

ADDRESS _____

CITY, STATE, ZIPCODE _____

TELEPHONE NOs. (Include Area Code): HOME ( ) _____ WORK ( ) _____

WHAT TYPE OF COMPUTER DO YOU OWN OR USE REGULARLY? (Check all that apply.)

☐ Apple][	☐ Apple][+	☐ Apple //e	☐ Apple //c
☐ Apple IIGS	☐ Apple ///	☐ Other Apple II	
☐ Macintosh 128K	☐ Macintosh 512K	☐ Macintosh 512K enhanced	
☐ Macintosh Plus	☐ Macintosh SE	☐ Macintosh II	☐ Mac XL/Lisa
☐ Other Macintosh	☐ Basis	☐ Franklin	☐ Laser 128
☐ IBM-PC or Compatible	☐ Any Laptop		

Other Computer _____

Which type of New Member Kit would you like to receive (check only one)? ☐ Apple II ☐ Macintosh

OCCUPATION _____

Please check one. ☐ I DO ☐ I DO NOT AUTHORIZE THE RELEASE OF MY NAME, CITY, ZIP CODE AND TELEPHONE TO OTHER MEMBERS through the Membership Directory. NOTE: Club policy prohibits releasing a member's name and information unless you release it by checking the appropriate area above. If you do not release your name and phone number, you will not receive a copy of the Directory.

If you DO NOT wish to receive occasional "selected" commercial material, check here ☐. (Note: WAP does not release its membership list. These mailings are done by WAP at a fee to the mailer.)

SIGNATURE _____ DATE _____

PLEASE ENCLOSE PAYMENT (CHECK OR MONEY ORDER MADE PAYABLE TO WASHINGTON APPLE PI, LTD.)
Payment **must** be in U.S. dollars, payable on a **U.S. bank.**
First Class requests and Foreign applicants should add the following additional postage.

☐ First Class	$ 15.00
☐ Canada, Central America, W. Indies, Mexico, Colombia, Venezuela	$ 16.00
☐ Air to Europe & other S. American countries	$ 33.00
☐ Air to Asia and elesewhere	$ 43.00
☐ Surface Mail to Europe, Asia and elsewhere ..	$ 14.00

MAIL TO:
Washington Apple Pi, Ltd.
Attn. Membership
8227 Woodmont Avenue, Ste 201
Bethesda, MD 20814
Please allow 2-3 weeks for processing.

Membership Fee:	
Family or Individual	$ 32.00
Full-time Student*	$ 25.00
Additional postage, if any	$ _____
Annual fee for electronic bulletin board (TCS), if desired	$ 6.00
Circle appropriate figures for Total Enclosed	$ _____

WASHINGTON APPLE PI DISKETERIA MAIL ORDER FORM

This form is only for ordering disks that you want mailed to you.
5 1/4" Diskettes: - Members $ 5.00 each; Non-members $ 8.00 each, Plus $1.00 each postage up to a maximum of $ 5.00.
3 1/2" Diskettes (IIgs & Mac): - Members $ 5.00 each; Non-members $ 8.00 each, Plus $1.00 each postage up to a maximum of $ 5.00.
A $1.00 per disk discount on the above prices is offered for orders of 5 or more disks. Postage remains as above.

DOS 3.3 Volumes

( ) 41 IAC 25 Mach. Lang. Util.
( ) 42 One Key DOS
( ) 43 IAC 29 Utilities H
( ) 44 Utilities I
( ) 45 Diversi-Copy
( ) 46 French Vocab. Tutorial
( ) 47 Tic-Tac-Toe in French
( ) 48 Boot for l'Hote
( ) 49 l'Hote Story
( ) 50 l'Hote Quiz
( ) 51 French Poetry Tutorial
( ) 52 Apollinaire Biography
( ) 53 Albert Camus Interview
( ) 54 Tic-Tac-Toe in Spanish
( ) 55 Rafel-Boot
( ) 56 Rafel
( ) 57 Rafel Quiz
( ) 58 Matute
( ) 59 Lo Fatal
( ) 70 Business/Math/Statistics
( ) 71 Music
( ) 72 Keyboard Games
( ) 73 Text Adventure Games
( ) 74 Paddle Games
( ) 75 Color Graphics for Fun
( ) 76 Education
( ) 77 Utilities
( ) 90 Spreadsheet C Genl. Bus.
( ) 91 Spreadsheet D Investment
( ) 92 Spreadsheet E Bus. Recd.
( ) 93 VisiPlot & VisiTrend
( ) 95 Spreadsheet F-Coin Coll.
( ) 100 Utilities A
( ) 101 Utilities B
( ) 102 Games A
( ) 104 Business A
( ) 106 Science Engineering
( ) 107 Games B
( ) 108 IAC 10 (Graphics)
( ) 109 IAC 11 (Applesoft Tutrl.)
( ) 110 Personal/Education
( ) 111 Games C
( ) 112 Utilities C
( ) 113 Business B
( ) 115 IAC 12/13 Misc.
( ) 117 Picture Packer
( ) 118 Utilities D
( ) 119 IAC 15 Misc.
( ) 120 IAC 16 Misc.
( ) 122 IAC 17 Misc.
( ) 123 French Vocabulary
( ) 124 Utilities E
( ) 125 IAC 18 Misc.
( ) 126 Sights and Sounds
( ) 127 Math/Science
( ) 128 Games D
( ) 130 Diversi-DOS (rev.)
( ) 131 Personal/Educ. 2
( ) 132 IAC 19 - Utilities F
( ) 133 IAC 20 - Pascal & DOS3.3
( ) 137 IAC 21 Spreadsheet A
( ) 138 IAC 23 Utilities G
( ) 139 IAC 24 Education 3
( ) 140 Education 4
( ) 141 Special Data Bases
( ) 142 IAC 28 Pinball Games
( ) 143 Sports
( ) 144 IAC 27 Applesoft Prog.
( ) 145-147)3 disks)Ap.Logo Util.
( ) 150 EDSIG1 (Elem. Math)
( ) 152 IAC 31 Miscellaneous
( ) 153 Investments A

DOS 3.3 contd.

( ) 154 Investments B
( ) 155 IAC 33 Miscellaneous
( ) 156 IAC 35 Applesoft-AW//e
( ) 157 IAC 36 Arcade Games
( ) 158 Apple Logo Programs
( ) 159 Recipe Files
( ) 160 Utilities & Games
( ) 161 Wizard Worker
( ) 162 Games E
( ) 163 Graphs and Displays
( ) 164 Games F
( ) 165 Happy Holidays
( ) 166 Charts and Graphs
( ) 167 IAC 40 - Pilot Lang.
( ) 168 IAC 41&47 - AW Util.
( ) 169 Hayes Term. Prog.
( ) 170 Love's Follies (Utilities)
( ) 171 Cat-Graphix
( ) 172 Print Shop Graphics
( ) 173 Riley's Pers. Instrum.
( ) 174 Imageworks
( ) 175 No Name Yet
( ) 500 Master Catalog Listing
( ) 501 Util.-Beginner's Choice
( ) 502 Util.-Intermediate User
( ) 503 DComm
( ) 504 Database - LOGIC
( ) 505 Reading Fun
( ) 506 Astronomy Programs
( ) 507 Griffith Observatory

Eamon Series Volumes

( ) 180 Dungeon Designer
( ) 181 Beginners Cave
( ) * 182 Lair of Minotaur
( ) * 183 Cave of the Mind
( ) * 184 Zyphur Riverventure
( ) * 185 Castle of Doom
( ) * 186 Death Star
( ) * 187 Devil's Tomb
( ) * 188 Caves of Treas.Isl.
( ) * 189 Furioso
( ) * 190 The Magic Kingdom
( ) * 191 The Tomb of Molinar
( ) * 192 Lost Isl. of Apple
( ) * 193 Abductor's Quarters
( ) * 194 Quest for Trezore
( ) * 195 Underground City
( ) * 196 Merlin's Castle
( ) * 197 Horgrath Castle
( ) * 198 Deathtrap
( ) * 199 The Black Death

Note: Eamon disks 200-229 are also available. See previous month's order form.

ProDOS Volumes

( ) 802 Utilities (A)
( ) 803 Filecabinet
( ) 804 Shareware
( ) 806 ZAP
( ) 807 Imageworks
( ) 808 Comm-Term
( ) 809 '86 Tax Tmplate-AW
( ) 810 Haunted House
( ) 811 Adventures Disk
( ) 812 Toddlers and Kids
( ) 813 TAWUG-1
( ) 814 TAWUG-2
( ) 815 TAWUG-3
( ) 816 TAWUG-4
( ) 817 Telecom
( ) 818 1987 AW Tax Template, (Shareware)

Pascal Volumes (See also 133)

( ) 300 PIG0:ATTCH 1.1/BIOS
( ) 301 PIG1: ( )302 PIG2:
( ) 303 PIG3: ( )304 PIG4:
( ) 305 PIG5: ( )306 PIG6:
( ) 307 PIG7: ( )308 PIG8:
( ) 309 PIG9 ( )310 PIG10:
( ) 311 PIG11: ( )312 PIG12:
( ) 313 PIG13: ( )314 PIG14:

CP/M Volumes

( ) 401 Master Catalog
( ) 402 Utilities 1
( ) 403 Communications
( ) 404 Utilities 2
( ) 405 Utilities 3
( ) 406 ZCPR2 Install
( ) 407 ZCPR2 Documentation
( ) 408 ZCPR2 Utilities
( ) 409 Modem 730
( ) 410 Essential Utilities
( ) 411 Text Editor
( ) 412 Spreadsheet
( ) 413 MDM740(SSC&Com)
( ) 414 MDM740(7710&A-Cat)
( ) 415 Orig. 350 Pt.Adventure
( ) 416 Kermit Source Code
( ) 417 Kermit Documentation
( ) 418 Kermit Running Code
( ) 419 Util.-Z83,REZ,VDE
( ) 420 Small "C" Compiler

Apple /// Volumes

( ) 1001 Games Volumes 1 & 2
( ) 1002 Basic Utility Vol. 1
( ) 1003 Basic Utility Vol. 2
( ) 1004 Sys. Utils & Data
( ) 1005 New Member Disk
( ) 1006 Word Proc. & WPL
( ) 1007 Games for Kids
( ) 1008 The Best of MAUG
( ) 1009 The Best of the Source
( ) 1010 The Best of TAU
( ) 1011 D3. Backup
( ) 1012 Sketchpad&Slideshow

Apple IIGS Volumes @ $5

( ) 2001 Utilities & Pictures A
( ) 2002 Demo Disk A
( ) 2003 Freeterm
( ) 2004 Slide Show I
( ) 2005 Demo Source Code 1
( ) 2006 Demo Source Code 2
( ) 2007 M18 Courses
( ) 2008 Odd Bits I
( ) 2009 GS Fonts I
( ) 2010 GS Fonts II
( ) 2011 GS Fonts III
( ) 2013 Odd Bits II
( ) 2014 Sounds I
( ) 2015 Sounds II Nostalgia
( ) IIgs Systems Disk

Macintosh Disks @$5

( ) 17.3a Red Ryder 9.2
( ) 17.2b Red Ryder Doc.
( ) 31.1 Dun.Doom/Eliza Talks
( ) 32 Fun & Games II
( ) 35 Fun & Games III
( ) 40 Mac Videos
( ) 41 Cap'n Magneto
( ) 42 Studio Session (512K)
( ) 44 Boston II Fonts
( ) 45 Games IV
( ) 46 Games V
( ) 47 Fonts IV

Macintosh @$5 contd.

( ) 48.3 Fonts V
( ) 50 Paintings III
( ) 51.2 Telecom II (no sys)
( ) 54 Games VI
( ) 55 Games VII
( ) 56 Games VIII
( ) 57.1 New Memb. Disk 86
( ) 59.1 CE Sampler II
( ) 74 Fun & Games IX
( ) 75 Fun & Games X
( ) 76 Fun & Games XI
( ) 77 Fun & Games XII
( ) 78 Fun & Games XIII
( ) 79 Fun & Games XIV
( ) 80 Fun & Games XV
( ) 83 Telecom III
( ) 84 Fun & Games XVI
( ) 85 Fun & Games XVII
( ) 89 Fun & Games XVIII
( ) 91 Fun & Games XIX
( ) 92 Education II
( ) 93A & ( ) 93B Fonts VI
( ) 94 Paintings IV
( ) 95 Fun & Games XX
( ) 96 Fun & Games XXI
( ) 97 Fonts VII
( ) 99 Inits I
( ) 100 Fonts VIII
( ) 101 Fonts IX
( ) 102 Sounds I
( ) 104 Fun & Games XXII
( ) 105 Fun & Games XXIII
( ) 106 Fun & Games XXIV
( ) 108 Fun & Games XXV
( ) 109 Sounds II
( ) 110 Fonts XI
( ) 111 Sounds III
( ) 113 Fonts XII
( ) 115 Telecom IV
( ) 116 DAs XII
( ) 118 Paintings V
( ) 120 Inits II
( ) 123 Graphics II
( ) 124 Paintings VI
( ) 125 Sounds IV
( ) 127 Paintings VII
( ) 128 Fun & Games XXVI
( ) 129 Telecom V
( ) 131 Sounds V PeeWee+.
( ) 134 Fun & Games XXV
( ) 135 Paintings VII
( ) 138 Utilities XXV
( ) 139 Utilities XXVI
( ) 140 Utilities XXVII
( ) 141 Utilities XXVIII
( ) 142 Utilities XXIX
( ) 143 Games XXVI
( ) 144 Sounds VI
( ) 145 Paintings IX Clip Art
( ) 146 Fonts XIII

DAs Series: (10-disk set $35) *

( ) 2.01 ( ) 2.02 ( ) 2.03
( ) 2.04 ( ) 2.05 ( ) 2.06
( ) 2.07 ( ) 2.08 ( ) 2.09
( ) 2.10
( ) 2.11 DAs 11 (not a part of series price)

FKeys Series:

( ) 4.1 ( ) 4.2

Util. Series (9-disk set $31.50) *

( ) 16.01 ( ) 16.02 ( ) 16.03
( ) 16.04 ( ) 16.05 ( ) 16.06
( ) 16.07 ( ) 16.08 ( ) 16.09

Note: Mac Disks are contd. on next page.

*Vol. 181 required with these disks.

Date: _____

Note: Allow 2-3 weeks for mailing. Total Order = ____ Disks; Postage $_____; Total Amount Enclosed $_____.

NAME: _____

ADDRESS: _____

CITY, STATE, ZIP _____

Make check (U.S. funds on a U.S. bank.) payable & send to:

Washington Apple Pi, Ltd. Telephone _____
Attn. Disketeria
8227 Woodmont Avenue, Suite 201
Bethesda, MD 20814

WAP Membership No. _____

Macintosh Disks contd.
HyperCard StackWare:
( ) 19.01 (aka 136) Utilities
( ) 19.02 (aka 137) Clip Art
( ) 19.03 Applications
( ) 19.04 Monster Hunt
( ) 19.05 Stackware for Children
( ) 19.06 Monty Python
( ) 19.07 Tutorials for Applns.
( ) 19.08 The AIDS Stack
New System 4.2 and Finder 6.0
( ) Set of 4 disks
Mac II (800K):
( ) 20.01 Graphics I
( ) 20.02 GrayView & DAs
( ) 20.03 Miscellaneous
( ) 20.04 Graphics II
( ) 20.05A Ray Trace Programs
( ) 20.05B Ray Trace Source
( ) 20.06 Color
( ) 20.07 Graphics 3

* Series disks are regular Mac price when purchased individually.

See page 87 for disk ordering information.

WAP TUTORIAL REGISTRATION

Apple II: The following three WAP tutorials are being offered to **Apple II** owners on the first three Tuesday evenings of the month from 7:30 to 9:00 PM, at the office, 8227 Woodmont Ave., Bethesda, MD. We are experimenting with alternating the sessions between Apple IIgs and other Apple II. (The tutorials start promptly at 7:30; if you bring your computer please arrive 15 minutes early to set up.) You may sign up for any or all of the series. They are designed for the "beginner" and will be repeated monthly. The fee for each **session is $10.** You are urged to bring an Apple, monitor and disk drive. (Monitors are available for the 1st 5 registrants - call office.) 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.

( ) March 1 ( ][, //e, //c specific)	- **WELCOME TO THE WORLD OF APPLE**	( ) April 5 (IIgs specific)
( ) March 8 ( ][, //e, //c specific)	- **HOW TO USE YOUR APPLE SOFTWARE**	( ) April 12 (IIgs specific)
( ) March 15 ( ][, //e, //c specific)	- **POPULAR APPLICATIONS: APPLEWORKS**	( ) April 19 (IIgs specific)

Macintosh: Tutorials for the beginners are regularly given on the 2nd, 3rd and 4th Monday evenings of the month at the office, from 7:15 - 10 PM. The fee for each **session is $10.** You may sign up for 1, 2, or all 3 sessions. You are strongly urged to bring your Macintosh—WAP does not have equipment for you to use. These tutorials fill up quickly - call the office to verify space before mailing in your registration. (**Note:** March tutorials are full.)

( ) Monday, April 11 or ( ) May 9 - Introduction to Macintosh. Prerequisite: Guided Tour to Macintosh.
( ) Monday, April 18 or ( ) May 16 - Intermediate Mac Skills. Prerequisite: Familiarity with Desktop, disk copying, etc.
( ) Monday, April 25 or ( ) May 23 - Personalizing Your Mac for Productivity. Prerequisite: First two sessions or equivalent.

Non-Regular Tutorials: The following tutorials are being offered in the next few months. The fee for these tutorials is $15 ($20 for non-members). A more detailed description is given elsewhere in this publication or was given in a previous month.

( ) **Introduction to HyperTalk - Holger Sommer - Saturday, March 5, 9-12 am, Office.** Fee $15 ($20). Prerequisite: Familiarity with browsing, painting, cutting and pasting buttons. Bring Mac, hard disk, HyperCard, blank disks.
( ) **HyperTalk: Advance Problem Solving - Rick Chapman - Saturday, March 12, 9-12 am, Office.** Fee $15 ($20). Prerequisite: Introduction to HyperTalk. Examples commonly encountered in HyperTalk applications. Bring Mac, hard disk, HyperCard, blank disks.
( ) **Introduction to Word 3.01 - Arthur Spitzer - Wednesday, March 16, 7:30-9:30 pm, Office.** Fee $15 ($20). Microsoft Word for the very beginner. Bring Mac, Word, blank disks.
( ) **Excel: Charting and Database Fundamentals - David Morganstein - Saturday, March 19, 9-12 am, Office.** Fee $15 ($20). Prerequisite: assumes you know how to set up Excel speadsheets - not for beginners. Bring Mac, Excel, blank disks.
( ) **Introduction to ReadySetGo 4.0 - Marty Milrod - Saturday, April 9, 9-12 am, Office.** Fee $15 ($20). Learn the major features of this popular desktop publishing program. Bring Mac, hard disk, RSG, blank disks.

Please check the desired tutorials and return this form with fee(s) made payable to Washington Apple Pi, Ltd. to:

Washington Apple Pi, Ltd.
Attn. Tutorials
8227 Woodmont Avenue, Suite 201
Bethesda, MD 20814

Name _____ Membership No. _____

Day phone _____ Eve. phone _____ Total Enclosed $ _____

Note: Index to Advertisers and Index to Authors appears on page 85 of this issue.

Telecommunications software for the Macintosh, a new version.

Soar to New Highs, Effortlessly

When Software Ventures set out to create MicroPhone, it had a simple mission: to develop the most intuitive communications software ever written. Indeed, when MicroPhone was born, it was universally hailed as a breakthrough in communications software. A product so friendly, it turned novices into experts. So sophisticated, it became, in the words of MacUser, a power user's delight.

MicroPhone is a legend. One of those precious software creations that single out the Macintosh as a superior computing machine.

With MicroPhone II, Software Ventures has set out to surpass itself: redefine power in telecommunications for years to come..

MicroPhone II is so revolutionary that PC Magazine was moved to say: "MicroPhone II is arguably the best comm software ever written." We won't have it any other way. MicroPhone II. The freedom to be yourself. At the top.

Critics' Choice

Stewart Alsop, P.C. Letter:
"MicroPhone . . . sets the standards that general-purpose communications software will have to follow."

The New York Times:
"MicroPhone is a breakthrough in communications software . . . "

SOFTWARE™ VENTURES

2907 Claremont Avenue Suite 220 Berkeley CA 94705
415-644-3232

Let's Get Technical

MultiFinder compatible. Supports background file transfer and script execution. Offers a full-featured script language: variables, counters, and expression-analyzer for string and arithmetic operations. Scripts allow: control of all communications settings; screen addressing and text editing; filtering of incoming text.

Supports import and export of scripts as text files. Allows control of PBX's, Hayes and non-Hayes modems through flexible modem drivers. Runs at 50 to 57,600 baud. Emulates DEC VT52, VT100, and TTY type terminals. Mac II and LaserWriter compatible. Works with all Mac large screen monitors. Supports the extended keyboard. Built-in text editor. Includes Glue, licensed from Solutions, Inc.

MicroPhone is a trademark of Software Ventures Corporation. Copyright © 1988 Software Ventures Corporation.