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Washington Apple Pi

Volume 10 February 1988 Number 2

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- Apple II News & Notes: **A Dozen Dozen for the IIGS**
- I Love Apple Music: Part 8
- Gutenberg 3.0 (ProDOS): A Review
- Quick Editing & QuicKeys
- Softviews: Reflex Plus
- A Tie That Binds: QuickShare Board

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Clinton Computer Teams Up with Apple to Provide Apple IIGS's to DoDDS Overseas Schools

Clinton Computer's John Sauer (white shirt) demonstrates IIGS configuration to group of DoDDS computer coordinators.

Apple Computer, Inc., has announced that the Department of Defense Dependent Schools (DoDDS) has selected the Apple IIGS as its system of choice. The recently awarded contract calls for equipping 270 military dependent schools overseas with Apple IIGS's during the next five years.

This means that more than 160,000 children -- kindergarten through twelfth grade -- in 23 countries in Europe, Central America and the Far East will have access to the latest in computer technology.

Apple Computer, Inc., has teamed with Clinton Computer as a systems integrator subcontractor. Clinton Computer has been working with local school jurisdictions for over six years and has installed over 11,000 Apple computers in schools. In fact, Clinton Computer is the designated dealer for all of the school systems in the Washington suburban metropolitan area.

"We are very pleased to have the opportunity to share our educational experience and expertise on such an important project. We believe the Apple IIGS is an exciting and innovative tool with ever-expanding capabilities that will greatly enhance the curriculum of DoDDS around the world as it has done here locally," said Ginny Stange, Clinton's Educational Sales Manager. We are also pleased to provide the third party printers, peripherals, and supplies required to complete each workstation."

To comply with the DoDDS requirements for operating system compatability, MS-DOS capabilities have been incorporated together with the Apple IIGS's existing PRO-DOS architecture. This configuration is achieved by utilizing *PC Transporter*, an MS-DOS emulator card introduced by Applied Engineering in July. As a result, DoDDS will benefit from the extensive library of educational software currently available for both the Apple II and MS-DOS systems.

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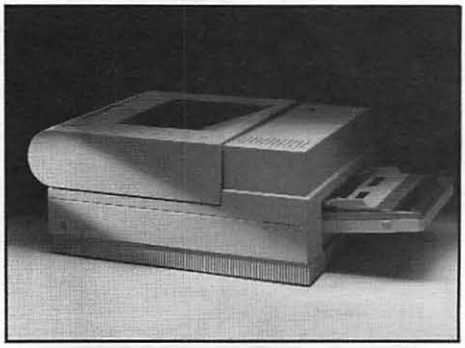

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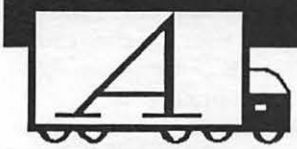

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CO-EDITORIAL

Well, here it is. The 109th issue of the Washington Apple Pi monthly publication. Since February 1979, when Volume 1 Number 1 was "published" and mailed to a handful of Apple enthusiasts, we have progressed from a 2-page newsletter typed on an IBM Selectric to our present day hefty (as one reporter recently characterized it) Journal composed on and with high-tech equipment and software. We hope you continue to find your Journal a "reading must". If you have comments and suggestions please send them to us and we will seriously consider all that are within our control and budget. And, at the risk of repeating ourselves, our Journal is what the Pi members make it, for it is the continued high quality of material submitted by our authors that sets it apart.

Soon we will be celebrating our tenth anniversary as a user group. Our first meeting was held between Christmas and New Year's in 1978. Let us hear from you about what you think we

contd. on pg 5

PRESIDENT'S CORNER

by Tom Warrick

It's good to be back among my friends at Washington Apple Pi after being tied up with work for the last few months. I want to thank ***Bob Platt***, the Pi's Vice President for Macintosh, for filling in here in the President's Corner last month. Bob deserves particular mention not only for all that he did during the last two months but also for the fact that he, too, has been very busy with his new law firm, Ginsburg, Feldman and Bress. I also want to thank Bob and ***Ray Hobbs***, Vice President for Apple II, for taking my place at general meetings, Board meetings and other functions. And, of course, I want to thank the ***Pi office staff*** for their help as well.

The project on which a great many of my colleagues and I were working was a real test of the Macintoshes our law firm bought back in October. The entire project involved the preparation of a 13-volume, 3,000-page filing in 13 weeks. About one-third of that was generated on our Macs. Before the project started, most of our people, while familiar with other word-processing systems, had had only about three weeks' experience with the Mac. They were able to return to their previously high level of productivity in short order—a tribute to the people involved, to be sure, but one that would have been difficult even to imagine had we been trying to use an MS-DOS system. Graphics that in our pre-Macintosh days took days to produce (had they been attempted at all) were prepared in hours. It's hard to make this not sound like a testimonial.

I learned a number of interesting things during our three busy months. I finally figured out how to create accurate graphs showing value changes that occur at irregular intervals, which I will describe in a future issue. The ability to do this to show the precise timing of, for example, price changes, has been on my "wish list" of features for programs such as Excel and Cricket Graph for years. While there is still no program that does it as a built-in feature, you can do it using Excel macros.

One interesting aspect of what happened during this experience is that I had the opportunity to work for a month with a Macintosh II (complete with Radius Full-Page Display, Apple Hi-Res Color monitor and eight megabytes of memory). None of my friends will believe that I did not ask for this to happen. The Mac II ended up in my office because the paralegals working on the case happened to mention to me that they needed to use Microsoft File (our office's low-end database program, which we use only because we once got a copy very cheaply) to track the 350-plus exhibits in the filing. Their Macintosh II, it turned out, could not run File. I just happened, ahem, er, ah, to suggest that I would be *more* than happy to loan them my Macintosh Plus for as long as they wanted. And since they needed some table space on which to set my Mac Plus... well, it was the least I could do to help them out, you see. (I told you that you wouldn't believe this.)

The Mac II was very nice, I admit. I noticed the increased speed whenever the applications I was using had to access the hard disk. I was using my own hard disk, which uses the 2-to-1 interleave designed for the Mac Plus and not the 1-to-1 interleave that the Mac II is capable of handling. ("Interleave" refers to the relationship between the physical sectors on the disk and the order in which data is stored on the disk. In a 1-to-1 interleave, the computer's disk controller can keep up with the disk drive, so the second sector of data is written right after the first. In 2-to-1 interleave, the data is written on every other sector because the computer's controller cannot quite keep up with the speed of the disk spinning beneath the disk drive's read-write head. Thus, 1-to-1 is the fastest form of interleaving.) Even though my hard disk was not configured to take full advantage of the speed of the Mac II, there was a noticeable improvement in the speed of spell-checks, opening desk accessories, search-and-replace operations, and the like. In addition, particularly long and complex spreadsheets (of which I had a great many in this project) did recalculate much faster using the 68020 microprocessor and the 68881 math co-processor in the Mac II.

Even more useful than the improvement in speed, however, was the increased screen size. I am not speaking here of the red-herring issue of whether the nine-inch picture tube on the Mac, Mac Plus or Mac SE is somehow "too small," which is the reaction many people have to the Mac screen before they use one for a few hours. Actually, as you know if you have a Mac, the Mac screen displays as much information as the larger screens on Apple II's and most MS-DOS machines—the only difference is that on the larger screens, the dots that make up the image are farther apart and must be connected by the user's mind to form solid shapes and letters, whereas on the Mac screen the dots are adjacent. But the increased screen size of the Radius Full-Page Display, in particular, enables much more information to be displayed at once. This is a considerable advantage when writing something complex, as it enables you to see more of your document so that you can glance up to something you just wrote without having to scroll back to see it.

Still more useful in some situations was having a second screen adjacent to the main one. Do you often have to take two different drafts of the same document and meld them into a single new version? Or do you need to proof complex documents with many long footnotes without taking the time to print the document? I was doing a great deal of both of these things, and the second screen was a real time-saver in both cases. By having a full-size window open on each screen, it is very easy to see what two different people have done to the same document, and to make conforming changes as appropriate. The half-size windows that you would have to use on a regular Mac screen generally do not have enough information in them to enable you

contd.

to do this easily. Also, it was a lot easier to proof documents with two screens than with only one. The larger one was used to show the text while the smaller one showed the footnotes (some of which were tables that ran for half a page or more) in the same document. Being able to see both at the same time saved having to adjust the size of the footnote window every few seconds, as would have been necessary on a regular Mac screen. I am definitely sold now on the idea of multiple screens for certain kinds of complex work.

The month is over now, and I am going to have to go back to my Macintosh Plus. The Macintosh II is going to go back to its regular home until the next large filing. But if winter comes, can spring be far behind?

VOLUNTEER PROFILES
by Robert C. Platt

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

Name: Gordon Stubbs
Occupation: Computer System Analyst
Residence: Springfield, VA
Computer: Apple IIe, IIc, Mac SE, Mac II, Lisa
Favorite Drink: Bourbon and water
Favorite Software: Excel, Word, Cricket Graph
Service to WAP: WAP member #196 has been an active volunteer for many years, including chairman of Lisa SIG and Fed-SIG, two years on WAP Board, Disk Librarian and disk copier.

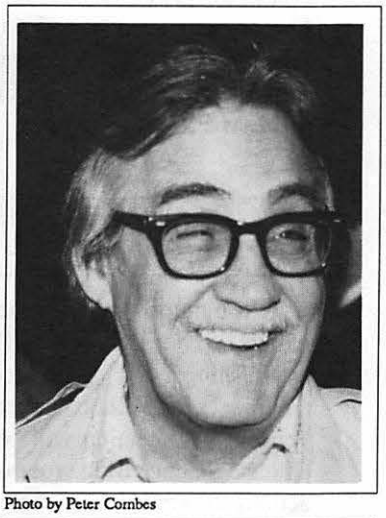
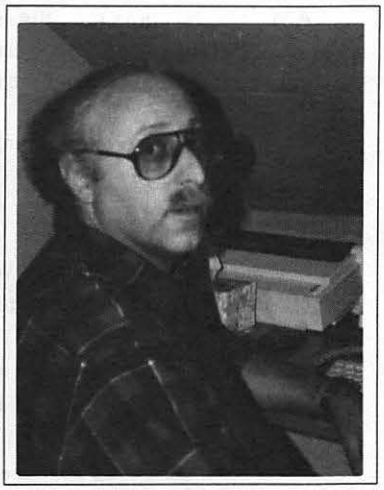


Photo by Peter Combes

Name: Walt Mossberg
Occupation: Newspaper Reporter
Residence: Washington, DC
Computer: Apple IIGS with 1.5MB RAM & 60MB hard disk
Favorite Drink: Classic Coke
Favorite Software: Word Perfect GS 2.0
Service to WAP: Apple II News & Notes column in Journal, WAP rep on CompuServe, tutorial instructor, main meeting leader.



MINUTES

Executive Board Meeting—January 13, 1988

Priscilla Myerson reported that six month financials would be avilable in about two weeks. Tom Warrick proposed a review meeting for 10 a.m. on February 6. The meeting agreed to reopen bids for Journal printing, the new bids to be in within ten days. The board authorized the President to investigate making contact with John Sculley during his visit to Washington. The meeting voted to invite FOSE to make a mailing to WAP members in the metropolitan area. The January WAP meeting will be held at the Georgetown Medical and Dental School. However, no reservations had been made past January 1988. The sense of the meeting was in favor of giving preference to having a fixed location. Ray Hobbs suggested we form a committee to look at the whole issue of membership, and volunteered to lead such a committee. The 501(c)(3) forms have been received, and task forces have started to take the appropriate action. The meeting authorized the expenditure of $600 to upgrade a club Macintosh. A 24-page booklet explaining the TCS has been prepared, and the meeting authorized the President to work with the TCS chairman to prepare a plan for publication.

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.

Editorial contd. from pg 3
should do to celebrate this occasion. Already a committee has been established to make plans, but they need your input.

As the winter days begin to lengthen and the cold begins to strengthen, it's a good time for you to stay indoors and hone up on your word processing skills by writing an article or two for the WAP Journal—anything from a short article describing a tip or technique to a dissertation...

CLASSIFIEDS

WANTED: Apple //e, monitor, disk drive. Our school's Special Needs Committe is optimistically searching for a donation for our special education students, both at the primary and secondary levels, of Apple equipment to enrich and enhance their learning potential. Such donations are tax-deductible and are immeasurable in terms of the benefits which will accrue to our students. Won't you please help? If you have the hardware, we can "bake-off" to buy our software. Call Laurice Redhead at 946-3321 after 6:00 PM.

WANTED: Own 64K Apple Plus. Looking for additional 64K (or more) new or used board at reasonable price. Call Eric Gustafson at 544-5523.

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

FOR SALE: Apple //e (7 months old) with 512K Ramworks II, $509; Apple Super Serial Card, $75; Apple Mouse w/card for //e, $75; Applied Engineering Z-80+ CP/M card with 4.0 software, $100; System Saver, $50; Grappler+ with Epson MX-80, $150. Call John Willis at (301) 694-9410.

FOR SALE: Apple //e software. Merlin Assembler, $35; Bard's Tale, $18; Wizard's Toolbox, $15; Marble Madness, $12; Sargon III, $15. Call John Willis at (301) 694-9410.

FOR SALE: 512K Macintosh with 800K external disk drive, great full featured starter machine or inexpensive upgrade alternative. System is in perfect condition due to little use and being well cared for. System comes with extensive software library library, meaning no additional startup costs. Software includes: (spreadsheets) Excel, Jazz; (word processing) Word 3.01, MacWrite, WriteNow; (spell checkers) MacLightning, Thunder, MacSpell Plus; (graphics) MacDraw, MacDraft, Mac 3D; (data bases) FileMaker Plus, Helix; (page layout) PageMaker, Ready Set Go; (resource editors) Copy II Mac, Fedit; and games. Software alone is worth $$$. Asking $1300 or best offer. Call Marty Biggs, w (703) 979-5080 or h (703) 998-8517.

FOR SALE: Unopened copy of 4th Dimension, $450. Used Bernoulli Box (5 MB) for Mac+, with software. Call evenings, 534-8827.

FOR SALE: Odesta Helix v2.0 rll, complete original package, excellent condition, $75. Also Microsoft File v1.02, $40 and Chart v1.0, $35, both in original boxes and in excellent condition. Call Eric McGrath at (703) 494-3640 after 5 PM.

FOR SALE: Apple Macintosh 512K, Apple external disk drive, Imagewriter printer, Apple Mac carrying case, dust covers, mouse pad and software. $1200. Apple //c external disk drive $80. Ask for Lincoln at (202) 546-7450 after 6 pm.

FOR SALE: GRAPPLER Plus interface, Mousetrak pad, cable for Apple IIe or IIgs to Imagewriter I, Super Serial Card, AIIe 80 column text card. Also have assored IIe software including: Apple Writer II word processor, Millionaire game, QuickFile II, Speedreader, Principles of Pharmacology, TestWriter and Home Accountant. Also have manuals for all of above and other Applesoft texts. Will sell separately (prices negotiable) or as bundle for $275 (cash and carry). Phone Dan at (703) 680-5848 anytime or leave message if a woman answers...

FOR SALE: Imagewriter II, a year old, barely been used, $375. Call Shelley Wetzel at (w) 453-8973 or (h) 483-7903.

COMMERCIAL CLASSIFIEDS

Everex products for sale! Hard Drives (20M, 40M, 91M, 261M!)—internal and external; 60M SCSI Tape Backups; Modems. *WAP member discounts!* Call Rusty at SUM DATA (301) 565-8007 (Silver Spring).

JOB MART

STUDENT PART-TIME HELP WANTED

Macintosh Expert—Student to work part-time maintaining Macintosh network system (25 Macs and Mac IIs), updating software, installing new equipment, expanding system. 15-20 hours per week, salary dependent upon experience. Must be full-time student. Walter Reed Army Institute of Research. Call Major David Smith on 576-1923.

Macintosh Graphics Expert—Student to work part-time providing assistance in newsletter and report preparation. Experience required with Macintosh generated graphics, graphs and table generation and table top publishing. 15-20 hours per week, salary dependent upon experience. Must be full-time student. Walter Reed Army Institute of Research. Call Major David Smith on 576-1923.

PART-TIME PROGRAMMER WANTED

Educational institution in Washington, DC seeks part-time **Apple programmer** for work on educational software. Must have experience with and access to an Apple IIe or IIGS computer and know Apple Assembly language. We're looking for the best. If that's you, give Catherine van der Ven a call at 828-5679, M-F, 9:00-5:00.

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 February 27 meeting will be at Georgetown University, Pre-Clinical Science Bldg., rooms LA 4 and LA 6. 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:

February	27	- Connectivity
March	26	- Apple II - Programming
		- Mac ?

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

Note: February 27 meeting is at Georgetown University, Pre-Clinical Science Building, rooms LA 4 and LA 6.

* February 1988 *

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 PI-SIG 7:30 PM Office	2 Apple IIgs Beginning Tutorial #1 7:30-9PM Office	3 Mac Progmrs. 7:30 PM Office; dPub SIG 7:30 PM PEPCO	4 GameSIG 7:30 PM Office	5	6
7 Deadline for Journal articles is Monday, February 8 -->	8 Introduction to Macintosh Tutorial - Office 7:15 - 10 PM	9 Apple IIgs Beginnning Tutorial #1 7:30-9PM Office	10 Executive Board 7:30 PM Office	11 Stock SIG 8:00 PM Office	12	13 Music on Mac Tutorial 10-12AM Office; MusicSIG
14 Happy Valentine's Day! Mon. Feb 15 Office Closed -->	15 Intermediate Mac Skills Tutorial - Office 7:15 - 10 PM	16 Apple IIgs Beginning Tutorial #3 7:30-9PM Office	17	18 Pascal SIG 8:00 PM Office	19	20
21	22 Productivity on Your Mac Tutorial - Office 7:15 - 10 PM	23 Mutual Fund Sub Group (Stock SIG) 8 PM Office	24 Apple /// 7:30 PM Office	25	--> Intro to HyperCard Tutorial Office 1-4 PM	27 WAP Meeting 9:00 AM Georgetown U. Pre-Clinical
28	29					

* 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
27	28 Productivity on Your Mac Tutorial - Office 7:15 - 10 PM	29	30	31		

SIGNEWS

Apple IIGS SIG - For information regarding the next meeting, call Ted Meyer at (703) 893-6845 evenings between 7 and 8 PM.

Apple /// SIG meets on the 4th Wednesday at 7:30 PM in the WAP office. The next meeting is February 24.

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 February 3.

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

Fed(eral) SIG usually meets on the third Wednesday of the month. 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 February 4.

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 February 3.

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 February 18.

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

Stock SIG meetings are on the second Thursday of each month at the office, 8 PM. The next meeting is February 11.

Telecom SIG meets after the regular meeting on the 4th Saturday of the month.

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
	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
Double Helix	Chuck Sicard	(301) 963-2879
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
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 Baldrige	(301) 779-8271

General

Games - Apple II	Charles Don Hall	(301) 864-2715
Games - Mac		
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.

—— 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—
- AL5 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

MACINTOSH

- 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
- Chart (presentation business graphics).... 85
- File (easy to use database)..... 125
- ReadySetGo! / PageMaker (latest versions)..... (call)
- dBASE MAC (from the dBASE folks)..... 315
- McMAX (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

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APPLE II NEWS AND NOTES

by Walt Mossberg

This month, we devote the column to a review of what software and peripherals are available for the IIGS. We hope this extensive listing will help those who may have acquired a GS over the holidays, and give cheer to those who have come to feel that third-party companies aren't supporting the new machine.

A DOZEN DOZEN FOR THE IIGS

Well, it's been over a year since the IIGS debuted, and some 300,000 have been sold. But there's still a lot of nonsense going around about how few programs and peripherals are available which are tailored for the new machine.

What follows is a refutation of that contention—a list of 144 programs and peripherals which are either designed specifically for the IIGS or modified to support its special features. These dozen dozen products are just the ones of which I'm aware, so the accounting here isn't complete. Readers will undoubtedly know of some items I omitted. But it makes the point.

Furthermore, this is a REAL list. I threw out a lot of stuff others might have counted. The mere ability to run or function on a GS wasn't good enough; just having a "IIGS" sticker on the box didn't count. To be listed here, a product had to be written especially for the IIGS, or rewritten or redesigned specifically to take advantage of the GS's special features. This includes new and separate, GS-only editions of existing programs. But this list does not include the thousands of unmodified Apple II programs which run on the GS without taking advantage of its special capabilities.

In addition, this necessarily partial list stresses products that are actually released and available. In a limited number of cases, I have included products that have been announced or advertised, but not seen in stores (to my knowledge) as of this writing. I picked the ones I felt were really coming soon, based on knowledge of active beta testing or other factors.

By the way, only 8 of the 144 items are modified IIe/IIc products; the rest are GS-only products, which either don't exist for older Apples or have been split into separate editions. And only 19 items are still pending release, to my knowledge. The rest are out there, available for purchase.

Where a product isn't yet on sale, to my knowledge, it is preceded by a (P), for "Promised". All products listed below are written for the GS only (including separate GS editions of existing products), except those followed by an asterisk (*), which are IIe/IIc products rewritten to support specific GS features such as extra memory, built-in Comm port, etc. Prices cited are list prices; you can always pay less by shopping around—often much, much less.

[NOTE: This is an unofficial list, intended as a guide to readers. I am not responsible for providing official info on list prices or release dates. In some cases, where I didn't know the publisher or list price, I just omitted them. On items like programming and game software, with which I'm not very familiar, I've refrained from adding comments. Obviously, I believe the data below is accurate, but you'll have to check dealers or publishers for absolute certainty.]

WORD PROCESSORS

WordPerfect V2.0 —The all-new IIGS-only version of the most powerful, comprehensive word processor available on a microcomputer. It does virtually everything any author could want, and V2.0 uses the IIGS's grahics interface—pulldown menus, mouse control, etc. Includes speller, thesaurus, macros, multiple printer fonts. WordPerfect Corp. $179.95.(2.01e)

MultiScribe GS V3.0—Newest revision of GS-only word processor adds a built-in speller and thesaurus to a program able to mix text and graphics and display onscreen fonts; uses full GS mouse-pulldown menu interface. StyleWare, Inc. $99.95. (3.01c)

Writer's Choice elite V1.1 —The word processor member of Activision, Inc.'s growing series of GS-specific programs. Combines text and graphics, uses GS onscreen interface, allows highlighting and "crossing out" text in color. $89.95.

Graphicwriter V2.0 —Designed for desktop publishing, it allows you to write, draw and lay out mixed text and graphics in special page segments called "regions." DataPak Software, Inc. $149.95.

AppleWorks V2.0 (*)—Now automatically recognizes RAM in a GS. Various add-on programs are available to provide mouse capability, the ability to use GS fonts, macros, built-in spellers, and more. A wonderful program. Claris Corp. (owned by Apple) $250.

MouseWrite V2.6.8B (*)—Fast, powerful, mouse-driven word processor modified for GS. Doesn't use graphics screen or display fonts, but includes speller, popup comm program, macros, desk accessories and more. Roger Wagner Publishing, Inc. $149.95.

(P) DeluxeWrite—Electronic Arts. $99.95.

DATA BASES

GS File—Onscreen Macintosh-like interface permits either tabular or form listing of data. Softwood Co. $99.95.

Notes 'N Files—A database that uses an onscreen file-cabinet graphic metaphor. Each file folder icon contains database records plus complete documents or letters associated with them. Includes a full word processor. DataPak Software, Inc. $129.95.

List Plus —Activision, Inc. $89.95.

AppleWorks V2.0 (*)—Claris Corp. (owned by Apple) $250.

MUSIC, SPEECH & SOUND

The Music Studio—Powerful composing-and-playing program with 15 instruments per song, MIDI-compatibility, instrument design, and more. Activision, Inc. $79.95.

Music Construction Set IIGS —Simple music program. Company has promised deluxe version for GS for nearly a year. Electronic Arts. $49.95.

Instant Music—Permits user to use mouse to "jam" with tunes played by the program. More a participatory product than a composing system. Electronic Arts. $49.95.

It's Only Rock 'N Roll —Add-on songs for Instant Music.

contd.

Electronic Arts. $29.95.

Hot & Cool Jazz—Add-on songs for Instant Music. Electronic Arts. $29.95.

(P) Pyware Music Writer—Professional, MIDI-compatible music composition system. Pygraphics. $295 for Special Edition, $595 for Professional Edition.

(P) MusicShapes—Music Composition program, compatible with Casio CZ keyboard. Music Systems for Learning, Inc. $175.

Smooth Talker—Speaks the words you type in. First Byte.

EDUCATION

Reader Rabbit (GS)—Talking GS-only version of this kids' classic. The Learning Co. $59.95.

Speller Bee—First Byte, Inc. $49.95.

MathTalk—First Byte, Inc. $49.95.

MathTalk Fractions—First Byte, Inc. $49.95.

KidTalk—First Byte, Inc. $49.95.

Talking Text Writer—Scholastic, Inc. $249.95.

First Letters and Words—First Byte, Inc. $49.95.

First Shapes—First Byte, Inc. $49.95.

KidsTime II—Includes great kids' music program. Great Wave Software. $39.95.

Information Laboratory—A Life Sciences Database. Addison-Wesley. $80.

EXTRA MEMORY

Apple IIGS Memory Expansion—Adds up to 1MB to RAM. Apple. $129 for 256K.

GS-RAM (Rev C)—Adds up to 1.5MB to RAM. Applied Engineering. $169 for 256K.

GS-RAM Plus—Adds up to 8MB to RAM. Applied Engineering. $559 for 1MB.

RamStak Plus—Adds up to 1MB to RAM, plus ROM Chips. AST Research, Inc. $129 for 256K.

OctoRam—Adds up to 8MB to RAM. MDIdeas, Inc. $149.95 for 256K.

OctoRam ESP—Add-on ROM disk emulation for OctoRam. MDIdeas, Inc. $179.95.

RamPak 4GS—Adds up to 4MB to RAM. Orange Micro, Inc. $189 for 512K.

(P) TopRAM—Adds 1MB to RAM. Parallax, Inc. $189.95.

(P) MegaROM—Adds up to 896K ROM to TopRAM. Parallax, Inc. $89.95 unpopulated.

(P) GS Juice—Adds up to 1MB to RAM. Applied Ingenuity. $79 for 256K, $169 for 1MB.

Memory Saver—Preserves files in RAM when computer is off and allows nearly instant bootup into RAM disk. Also combines two memory cards from different makers for larger RAM. Checkmate Technology. $149.95.

(P) Ram Keeper—Also preserves files in RAM when computer is off and allows almost instant bootup into RAM disk. It, too, combines two memory cards from different makers for larger RAM. Applied Engineering. $179.

SPREADSHEETS, FINANCIAL AND ACCOUNTING

VIP Professional GS—Lotus 1-2-3 clone with mouse/pulldown menu interface, macros and graphing. ISD Marketing, Inc. $299.95.

Visualizer IIGS—Creates color graphs from AppleWorks spreadsheet data. PBI Software.

Salary Magic—For employers. Magic Software, Inc. $395.

AppleWorks V2.0 (*)—Claris Corp. (owned by Apple) $250.

(P) Dollars & Sense for the GS—A total rewrite, unprotected and in ProDOS 16, to make use of the GS's abilities. Promised for March 1988 release. Monogram Software.

COMMUNICATIONS

Point-to-Point V2.1 (*)—Autodial, macros, capture buffer, fullscreen editor, AppleWorks-type interface. Pinpoint Publishing. $129.

MouseTalk V2.3 (*)—Full-featured, with mouse/pulldown menu interface. United Software Industries, $99.95.

Freeterm—Public Domain comm program with full GS graphics interface. No bells and whistles.

Talk is Cheap V2.03—Shareware command-oriented comm program, very sophisticated and flexible. Sold by author Don Elton, Columbia, S.C., for $35.00.

ART, GRAPHICS, DESKTOP PUBLISHING

PaintWorks Plus V1.2—Enhanced and now unprotected. Activision, Inc. $89.95.

DeluxePaint II—Most features of any Apple II paint program. Electronic Arts. $99.95.

816/Paint—Baudville, Inc. $75.

SHR Convert V2.0—A ProDOS 16 mouse-drive utility which will take many different types of computer pictures and convert them to any one of the standard IIGS picture file types used by the above programs. Handles older Apple II pictures as well as Mac, Atari, Commodore. Shareware available from Jason Harper. $15.

Clip Art Gallery—Over 600 small images for use in documents. Works with PaintWorks Plus. Activision, Inc. $29.95.

Art Parts—Clip art for use with Deluxe Paint II. Electronic Arts. $29.95.

Draw Plus V1.1—Precision drawing program. Activision, Inc. $89.95.

Top Draw—Precision drawing program. StyleWare, Inc. $99.95.

PrintShop IIGS—Much-improved, beefed up version of the classic publishing program. Great graphics, much faster, allows previews of designs and saving of creations. Broderbund Software, Inc. $59.95.

Graphics Studio—Accolade.

Calendar Crafter—MECC. $59.00.

Fantavision IIGS—Animation. Broderbund.

Postcards (GS)—Make postcards with PaintWorks Plus. Activision. $29.

ShowOff—Produces slides, transparencies. Broderbund. $59.95.

(P) Personal Publisher—Powerful desktop publisher. Milliken.

(P) DeluxePrint II—Electronic Arts. $49.95.

(P) Design Your Own Home - Architecture (GS)—Abracadata. $89.95.

(P) Design Your Own Home - Interiors (GS)—Abracadata. $89.95.

contd.

(P) Design Your Own Home - Landscape (GS)—Abracadata. $89.95.

DESK ACCESSORIES

DeskWorks—Twelve New Desk Accessories, usable from the pulldown "Apple" menu on standard 16-bit GS programs. StyleWare, Inc. $59.95

DESKPAK—Ten New Desk Accessories for use under ProDOS16. Simple Software. $39.95.

The Desktop Manager—Eight desk accessories accessible from their own popup menu while using ProDOS 8 or ProDOS 16 software. On Three, Inc. $89.95.

The Communications Manager—Pop-up communications program for use with The Desktop Manager. On Three, Inc. $49.95 (requires TDM).

The Disk Manager—Pop-up filer program for use with The Desktop Manager. $39.95 (requires TDM).

Pinpoint IIGS Starter Pak (*)—Desk accessories, including speller and macro program, for use with AppleWorks and selected other programs on a GS. Pinpoint Publishing. $149.

UTILITIES

IIGS Finder V1.0—The icon-oriented file handler and program launcher, by Apple itself. Bundled with the GS and on System Disk 3.1.

ProSel V3.3 (*)—Perhaps the best all-around Apple II utility package, this product has been modified to handle the GS and ProDOS 16 software, from the namesake program selector itself to the accompanying utility programs. Sold by the author, Glen E. Bredon of Princeton, N.J., for $40.

Copy II+ V8.1 (*)—A total rewrite of the venerable utility package and protected-disk copier to accomodate the GS and 3.5" disks better. Central Point Software. $39.

SoftSwitch—Allows switching between three different active applications, and other tricks. Roger Wagner Publishing. $59.95.

LifeGuard—Recovers lost or damaged files. Harbor Software. $59.95.

Diversi-Key—Keyboard Macros. Diversified Software Research, Inc. $45.

Diversi-Cache—Speeds up disk operations. Diversified Software Research, Inc. $35.

DiskUtil II —Backs up protected software. FWB, Inc. $59.95.

Font Library Vol. 1 —90 new fonts for all standard GS interface programs. StyleWare.

PROGRAMMING

GS BASIC—Apple Programmers' and Developers' Association. $50 for members (membership costs $20).

Apple Programmers Workshop —APDA.

MERLIN 816—Assembler that handles GS, ProDOS 16. Roger Wagner Publishing.

TML Pascal—Another GS-specific Pascal compiler. TML Systems. $125.

TML BASIC—TML Systems. $125.

TML Speech Tool Kit—Adds speech to programs. TML Systems. $69.

TML Source Code Library—TML Systems. $49.

ORCA/M Assembler—The Byte Works, Inc. $69.95.

ORCA/BASIC Interpreter—The Byte Works, Inc. $50.

ORCA/BASIC Compiler—The Byte Works, Inc. $95.

ORCA Pascal—A compiler Pascal language. The Byte Works, Inc. $125.

ORCA/M Utility Package #1—The Byte Works, Inc. $39.95.

ORCA/M Subroutine Library Source—The Byte Works, Inc. $39.95

ORCA/M Merlin to ORCA—The Byte Works, Inc. $39.95.

(P) Graphics Supermarket—Translates graphics into assembler or C code for use in programs. FWB Software. $49.95.

(P) AC/BASIC—New compiler tailored to IIGS. absoft. $125.

Iconix-GS—Lets AppleSoft programs use GS graphics interface. So What Software. $29.95.

HARDWARE

System Saver IIGS—Fan/Power Center/Surge Suppressor. Sits between GS and monitor, matches both in color and style. Kensington Microware Ltd. $99.95.

Conserver—Fan/Power Center/Surge Suppressor. Holds two 3.5" drives. MDIdeas, Inc. $149.95.

Apple IIGS Fan—Apple's own fan, mounted internally. $49.

JuiceBox—Fan/Power Center/Surge Suppressor. Orange Micro, Inc. $79.

VisionPlus—Video digitizer. Turns color camera or VCR images into digitized pictures that can be recorded on disk and played back. AST Research, Inc. $399.

ComputerEyes (GS)—Color video digitizer for GS. Digital Vision. $249.95.

Thunderscan (*)—Snap this unit into your ImageWriter printer in place of the ribbon, plug it into your GS, and it'll scan and digitize any picture you roll through the printer. Special capabilities on GS. Thunderware. $219.

SuperSonic Card—Stereo Sound Output. MDIdeas, Inc. $59.95.

SuperSonic Digitizer—Turns music, voices, etc. into digitized sound that can be recorded on disk and played back. MDIdeas, Inc. $59.95.

SuperSonic Digitizer Professional—More powerful, standalone version of the standard digitizer. MDIdeas, Inc. $149.95.

Future Sound—Stereo output and digitizer card in one, with sound-editing software. Applied Vision, Inc. $279.

(P) FingerPrint GS—Screendump card. Allows user to interrupt programs and print what's on screen. Thirdware Computer. $99.

(P) GSX Accelerator Card —Shown in demo form at AppleFest, the GSX doubles the 2.8MHz fast speed of the GS and adds 1MB of RAM. Release date and price uncertain. MDIdeas, Inc. (NOTE: At least two other companies are rumored to be working on GS accelerator cards, but MDIdeas is the only one I know of to demo such a device).

Kurta GIS—Cordless input via light pen or puck-and-tablet, for graphics entry or mouse simulation. Kurta Corp. $495.

DMS802—Two-way mini-8 switch box. Data Spec. $52.95.

DMS804—Four-way mini-8 switch box. Data Spec. $59.95.

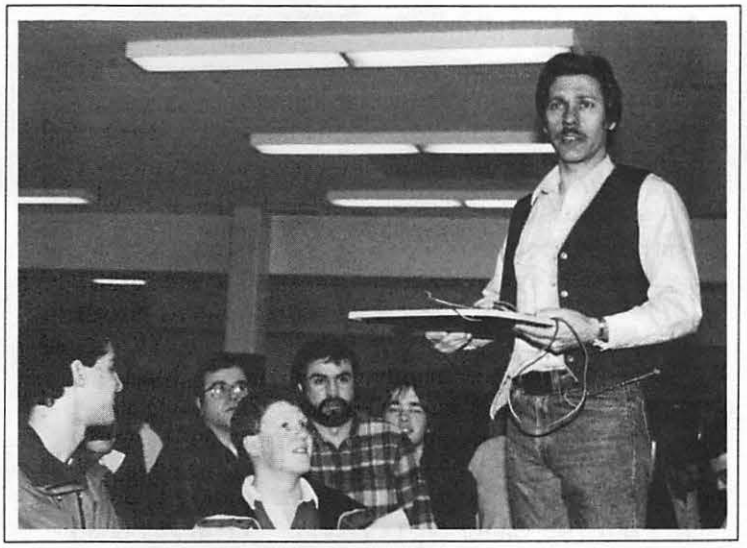
A-B Box—Lets two 8-pin peripherals share serial port.

contd.

Kensington Microware. $99.95.

ENTERTAINMENT

Tower of Myraglen—PBI Software. $54.95.
Thexder—Sierra On-Line. $34.95.
Tass Times in Tonetown—Activision, Inc. $34.95.
Dream Zone—Written by two DC-area teens. Baudville, Inc. $49.95.
The Bard's Tale (GS)—Electronic Arts. $49.95.
Space Quest (GS)—Sierra On-Line. $34.95.
Marble Madness (GS)—Electronic Arts.
Shanghai (GS)—Activision. $44.95.
Mean 18—Accolade. $44.95.
Mean 18 Famous Course II—$19.95.
Mean 18 Famous Course III/IV—$34.95.
World Tour Golf
Hardball (GS)—Accolade.
Hacker II (GS)—Activision. $39.95.
Computer Mad Libs—Adult game.
Winter Games
World Games
Silent Service
Sub Battle Simulator
Destroyer
GBA Championship Basketball
Defender of the Crown
(P) King's Quest (GS)
(P) Beyond Zork
Cavern Cobra—PBI Software. $49.95.
Sea Strike—PBI Software. $39.95.
Strategic Conquest II—PBI Software. $49.95.
Monte Carlo—PBI Software. $39.95.



Ray Hobbs, Auctioneer — Photo by Peter Combes
What am I bid for this wonderful er— ah . . . ?

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.

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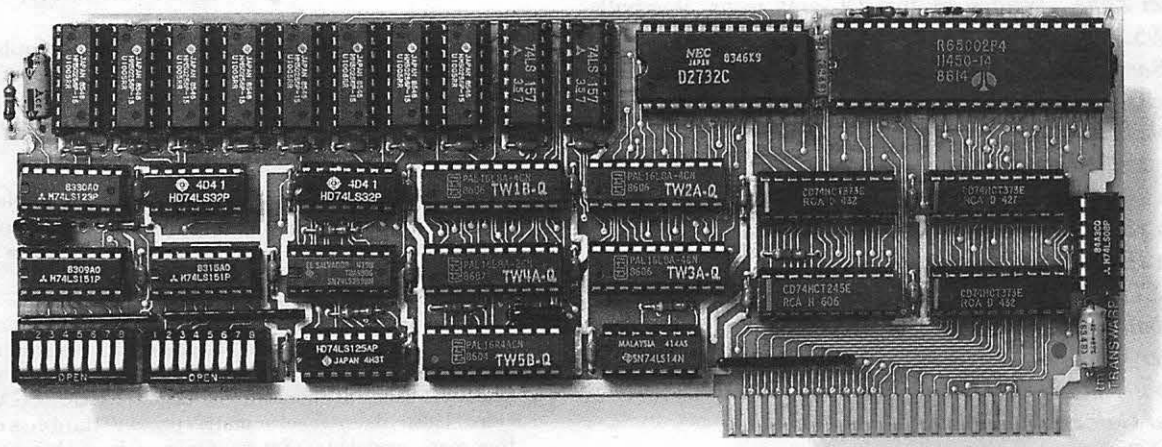

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It's an experience you shouldn't miss. And with TransWarp, you won't have to. Because TransWarp will run your IIe or II+ software *3.6 times faster* — that's 40% faster than Apple's IIGS!

No more yawning while your Apple™ slowly rearranges text or calculates spreadsheets. With 256K of ultra-fast RAM, TransWarp speeds up *all* Apple software—including AppleWorks, and all educational software, graphics and games. And it's compatible with all standard peripheral cards (such as RamWorks and Apple memory cards), hard disks, UniDisk 3.5's, 80-column cards, modems, clock cards, mouses and more! You name it, TransWarp accelerates it. There's even a 16 bit upgrade chip available.

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Steve Wozniak, the creator of Apple Computer

An important difference.

With TransWarp, software runs up to three times faster than with other cards, since the other cards can't accelerate programs in auxiliary memory. That's why TransWarp is so much faster than the rest. Nearly all of today's more powerful programs run partially or completely in auxiliary memory: programs like AppleWorks, Pinpoint, Managing Your Money, SuperCalc 3a, BPI and Apple Pascal, to name a few. Why settle for a card that accelerates only part of the memory?

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Simply plug TransWarp into any slot in your Apple II, II+ or IIe including slot 3 in the IIe. Instantly you'll be computing at speeds you only dreamed about before. And should you ever wish to run at normal speed, press the ESC key while turning your Apple on.

Since TransWarp is completely transparent, you won't need preboot disks or special software. It's ready to go right out of the package!

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- Totally transparent operation with all software
- Plugs into any slot, including slot 3 on the Apple IIe
- Accelerated 16 bit option available
- 5-year warranty

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Give *your* Apple the TransWarp advantage. With our risk-free 15-day money back guarantee, you have nothing to lose but wasted time. Call today!

TransWarp accelerator $219
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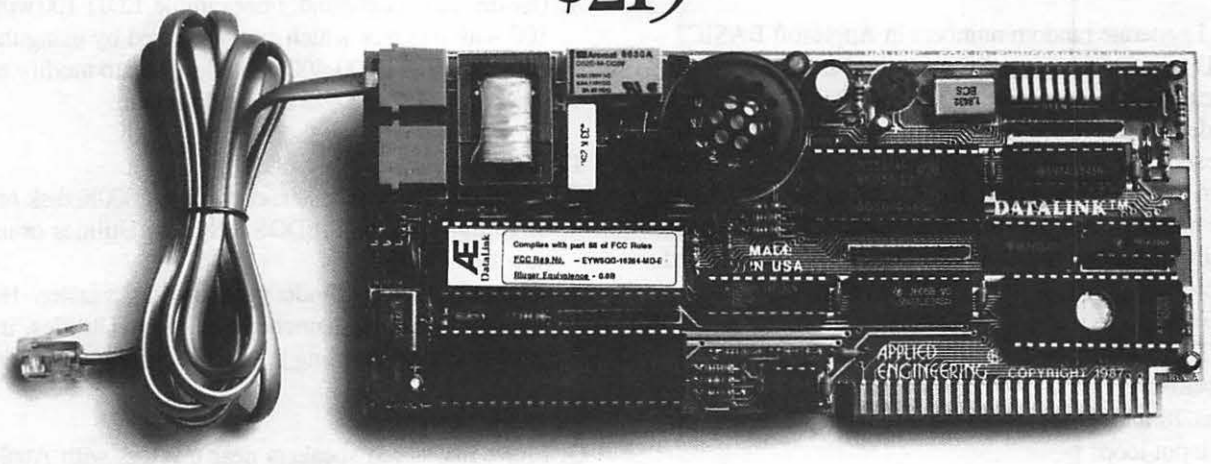

Introducing the DataLink™ modem. Get instant access to networks and databases – plus network memberships and discounts worth $177.95!

Now you can tap into a world of information — without draining your resources. Our DataLink™ modem lets your Apple IIGS, IIe or II+ communicate with other computers, download free software from networks and bulletin boards, access database services and more. For a remarkably low price.

The world at your fingertips.

With the DataLink modem, you'll be able to draw information from thousands of databases. Send and receive electronic mail — even overseas. Join clubs and bulletin boards to exchange software or solve computing problems with other Apple users. Download free public domain software. And share files with personal computers and mainframes.

There's nothing missing on DataLink.

Unlike the Smartmodem®, DataLink comes with its own easy-to-use communications software in ROM and on disk that supports macros, file transfers, on-line time display, data capture and datascope mode. The software also allows you to store hundreds of phone numbers for auto dialing and log on.

Because DataLink is 100% Super Serial Card compatible, you can also run virtually all other communication software, including Point-to-Point, Apple Access and ASCII Express, to name a few.

The compact design allows DataLink to fit in any slot — including slots 1 and 2 of the IIGS with a cooling fan installed. DataLink operates at 1200 or 300 baud. Built-in diagnostics check for accuracy of data transmission, and DataLink lets you track the progress of calls either electronically or via an on-board speaker.

Introductory offers from popular networks included.

When you purchase DataLink, you'll get a fee-waived membership to The Source worth $49.95. $60.00 worth of free on-line time from NewsNet. A free $50.00 subscription to the Official Airline Guide. And a free subscription to the GEnie network worth $18.00!

	Applied Engineering DataLink	Hayes® Smartmodem 1200A
Price	$219	$349
Max. transmission rate	1200 baud	1200 baud
Warranty period	5 years at no charge	2 years or 4 years for $75
Software included	YES	NO
Hayes AT command set	YES	YES
Help screens	YES	NO
On-board telephone jacks	YES	NO
Fits any slot (even with fan)	YES	NO

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Q & A

by Robert C. Platt and Bruce F. Field

Try to stump our experts with your Apple II or Apple III dilemmas. Send your questions to the WAP Office.

Q. How do I generate random numbers in Applesoft BASIC?

A. The RND function returns a different number between 0 and 1 when called with a positive argument: X=RND(1). Each number depends upon the last number used. To avoid getting the same sequence of numbers, you should store a new "seed" in the random number generator. A seed is loaded when a negative number is used as the argument to RND. The code below will load a seed based upon a counter which is changed whenever the Apple is waiting for the user to press a key:

```
10 I=PEEK(78)+256*PEEK(79)
20 IF I>0 THEN I=-I
30 I=RND(I)
```

Locations 78 and 79 are automatically changed during the wait for input loop.

Q. How do I load a random number seed in IIgs BASIC?

A. The following will use a seed based upon the time since midnight:

```
10 TIMER ON
20 RANDOMIZE SECONDS@
30 X=RND(1)
```

Q. Aside from random number seeds, what other differences should I watch for in converting Applesoft to IIgs BASIC?

A. The Applesoft GET command becomes GET$. GET$ returns a high ASCII value. All disk commands must reference a "file reference number" and are not a part of a PRINT statement. For example if D$ has a control-D, the following commands would translate:

```
10 PRINT D$;"OPEN MYFILE"
20 PRINT D$;"WRITE MYFILE"
30 FOR I=1 TO 10
40 PRINT I
50 NEXT I
60 PRINT D$;"CLOSE MYFILE"
```

to:

```
10 OPEN "MYFILE", FILTYP=TXT FOR
   OUTPUT AS #1
30 FOR I=1 TO 10
40 PRINT#1 I
50 NEXT I
60 CLOSE #1
```

In addition to the ProDOS CAT and CATALOG commands, IIgsBASIC also supports a DIR command. In deferred execution mode, DIR has the advantage of displaying little icons which each file. In immediate mode, DIR can be used with "wildcard" characters to display only selected file names based upon file types or the presence of letters in file names.

Q. In Applesoft BASIC, I can edit a long program line by using the escape key followed by I or J to move the cursor up to a listing of the program line. How do I edit an existing program line in IIgsBASIC?

A. Use the EDIT command. For example, EDIT 100 will list line 100 with a cursor which can be moved by using the arrow keys, etc. EDIT 100-400 will allow you to modify each line in a range. Escape will leave edit mode.

The IIgs Finder

Q. Generally, which is faster, copying an 800K disk on a one-drive IIgs with the ProDOS 8 System Utilities or using the new IIgs Finder?

A. Generally, the IIgs Finder will copy disks faster. However, if you have already launched the System Utilities, it may be quicker to avoid loading in the Finder for a single disk copy.

Magnetic Interference

Q. I have my stereo speakers near my IIgs with Apple Color Monitor. One day, the monitor color turned sick-looking. By turning my speakers I was able to get my monitor to run through the specturm. How can I fix my monitor?

A. Turn off the monitor for several minutes, move the speaker away and then turn the monitor back on. The magnetic field of the speaker affected the electron gun in your monitor. This should work because most monitors have a built-in degaussing coil which is operated when power is first turned on in the monitor. If your make of monitor does not have one, you can buy one at a radio supply store for a few dollars.

Printing in Applesoft

Q. I have an Apple][+. Some of the lines in my Applesoft BASIC program are longer than 40 characters. In fact, some of them are longer than 80 characters. How can I get a good listing on my printer?

A. Either 1) Use the following series of commands: POKE 33,33 then PR#1 then LIST then PR#0 and finally POKE 33,40 or 2) Most printer control cards will accept the command <control-I>80N. Without either step, Applesoft will wrap to a new line when the line length approaches the 39 characters.

Q. Same question, but I have an Apple //e.

A. The easy way is to enter 80 column mode by using PR#3 (or ESC-8 if you have already activated your 80 column firmware.) Then LIST.

Q. What about an Applesoft listing on a IIgs? When I set the Line Length option on the Printer Port menu in the control panel to "unlimited line length," lines longer than my 80 column printer will overprint.

A. Select the correct line length in the control panel (either 40, 80 or 132 columns) and line feeds will be generated.

Q. Now that I've printed my program listing, I want to also get automatic line wraparound when sending output to the printer. For example, how can I get the following Applesoft

contd.

Apple Discounts
from VF Associates

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program to send the last 20 X's to a second line?

```
10 PRINT CHR$(4);"PR#1"
20 FOR I=1 TO 100
30 PRINT "X";
40 NEXT I:END
```

A. You can't if you are using the IIgs built-in firmware. Your program must know when it reaches the end of the line and generates a carriage return. Alternatively some printer control cards will automatically wrap the 81st character to the next line when initialized with the command<control-I>80N.

Q. I bought an Applied Engineering RAM expansion card for my IIgs. What is a good source for additional RAM chips?

A. The manual which comes with the AE card lists particular chip part numbers which will work with the card. For the GSRam use: Hitachi HM50256-15, Mitsubishi MSM4256P-15, Fujitsu MB81256-15, or OKI MSM41256A-15AS/RS. For the GSRam Plus, use: Hitachi HM511000-15 or Toshiba TC511000-15. Basically the IIgs requires 150 ns memory chips which support the /CAS before /RAS method of memory refresh. In general, discount houses and mail order outlets sell chips for much less than Apple dealers.

Q. What is the ProDOS "File Backup Bit?"

A. It was designed to help keep track of which files on a hard disk were changed since the last time that a backup program was run. Each file on a ProDOS volume (i.e. disk) has a directory entry. The Access flag byte in the directory entry keeps track of whether the file was locked, etc. You can examine directory entries using any ProDOS disk zap utility. The Access flag has an offset of $1E from the start of a file's entry. The third bit in that byte is the "file backup bit."

ProDOS can operate in two different modes. Ordinarily, ProDOS sets the backup bit whenever the file is changed (e.g., after a CREATE, RENAME, CLOSE after WRITE, or set_file_info.) See page 172 of the *ProDOS Technical Reference Manual*. However, you can suppress such changes of the backup bit by storing a $20 at location $BF95. In this mode, the backup bit can be set using a mask value of $20. If you are using the Machine Language Interface routines, you can set the value of the Access flag byte using either the ProDOS create ($00) routine when creating the file or the ProDOS set_file_info ($C3) routine. In each case, the fourth byte in the parameter list should be the access byte.

To set the backup bit in an existing file, call get_file_info ($C4) using a parameter area with 18 bytes. Then OR in a $20 in the fourth byte of the parameter area, and change the parameter count (first byte) to 7. Finally, call set_file_info using these same parameter bytes as modified.

Q. A few months ago, you listed a program which identified which drives are connected to the IIgs Smartport. Is there any way for the program to distinguish between a UniDisk 3.5 and an Apple 3.5 drive?

A. Yes. Calling the Smartport with the Status command ($00) subcommand ($03) returns both a device type and a subtype in the "device information block." If the type is $01, then the drive is either a UniDisk 3.5 or an Apple 3.5. You can then check the subtype. A 0 means that it is a UniDisk 3.5, while a $C0 means that the drive is an Apple 3.5.

A fair question would be what difference does it make to your program. If you use ProDOS instead of talking directly to your disks, your programs will treat both drives the same. However, there are important differences when handling the drives directly. For example, the UniDisk 3.5 has its own microprocessor, while the Apple 3.5 uses the IIgs' microprocessor. Therefore, it is important to shift to a 1MHz clock speed when accessing an Apple 3.5 drive.

AppleWorks 2.0

Q. How can I get my copy of AppleWorks 2.0 to recognize the built-in clock on the IIgs?

A. You must use a version of ProDOS 8 which is 1.2 or later. Remember that ProDOS 8 is stored in the P8 file on the IIgs System Disk. You can launch AppleWorks after booting the System Disk. To create an AppleWorks disk which can be used as a startup disk, make a copy of your /APPLEWORKS disk and replace the PRODOS file on the /APPLEWORKS disk with the P8 file from the System Disk. (That is, delete /APPLEWORKS/PRODOS then copy P8 and finally rename /APPLEWORKS/P8 as /APPLEWORKS/PRODOS.)

Q. Is there a bug in AppleWorks 2.0 for the IIgs? If you run a program which uses the hi res screen after leaving AppleWorks 2.0, you get garbage.

A. Yes. AppleWorks 2.0 turns off "shadowing" for all memory except the text screen and does not turn it back on when you quit. Jim Luther reported a patch in the December 1987 *Open Apple*.

```
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, 9, 8, 141, 53, 192, 96
40 CALL 768
50 END
```

Save this program and then run it between your AppleWorks 2.0 session and your hi-res program. By the way, I continue to recommend *Open Apple* for anyone seriously interested in programming on the Apple II. Subscriptions are $24 per year. (P.O. Box 6331, Syracuse, NY 13217.)

Hardware

Q. When displaying a full white screen on my Apple RGB monitor, I get a thin grey line on the bottom third of my screen. Is there a fix?

A. No. The thin line is caused by a fine horizontal wire that is required to stabilize the color mask in the CRT. It is inherent in the design of the CRT and can't be changed.

Q. On the Apple //e, the main and auxiliary RAM banks were served by two different sets of RAM chips. By running a memory test program, a user could isolate the bad chip and replace it. This doesn't seem to work on the IIgs.

A. The memory mapping on the IIgs motherboard is different than on the //e. In the //e, separate banks of 64K RAM chips served the main and axiliary memories. In the IIgs, each physical bank of 64K RAM chips actually serves portions of both the main and auxiliary memory. Hence, you should use

contd.

the builtin memory test program designed specifically for the IIgs in order to isolate the bad RAM chip.

Q. Do you know of any optical character readers that will work with an Apple II?

A. Optical character readers, which are devices which will convert printed text into characters in the computer's memory, have become more reliable and are in widespread use. A few years ago there were several OCR's on the market which could be attached to a serial port or a super serial card. These machines worked on any computer which supported the RS232 interface. Recently, users have been demanding machines which will read both text and also digitize graphics. As a result, products have been redesigned to support both functions by bundling the reader with a control card. Because the market for OCR's is primarily on IBMs and clones, the current products tend to work on only the IBM PC's. The October 13, 1987 issue of PC Magazine reviewed the available OCR's. Calls to several manufacturers indicate that they don't support the Apple II although some support the Mac. If anyone out there knows of an OCR for the Apple II, please write and I will share the information.

ANNAPOLIS APPLE SLICE NEWS

by Katherine M. Cave

At our December meeting, we installed new officers:

President: Craig Contardi	Publicity: Jurij Solovij
Vice-Pres.: Charles Schindler	Membership: Steve Toth
Secretary: Katherine M. Cave	Disketeria:
Treasurer: Robin Ellinwood	Apple: Jim Taylor
Programs: Lou Aymard	Mac: Nat Frampton
Apple II : Tim Colmus	IIGS: Ray Settle
Mac: Casey Kester	Group Purchase: Manse Brousseau

The former President, Steve Toth, thanked his officers and the membership for their help during his term and then turned the meeting over to the new President, Craig Contardi, who outlined his plans and hopes for the coming year. More programs on telecommunications are planned and some workshops are projected for March. It is hoped that a BABBS communications center will be established; a hotline for the local area will be in force by February; and a beginner's corner will begin soon. The meeting was opened to the membership for discussion and suggestions. These included more member social functions, and more meetings on telecommunications. The meeting adjourned at 11:30, with some of the group going to the lab to use the equipment with material that Craig had previously set up.

The next meeting will be on Feb. 13 at 10 AM in the Careers Auditorium of Anne Arundel Community College, Arnold, MD. For further information, call the President Craig Contardi at (301) 674-2344 or the Secretary Kay Cave at (301) 266-9752.

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TECH TIDBITS
APPLE II FAMILY

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IIc PDL(0) Discrepancy

? On the Apple® IIe, the following program works:

```
10 HOME:GR
20 COLOR=0:PLOT P%,39
30 X=PDL(0):P%=X*39/256+1
40 COLOR=3:PLOT P%,39
50 FOR T=1 TO 10:NEXT T:GOTO 20
```

It draws a character whose horizontal position is dependent on the joystick's horizontal deflection, then erases it. On the Apple® IIc, however, the joystick reads only to about 185 [line 45 PRINT X], and the character only travels about 2/3 across the screen. If the same program is Run with TRACE on, it works fine! Our customer wants to know why, and we're rather interested, too...

The most likely explanation for the problem you cite relates to the way the computer "reads" the Game ports. There is a variable resistance in series with a standard resistance and a capacitor that is "timed" by a 555 counter. "Normal" timing interval from trigger read to complete discharge is approximately 3 milliseconds. It may be that the IIc is just a "smidgen" faster than the IIe. If that counter is polled at a faster rate than "expected", you will get a "smaller" reading than "full scale" (255). By turning TRACE ON, you allowed for just enough of a delay (Micro-seconds difference) to let the counter count the time of full discharge of the RC (Resistor-Capacitor) network. As a suggestion, you can scale the reading that you get to give a value within the range needed. I.E.—before ACTUALLY using the Joystick, you can take a sample full scale reading (in this case it may be 185 as you indicated). Use this value as the basis for your scaling. As you use the joystick, it will be necessary to convert the value read into the range expected...(I.E. - first, presume that REFVAL=<sampled full range value> (185), then the following statement "X=PDL(0):P%=((X/REFVAL)*39+1)" should give you the same result as line 30 above.

Name That Folder!

? How do you name folders on the Apple ®IIGS? We are using a HD20SC on a IIGS, and so far we have not been able to name a folder. We have tried double clicking on the (censored) folders, pulling down the (censored) menu item. All has gone for naught, we have a desktop full of "untitled A-Z". We would be grateful for any help you can offer.

To name a folder on the IIgs desktop, select "Make a New Folder" from the File Menu on your Menu Bar (unless you already have the folder that you wish to name). Now, select the folder by single clicking on it (a double click will open the folder), and while the folder is selected (highlighted), return to the File Menu and select "Rename" from the pull down menu. Type in the name of the folder and press return.

+++ Won't Disconnect

? A customer is using Apple Access on an Apple IIe. She can dial in to a service correctly and use the modem, but she says she cannot disconnect. "+++" doesn't do anything at all. How can she disconnect aside from turning the modem off?

The "+++" command will not disconnect you from an on-line service. You must issue the correct disconnect command recognized by the system you are connected to. Every on-line service has a help file on-line which will indicate what word or words it recognizes as a log-off. Most services use commands such as "bye", "off", "logoff", etc. The "+++" command is not a replacement for this logoff command. It is a command that can be issued to the modem, and is detailed in the modem's manual. If after disconnecting from the on-line service you find yourself at an @ prompt, you are probably calling through a Telenet™ line, and typing "Hang Up" (without the quote marks) will disconnect you.

IIgs & Keyboard Connection—I Want to Make Music!

? We have received numerous inquiries about how to hook up a keyboard to an Apple® IIgs. Can you help us out?

Your best resources for connecting the IIgs to a Synthesizer or keyboard are third party vendors, such as Passport Designs located at 625 Miramontes St., Half Moon Bay, California 94019 (415/726-0280) who specialize in MIDI software and hardware.

IIgs and AppleShare - I Can't Gain Access

? After connecting my IIgs to an AppleTalk® network on which there was an AppleShare™ file server, I attempted to select the file server. There was no disk I/O and no file server was found. What am I doing wrong?

A IIgs on an AppleTalk network can access on-line printers, however, at this time there is no solution for accessing the file server.

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APPLEWORKS TAX TEMPLATE UPDATE (REVISION 1)

by Paul Koskos

No matter how often you proof read something, the Law of Minimum Astonishment states that there will be no less than one error more than the number found! Add to that the fact that IRS decided to make a cute improvement in Form 1040 between the advance proofs which I obtained, and the final forms mailed out by the IRS to the peasants after Christmas.

Sooo-oo, following a hectic weekend, Revision 1 was issued and is available at the Pi office at no cost to anyone who purchased the original issue at the December meeting or since.

It includes the following specific revisions, as well as a few other minor ones:

1. **Schedule A, line 25**—a formula was left in from last year which automatically selected a deduction based on your Filing Status. This is now corrected.

2. **Form 1040, lines 32 and 33**—These were reversed in the preliminary forms, and did not include an adjustment for Blindness or age over 65 for the Standard Deduction.

3. **Form addresses in the window at the bottom of the screen**—These were incorrect in Rev. 0, because they were not corrected when the template was originally edited. This has been corrected in Revision 1.

Our apologies for any inconvenience caused.

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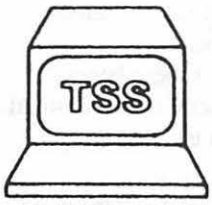

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I LOVE APPLE MUSIC—SIMPLE APPLE MUSIC: Part 8

by Gary Hayman © 1988

In the past seven articles I have presented some systems that allow you, the novice or the non-musician, to take advantage of your Apple in producing musical sounds. We have walked through clicks to tones. I covered some interesting techniques that allow you to use DATA statements or TEXT files to hold your music.

We spent a lot of time learning something about the musical staff and all those "strange" musical notations. Using what I have presented, you are now able to take a simple piece of music and program your musical piece. I have approached the subject always from the viewpoint that you are a non-musician and non-"techie".

Most of the listings were short, the few that were longer were worthwhile spending the time typing them in. If you haven't had the opportunity to type the listings, the author has available all the articles and all the listings already on a disk for your convenience.

IMPROVING THE SOUND

Most likely you have been listening to the sound coming from your Apple from that little pip-squeak of a speaker hidden under the keyboard. While it is quite adequate to give you a beep or a click, let's face it, it is not the best for your music. There are a couple of ways that you can improve the sound.

1. AUXILIARY SPEAKER—(Apple][,][+, //e). I highly recommend this technique. I use it myself and find that I get terrific sounding music from my old Apple][+. The cost is low, about $14, and you can set everything up in less than an hour. It does take a little soldering ability to do this, but if you don't know how, I am sure that you can find someone to help you with it. Most of the time I will be referring to Radio Shack part numbers and Radio Shack's prices. You can, of course, purchase the parts elsewhere, but for the purpose of this article I will use the aforementioned retailer because of its many outlets. For this technique, YOU DO NOT CUT ANY WIRES THAT ARE INSIDE YOUR APPLE—you don't need to. Please refer to Figure 1 for a general schematic. The drawing is not meant to be in exact proportion.

First, here is a list of Radio Shack parts that you will need:

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74-283 ($2.29) Two-conductor Plug and In-line Jack Set
278-1292 ($2.49) Hook Up Wire Pack, 18 Ga. stranded. (or use anything you got)

Molex plugs: (I will tell you how to get these later):

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08-50-0114 Crimp Terminals to fit above (4 needed - get more)
22-03-2021 4030 series. .100" Square Pin Straight Wafer, 2 circuits, (1 needed - get more)

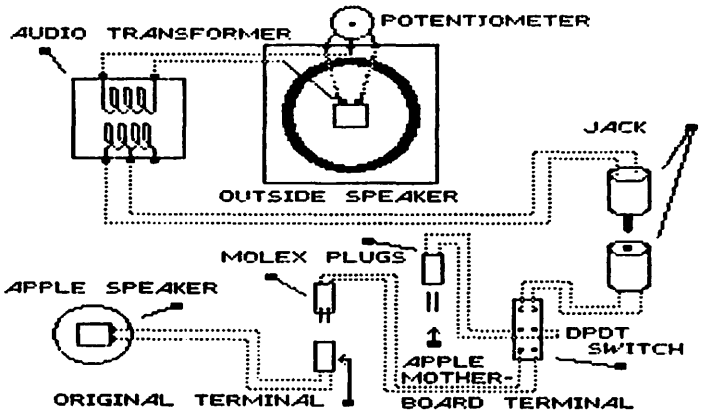

Figure 1

SPEAKER-TRANSFORMER-POTENTIOMETER: With the speaker removed from the box, cut a hole in the center of the face of the speaker box with a diameter slightly smaller than the speaker's paper cone. You will be using the box as a speaker cabinet. Place the potentiometer, points down on top of the box in the center. Mark the spots where the points touch the box and punch small holes the size of the points so the potentiometer will stand up when the points are inserted (see diagram). Solder two 6" wires to the two outside points of the "pot" and solder the other ends to the speaker terminals. Solder two 6" wires from the two-terminal end of the audio amplifier (connect to the red and the white leads). The wire from the red lead goes to the middle post of the "pot", while the wire from the white lead goes to any one of the speaker terminals. Solder them. NOTE: This is all done from the inside of the box. The audio amplifier will be housed inside of the speaker box with the speaker. Punch a small hole in the bottom back (or side) of the speaker box. Run two longer wires (distance from speaker to computer plus some slack) through this hole and solder to the middle and to one of the outside terminal leads (you may use the brown and black leads). The other outside terminal lead is not used (see diagram). Protect all exposed connections with electrical tape. Solder the other end of the wires to the male portion of the plug from the plug and in-line jack set. Make sure that you put the sleeve on the wire first before you do the soldering. Now you have an unpluggable speaker with audio boost and volume control.

SWITCH AND CONNECTORS: Solder a 10" (approx.) wire to each of the 6 poles of the DPDT switch. Solder the two wires from the upper terminals to the female portion of the jack set. Again, pay attention to the sleeve. The two wires from the middle poles of the DPDT are now soldered to two of the crimp terminals. Before soldering, let me suggest that you play around with the crimp terminals and see how they fit into the terminal housing. Once soldered, insert terminals into one of the terminal housings—they will stay. With the two wires coming from the lower terminals do the same thing as you just did using two new

contd.

crimp terminals and a new terminal housing. Insert the square pin straight wafer, short pins, into the other end of this terminal housing.

Recheck and double check all connection continuity and soldering. Make sure that there are no shorts. Cover exposed solder and wire areas with protective covering such as electrical tape, to prevent shorts. You realize, of course, that the author assumes no responsibility for any damage that you might do by incorrect wiring, etc. In other words, total disclaimer for your actions in this matter.

TURN THE POWER OFF TO YOUR COMPUTER! Remove the cover from your Apple. You people who own a //c are NOT supposed to be doing this! Looking inside just below the keyboard on the left side you will see the small speaker. There are two wires leading from the speaker across the motherboard to the front right side. You may have to use a flashlight and really look toward the front to see them. These wires are connected to a Molex terminal housing which rests on two pins sticking up from the motherboard. GENTLY lift the housing free from the pins. Put it on and take it off several times till you are sure that you can do it easily. Now plug in the two prongs that are on the ends of the two wires coming from the bottom terminals of the DPDT switch into the housing that you just removed. It should slide on easily. Plug the terminal housing that ends the wires coming from the middle pins of the DPDT onto the pins sticking up from the motherboard. It too should go on easily. NO FORCING PLEASE! Run the DPDT switch and the jack out the rear of the Apple and replace the cover.

TESTING: Set the speaker potentiometer in the middle of its range. Turn your computer on. Do a RESET! Do a couple of CTRL-Gs to hear the beep. Where is the sound coming from? Switch the DPDT switch in the other direction. One way the sound comes from the Apple speaker, the other way it comes from the auxiliary speaker. Make a note of the direction of the switch that produces the sound from the speaker you choose. Now with the sound directed to the auxiliary speaker, do some more CTRL-Gs and move the potentiometer throughout its range. Note which direction is loud and which direction is low. Now run a program that has music. Perhaps something you wrote as part of this series, or a commercial product. Listen! Wow! Try it with a game. You have just added new life to your Apple.

NORMAL CONFIGURATION AGAIN: The way the circuit and connections are designed permit you to rapidly put every thing back in to its original condition in less than a minute. Simply, WITH THE POWER OFF, remove the cover, unplug the plug and jack in-line. Unplug the Apple speaker housing from the two pins that lead to the DPDT switch. Unplug the other housing from the motherboard pins. Plug the Apple speaker housing onto the motherboard pins. Remove all the unplugged wires, plugs, housings and switch; replace the cover, and you are in business again in your normal configuration.

GETTING MOLEX EQUIPMENT: Four years ago, when I was putting together my auxiliary speaker, I wasn't able to find the Molex connectors that fit my Apple in any of the local stores. Molex's Corporate Headquarters is in Lisle, Illinois. I called them and told them what I wanted, and they directed me to their Southeast Region Office. The normal minimum order for parts is $25. What I wanted would cost about 25 cents. Their customer service department was very happy to send me what they call a "sample order", at no charge. I asked for a few of the terminal housings, straight wafers, and crimp terminals. They arrived in a few days. Here are the address particulars. I hope that they are current and that you can do the same or similar thing: Southeast Regional Office, Molex Incorporated, 8 Perimeter Center East, Suite 8000, Atlanta, GA 30346. 404/396-6120.

2. CASSETTE PORT. I am mentioning this second technique although I have not done it myself. I want to thank Bruce Field for some of the technical information that I am basing my comments on. If your Apple has a cassette port, you can direct the sound there instead of through the speaker; and through the use of an audio cable, send the signal to your monaural or stereo amplifier's AUX input. You could use an audio cable such as Radio Shack's #42-2368 ($3.09), that has standard phono plugs on each end to connect the cassette OUTPUT port of your computer to the AUX input connector of your amplifier. This way you can use your present large wattage amplifier output to your room speakers for listening to your sound.

Now there is a little problem here. Some of the commercial music generating programs such as MUSIC MAKER and ELECTRIC DUET allow you to make a choice if you want the music to go to the internal Apple speaker or to the cassette port. Others, do not. If you remember, in my earlier articles I was discussing causing the speaker to click by addressing location 49200 ($C030). It was the constant controlled addressing of this location with a PEEK or POKE that caused the sounds to be produced by the speaker. This was also accomplished by the various SOUND DRIVER binary programs that were listed in Parts 1 and 5 of this series and used throughout the series to produce the music. If you want to re-route the music signals to the cassette port instead of the speaker, you would have to substitute the location 49184 ($C020) for the 49200 ($C030) that is contained in the programs.

You could accomplish this easily in Listing 17 (VARIOUS SOUNDS) contained in Part 6 of this series, by changing the 'S = 49200' on line 10 to read 'S = 49184'. Then your clicks would go to the cassette port. Authors opinion: this is a waste of time. Who wants to hear clicks and buzzes in their living room. It would be more appropriate to change the two SOUND DRIVERs in Parts 1 and 5. To accomplish this in Listing 1 (SOUND DRIVER GENERATOR)—which appeared in Part 1 of the series—change the '48', that appears on line 30 to read '32', and RUN the program. The new SOUND DRIVER that is created will now send the sound to the cassette port. To get the sound to go back to the internal Apple speaker or your new extension speaker, you would have to change the '32' back to a '48' and reRUN the program, creating your original SOUND DRIVER. To do a similar thing with Listing 15 (NEW SOUND DRIVER GENERATOR)—which appeared in Part 5 of the series—you would have to change the '48' that appears on line 110 to read '32' and RUN the program. Of course to get it back to its original state, change the '32' back to '48' and RUN the program again.

You might like to experiment with this but I am not sure it is worth the trouble, especially when you hear the music from the auxiliary speaker that you constructed. However, if your computer is near your amplifier (mine isn't) you may decide that this is the only road to travel.

contd.

ELECTRIC DUET REVISITED

I may have been a little too harsh in my discussion of ELECTRIC DUET by Paul Lutus. While playing around with it, after I completed the last article, I discovered, by accident, some undocumented features that allowed me to change or correct notes and durations more speedily. Further, I made it a point to discuss the matter of the choice of the second note with some professional musicians. Although they don't all agree, or at least have different ideas, I was able to piece together several systems that help in choosing the second note—remember, this was my major objection to a two note (duet) system—if you don't know what to use as the duet note, what good is attempting to write music with it. I proceeded to develop a remarkable program that allows you to quickly enter music in a file using your graphics tablet and a special template. With this program, called QUICK.DUET, one can cut down music programming time from hours to just minuets (sic). QUICK.DUET is presently under consideration for publication by a major software publishing house. With it I wrote two musical programs, 10 HAYDN MINUETS and ALPINE MELODIES which have also been submitted for disk publication by disk magazine publishers. As you can see, I have made a turnabout regarding ELECTRIC DUET. I will not abandon, however, MUSIC MAKER or some of the systems that I shared with you in my series of articles.

Well I hope that you have enjoyed the series and that it may have peaked (Ed. Note: or "POKEd") your interest in 'older type of Apple music'. Of course, when you listen to what is happening in the IIgs field, it blows your mind. I hope that someone will do a series such as this one, on the new music, showing tricks and techniques. Please keep the non-musician in mind when you write the articles so that we can enjoy your efforts.

Photo by peter Combes

Offer him $5.50, Dad!

PROGRAM INTERFACE SIG (PI-SIG) NEWS

by Robert Golden

Our group met December 7, in the WAP conference room. Without the Apple IIgs, we turned to theory, experiences, and future interests. Problems of debugging programs for the IIgs were tackled. This machine has a dual personality, the 8-bit mode and 16-bit mode. Documentation and programs for it are relatively new. Therefore the programmer is cautioned to know the machine and to expect bugs to be found in either APW documentation or in the program or both. This requires careful "housekeeping" of the programming steps. As an example, the mixing of real and floating point numbers, such as dividing a number by an integer is complicated by many layers of routines.

Members compared the C language vs. Pascal for accomplishing various programming tasks on the IIgs, e.g. a "great" C language program may run much slower than expected.

Tool sets were the next area of interest. Members noted that some tool sets exist but are not listed. We had questions such as, "Where do you get the Font ID?" The Print Manager and the Dialog Manager werediscussed, and the detailed steps to bring in the tools and apply them were enumerated.

Finally, the question of program and data storage were brought up. The merits of various hard drives incorporated into the IIgs, were compared. Recent successful use of a name brand of hard drive after several early failures, was described by Jim Winter. At this point, we adjourned.

Our January meeting was held on the 4th, in the WAP conference room, 15 minutes delayed by the arctic weather and the lingering effects of the long holiday weekend. We are a small group, but a quorum was present, and we were unanimous in agreeing that conditions weren't appropriate for anyone to bring an Apple IIgs to the meeting. Everyone voted to urge the WAP Board of Directors to follow through on its decision to purchase the IIgs. We agreed that this computer, available for meetings and for service of Apple IIgs concerns to a substantial and growing number of WAP members, should be on board as soon as possible. It was argued that access to this machine now, while the learning curve is rising, is more important that later when programming interest levels off.

After an hour of discussing general aspects of the PI-SIG program, we adjourned to this member's home to work directly with the IIgs. Walter Urban demonstrated portions of a modified version of Ray Hobbs' musical program. It was an attempt to understand the sound portion of the Ensoniq chip in the IIgs. Discussions continued on some general features and performance of the IIgs. Now that the holiday is receding into the past, and everyone is getting back on schedule, we expect our next meeting to be even more interesting and fruitful.

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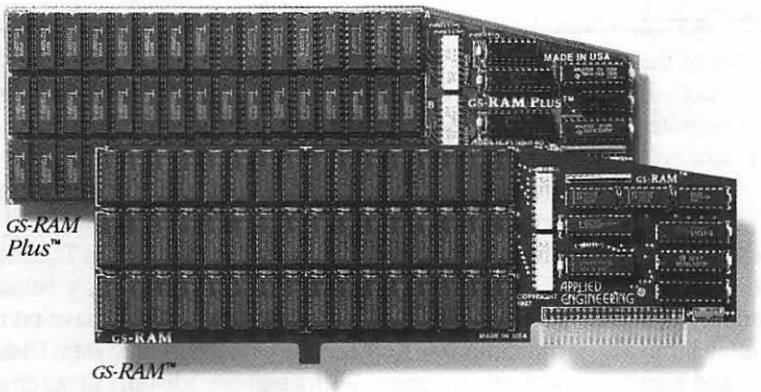

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SCSI HARD DRIVE ALTERNATIVES FOR THE IIGS

by Paul C. Kelbaugh

The last three months have been notable for owners of the Apple IIGS for many reasons. However, I believe this period will be remembered as the time when a broad base of Small Computer System Interface (abbreviated SCSI, and pronounced "scuzzy") hard disk drives became available and affordable in the GS world.

I have absolutely nothing against the very affordable Sider 10 (now discontinued) and Sider 20 megabyte hard disk drives which are extremely popular in the Apple II market. Two Washington Apple Pi members who have been extremely influential in my growth in the Apple II world, Lee Raesly and Kim Brennan, own them. And yet, when I sought out Kim Brennan for advice, he made a point which I could not overlook: the SCSI interface is the wave of the future in the Apple II GS world and any drive I consider should utilize the SCSI. Kim advised me he believes that when the SCSI based CD-ROM devices begin to show up in about eighteen months, all GS owners will want to have SCSI interfaces in place. The SCSI is essentially a high speed, 8 bit parallel interface which is the method blessed by the Apple designers for hooking up to mass storage devices.

Up until several months ago, a consumer with a IIGS planning to add a 20 megabyte hard disk drive which utilized the Apple brand SCSI interface was looking at spending $900 to $1200. And that did NOT even include the price of the Apple SCSI interface (another $130 or so). Several of the Apple licensed dealers I approached (all of whom advertise in the WAP Journal) were very bullish on the Apple brand 20 megabyte hard drive and understandably reluctant to offer an alternative. Finally, one helpful salesperson whispered to me that the Rodime 20+ hard disk drive, which was being aggressively marketed by that Apple dealer for the Macintosh crowd, could in fact be reformatted and used with a SCSI interface on the IIGS. It was available on sale for $799.

I would have bought it on the spot, but that was what I had paid for my IIGS in the Spring of 1987 (See my article in the July 1987 WAP Journal for THAT adventure). And "Kelbaugh's First Law" of computer expansion is. "Never buy a computer accessory which costs as much as the computer itself!"

Armed with this very valuable piece of information, I gathered enough courage to call the toll free numbers for Jasmine Technologies, Rodime Systems and Microtech Peripherals, three respected hard drive manufacturers well known in the Mac community and frequently mentioned favorably on the TCS Conference Three boards. Service representatives for all confirmed that with a minimum of patience, any of their 20 (or 30) megabyte hard disk drives should be capable of being reformatted and used with the SCSI interface on a IIGS. BUT (and it is this "but" which is the reason for this article), they explained they were not actively marketing their hard disk drives for the IIGS and did not have software nor documentation to include with their hard disk drives to support use on a IIGS system. Of course, it would be up to the customer to reformat the hard drive.

On pointed questioning from me, one service rep said "Well, there might be some bugs which cause problems interacting with the IIGS, but I can't imagine what it would be." Another informed me that the current Apple 20 megabyte drives were made for Apple using Rodime components anyhow (I did not confirm this) so I shouldn't have a problem. All informed me the consumer would only get Mac disks with the drives and the drives would arrive pre-formatted for Mac use. I had a flashing vision of Indiana Jones trying to survive in the Temple of Doom.

Fortunately, almost as an after-thought, a helpful service representative (with Rodime) said I would have no trouble reformatting the Rodime 20+ with the IIGS System Disk that came with my computer. With a trembling hand, I wrote down what he said, "After you hook the Rodime cable to the SCSI, do a cold boot from a 3.5 drive containing the IIGS System Disk. From Launcher, open sub-directory SYS.UTILS and then open application SYSUTIL.SYSTEM. Cursor to "Format a Disk". Answer the prompts with the appropriate responses and THAT'S ALL THERE IS TO IT." When he hung up, I had already decided this was all a foreign language—I was out of my league. I was going to buy a nice reliable PROVEN Sider 20 (which already comes with the necessary connecting card and cable) and forget this whole scheme.

And then, it happened. The prices for Macintosh SCSI hard disk drives started falling. Jerry Walz posted a message over on the Mac side of the Pi TCS (yes, many of us Apple II owners ARE closet Macintosh followers) stating he had found a Rodime 20+ (minus the internal fan) for $569 with a "no questions asked" 15 day money back refund. My last reason for waivering had been removed. The price was below what I had paid for my IIGS (and thus did not violate the above stated "Kelbaugh's Law").

Two days later, I had purchased the Rodime 20+ and connecting cable. I also bought the SCSI card for just under $100 (reflecting a Pi discount). Hmmmm, now I was on the verge of violating "Kelbaugh's Law". A voice deep down inside my conscience reminded me I wouldn't have needed the SCSI card if I had bought a Sider or a ProApp hard disk drive. But I convinced myself the SCSI card was an integral part of the future of IIGS porting and I would have bought it in the future anyhow (and thus we have "Kelbaugh's Second Law": "Rationalization is the cornerstone of all purchases for a home computer system").

Sure enough, as I unboxed the hard drive, there were the Mac support 3.5" microdisks. And the documentation NEVER mentioned the IIGS. Since the service reps had warned me of this, it came as no surprise. Still, it is VERY disconcerting to realize that you are about to use a piece of equipment for a purpose not publicly endorsed by the manufacturer. With visions of smoke, fire and "Fatal System Error" flashing on the screen, I turned off my IIGS and plugged in the SCSI card (I chose to use slot 6), hooked up the Rodime 20+ with the cable enclosed with the hard disk drive (Eureka!!! Everything fits!!), took a deep breath and booted up. I told the IIGS control panel I wanted to boot from my Apple 3.5 drive in slot 5, did a cold boot with the Apple Systems Disk in the 3.5 drive—and waited. No smoke, no fire, no strange screen prompts.

Then the nail-biting part. Into the System Utilities and "for-

contd. on pg 31

HOW TO SET UP HARD DISK PROGRAM SELECTION ON THE IIGS

by Paul C. Kelbaugh

In a related article in this issue of the Journal, I have recounted my adventures buying and installing a 20 megabyte hard disk drive for my Apple IIGS. The hard disk drive I ultimately purchased came formatted for the Macintosh Plus and had absolutely no support documentation or software for the Apple II. Out of the ashes of this adventure came a greater issue: How to set up my hard disk drive for the IIGS without dedicated software provided by the hard disk manufacturer?

Obviously, if the hard disk drive you purchase comes with formatting, program selection and back-up software, chances are you will use those programs, at least for a while. But, when the hard disk drive comes out of the box with NOTHING usable for the system installation, it allows the owner to think through what is desired and how you would like your hard disk to "look".

FORMATTING

This one is the easiest exercise. I have used the disk format program on the IIGS System Disk and also the format selection provided on Copy II Plus. Both get the job done. Formatting your hard disk, even without manufacturer provided formatting software is not a problem.

PROGRAM SELECTION

I had a few false starts on setting up how I would select the programs I copied over to the hard disk drive. I'm not into icons (yet, although I acknowledge there is a Mac in my future plans) and gave up after a few days of playing around with the icons on the IIGS Desktop. I just want a screen listing the programs on which I can scroll around a highlighted cursor using either a mouse or keyboard arrows. I got closer to what I wanted with Pinpoint's "RunRun" but it still felt awkward and did NOT support the mouse. Hands-down, I recommend Professor Glen Bredon's ProSel (ProSel stands for Program Selector), price $40, available direct from Bredon at 521 State Road, Princeton, New Jersey 08540. ProSel is perfectly suited for use as the controlling program selector on a hard disk drive. I am aware of at least two other Pi members, Walt Mossberg and Paul Schlosser, who have also been experimenting with ProSel menu selection applications on 800K and hard disk drives. I must acknowledge it was a concept which Walt Mossberg posted on CompuServe several months ago entitled "Cycler Multiple Menu System" which convinced me to use ProSel for my hard drive menus.

A unique application on the ProSel is something called the ProSel Cycler. In layperson's terms, the Cycler allows the user to define a number of "sub-menus". On bootup, it is possible to arrive at a ProSel master menu offering the option of going to one of a preselected sub-menus. I have determined that all of my most heavily used programs fall into one of eight categories (or sub-menus):

WORD PROCESSING	COMMUNICATIONS
UTILITIES	PAINT AND DRAW
FINANCE	DATA BASES
GAMES	GENEALOGY

Upon selection of one of these sub-menus, I get a listing of all the programs I have set up to boot from within that directory. For example, when I choose sub-menu "WORD PROCESSING", I have set up the screen display to look like this:

** WORD PROCESSING MENU **

Appleworks 2.0	CRYPTOR
A.W. 2.0 w/Timeout	COPY II PLUS
Writers Choice Elite	**Other Menus**
	Communications
	Utilities
	Paint and Draw
	Finance
PROSEL	Games
	Data Bases
Applesoft BASIC	Genealogy
PROSEL Editor	PROSEL Cycler

The utility of setting up such a menu may not be readily obvious. However, ProSel allows program selection by mouse or cursor arrows on the keyboard. By studying this sub-menu, you will notice that the user can IMMEDIATELY select one of several word processing programs. For example, in the menu shown here, I keep separate versions of AppleWorks version 2.0 available. One, a very basic unmodified version of AppleWorks boots very quickly. Just below it is a "fully loaded" version with Beagle Brother's "TimeOut" series imbedded which also uses the Applied Engineering Ramcard expansion option. Also note that from this menu, I can "cycle" directly to any one of the other seven sub-menus. This sub-menu also allows me to move directly into Copy II Plus or ProSel for their utility functions without even having to first go to the "UTILITIES" sub-menu. As a final note, it also allows me to go directly to BASIC with one key-stroke.

The versatility of the ProSel Cycler sub-menus is also apparent from reviewing the "COMMUNICATIONS" sub-menu which on my system is set up to look like this:

** COMMUNICATIONS MENU **

POINT TO POINT

PROCOM-A	WAP TCS Line 1	**Other Menus**
		Word Processing
FREETERM GS.	WAP TCS Line 4	Utilities
		Paint and Draw
CRYPTOR	CompuServe 300 Baud	Finance
		Data Bases
	CompuServe 1200 Baud	Games

contd.

PROSEL Genealogy
WESTLAW 1200 Baud
COPY II PLUS
Clinton Computer Board
Applesoft BASIC
Prosel Editor Prosel Cycler

This sub-menu shows the user can immediately select any one of the three listed communications programs and thus easily use their respective strengths. Gary Little's "Point to Point", for example, will automatically convert .BNY files as they are downloaded and would be the communications program of choice for any download application. PROCOM-A will not do this but I tend to use it more because, like a pair of old shoes, it is much more comfortable to me. Again, as discussed above regarding the "WORD PROCESSING" sub-menu, the most used utilities: ProSel and Copy II Plus can be directly accessed with one keystroke without going through the "UTILITIES" sub-menu. Also, by carefully using the program selector format, I can select several "Most-used" bulletin boards and dial them without even having to go through the key strokes associated with the selection in the communication program.

The "sub-menus" for the remaining six categories are similarly configured.

ProSel also provides the luxury of being the default path program once you quit any imbedded selected program. For example, when I quit AppleWorks, I come back to the "WORD PROCESSING" sub-menu. When I quit Point to Point, I come back to the "COMMUNICATIONS" sub-menu. If you have ever "quit" a program and ended up at the Applesoft BASIC prompt ("]"), you will appreciate remaining within ProSel even when you "quit" a specific program.

Between "fine-tuning" and putting in all the set-up keystrokes, I've got about fifty hours invested in customizing ProSel to give me this level of speed selecting off my hard disk drive. But, most importantly, this points out the advantage of choosing the hard disk selection program which best serves your purposes. Obviously, I have not suffered because the Macintosh Plus oriented hard disk drive I purchased did not come with packaged software for the Apple II.

BACK-UP

I was most concerned that my hard disk drive did not come with a back-up program. Having suffered through several painful hard disk crashes at the office on (groan) non-Apple systems, I insisted that I be able to back up my hard drive. I found I had to look no further that Bredon's ProSel program for an exceptional pair of programs: "Backup" and "Restore". I can report only that I use "Back-up" religiously but have thankfully never had to use it to restore after a crash.

SUMMARY

Of all the concerns you might have about buying a hard disk for your Apple II GS, concern about a lack of Apple II specific software should not be one of them. As I have tried to express in this brief article, ProSel will provide you with the primary hard disk utilities and a very flexible program selection process. I hope this will encourage others to share their experiences with Journal readers in how they have configured their own hard disk menu selection systems.

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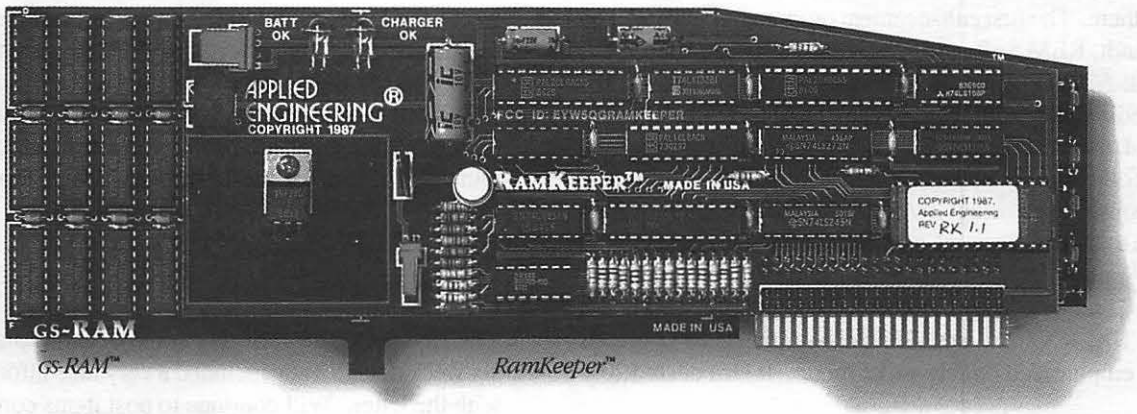

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BEST OF THE APPLE ITEMS FROM THE TCS

by Lou Pastura

AppleWorks Stuff!

DAVE HARVEY ON 11/28

At the meeting today, I talked about two AppleWorks enhancements that I especially like, but I didn't have too much information about them. The first enhancement program is Pathfinder by Randy Brandt, REM Software, P.O. Box 20920, El Cajon, CA 92021 cost: $20. Pathfinder lets you rename files, drop the current subdirectory from the pathname, and most importantly, lets you add to the pathname by choosing from a list of subdirectories. The other program, ExtraWorks Printer Utility by Eugene M. Whitehouse, 25 Kensington Ave. #503 Jersey City, NJ 07304 allows you to customize some of the predefined printers in your copy of AppleWorks. It currently supports colored text, MouseText, and half-height scripts on the ImageWriter II. On the Epson FX, RX, and MX/Graftrax+ printers, EPU allows italics and emphasized double strike mode. It also costs $20.

MIKE UNGERMAN ON 12/19

While scanning through the AppleWorks data base I came across the message in October about using AppleWorks with a mouse. Let me tell you that I am thoroughly hooked on my AppleWorks modified with Super Macroworks and the Time Out features from Beagle Bros. It uses the mouse for almost all the cursor functions, not just the menus. The configuration program lets you set up the sensitivity for the mouse in the horizontal and vertical directions. The mouse then works in all modules moving the cursor up/down/left/right in word processor, spreadsheet, and data base. Coupled with the ProSel selection program, I "almost" don't touch the keyboard from turn on to turn off, but need to type something to justify the modifications <grin>.

SKIP MORGRIDGE ON 12/01

I just picked up a second hand 64K][+ and am unable to get AppleWorks V1.3 to run on it. It works fine on my //e. I seem to recall something about a patch to configure AppleWorks and/or ProDOS to run on a][+ (but maybe that was on a 48K machine). Anyway, I need some assistance. Do we have this patch hidden here in one of the libraries?

BILL HUGHES ON 12/02

Checkmate Technologies sells a program that will permit AppleWorks to work on a][+. I don't know what the price is, but many magazines have ads. (*Nibble* and *Call-A.P.P.L.E.*, do I think.)

KEN DE VITO ON 12/02

You need a program called Plus Works or Plus Works XM (depending on whether or not you have extra Memory)—Norwich Data Systems puts it out and VF Associates sells it. I also understand that the Applied Engineering RamFactor Card comes with a patch for the][+ so that it can run AppleWorks. Hope you got a good deal!

Zipping Along (Almost)

ALAN HOFFMAN ON 12/21

Any word yet on the infamous Zip Chip from Zip Technology? I have been reading the messages on GENIE, and they are beginning to sound litiginous. It obviously would be fantastic when it arrives, but I am reminded of the recent fraudulent ad posted in a number of computer journals this fall, where people were asked to send in money orders or personal checks only—they made a killing advertising NEC Multisync monitors for $299, until they were caught. I have always trusted "APPLER's", but this delay is almost unbelievable. When the //e chip is selling, and has been reviewed on this board, then I will plunk down cash for the 12 mHz //GS ZipChip.

WALLACE RIDLEY ON 12/22

I still have not received the ZIP CHIP yet, and I still haven't been billed for the hardware either. I did receive a letter from ZIP TECHNOLOGIES verifying the order and explaining the four to six week delay. They included a very nice information package with the letter. Will continue to post items concerning the ZIP CHIP as they come along.

JOHN CONNAUGHTON ON 12/29

I just talked to the ZIPPER's in LA LA Land. 1-800-628-FAST. They are on back order until sometime in FEBRUARY. They claim that they are waiting for the chip-maker to deliver the goods to them. Also, their tech rep said the transwarp would be obsoleted by their chip since it doesn't tie up a slot, doesn't require unusual power, and, since it uses a caching scheme, it REALLY speeds up software. They use "Print Shop" as an example. (This could be the only difference in speed between transwarp and the zipchip since they both run at about the same speed). However, the zip doesn't change the speed of slot access as is possible with the transwarp, so transwarp may be faster on hard disk access. The price seems ok and is much less than a Transwarp but hang on to your money until they clear up the back orders.

GS Print Shop Goodies

CORY MCNUTT ON 11/29

Just got the new GS Sampler Edition graphics library for the Print Shop. It has 75 new colored graphics, 10 new Full Panels for letterhead, 14 Full Panels for cards and signs, 30 background patterns (10 B&W, 20 colored), 10 new fonts, and 30 borders (10 B&W, 20 colored). In all areas they are welcomed additions to the owners of Print Shop for the GS, and will really enhance your designing capabilities. The graphics have bright colors and most are fairly detailed. The Full Panels are excellent and getting more sophisicated all of the time—now if we only had the LQ to give us the better printout!

Try This One!

DAN HUGHES ON 12/27

Try changing the name of a 5.25-inch disk by double clicking on its name and typing in the new name. It comes out backwards!

AE Transporter

ED DONNELLAN ON 12/04

Has anyone gotten an AE Transporter yet, or seen one demon-

contd.

strated? The idea is appealling if it works well, but I think they will have to cut the price substantially to sell many.

JOHN PAFF ON 12/20
I've gotten to use one in connection with a demonstration we did for the Federal Government. Yes, it works brilliantly. We ran Lotus, Dbase II+ and other software, without a hitch. Flight Simulator looks better on the IIGS color monitor than it does on any PC or Clone that I've ever seen. I only wish that they were available sooner.

Fatal Error! HMPH!

BOB COSGROVE ON 12/24
What is a FATAL SYSTEM ERROR 0682? I ran into this after turning off my monitor for a short time. When I turned it back on (I was in WordPerfect GS), my screen was filled with garbage, the likes of which I had never seen before. When I reset the system, I got the error message. I then could not reset the machine; the error message kept appearing. It only left after I turned off everything and started up again.

JAMES FRISON ON 12/24 08:19AM
According to the Toolbox reference, $0682 is an Event Manager error which indicates that the queue handle has been damaged, i.e. a pointer to the event queue was somehow (voltage spike, program writing to an area of memory it
shouldn't write to, Act of God, etc.) corrupted. My guess is that turning the monitor off and on caused it.

JON THOMASON ON 12/24
My guess is that the monitor had nothing to do with it. It was that he left the computer alone for a while, and the problem just happened to occur then. I got this error a couple of times, when I got the wrong kind of RAM chips, or installed them wrong. Bob, have you recently upgraded your RAM? The folks I got mine from were all IBM people, and weren't sure if they'd work. They let me swap, though, when I found out they didn't. (EDITOR'S NOTE; Shows how much all these self-styled hardware gurus know! System Error $0682 means you forgot to call the WOZ before turning off your monitor!)

New GS System Disk

BOB COSGROVE ON 12/30
Has anyone seen the new GS System Disk User's Guide? This new manual supposedly provides "extensive documentation of the Finder and other functions of System Disk 3.1." P.S. I've always wondered: Whatever happened to System Disk 3.0?

JON THOMASON ON 12/30 10:41AM
System Disk 3.0 was the one that crashed Gassee's hard drive during a demonstration, and never made it out of the room... <grin!>

ProSelUpdates Now on the TCS!

WALT MOSSBERG ON 01/01
With Glen Bredon's permission, I have just uploaded here the latest revisions of his fabulous ProSel program selector and its accompanying great utilities. The uploads are in our File area #2, utilities. But there's a catch. They are encrypted, copyrighted and for ProSel owners only. For details, read the file README.PROSEL. Enjoy.

SCSI HARD DRIVE contd. from pg26

mat a disk". I told it to ProDOS format the disk in slot 6, took a deep breath and hit return. This was obviously the point of no return. I was erasing all that good Macintosh stuff on the hard drive and replacing it with—well, I hoped with ProDOS format. It seemed to work. The hard disk panel light blinked and fluttered (was it winking at me?) If you have never formatted a hard disk drive, it makes a very unusual noise. If you aren't totally convinced what you are doing is going to work, the sound is terrifying. Then, I started copying files over to the hard drive and got no strange screen prompts. In fact, I copied the IIGS System Utility disk over to the hard drive, went back into the control panel and indicated I wanted to boot from slot 6 (the SCSI/hard disk disk slot I had chosen), did a cold boot and everything worked. I was now booting and running my system from a 20 megabyte hard disk drive which did not claim in its materials it would even support my system.

That was three months ago. As I look back, it seems so foolish that I would have even worried about what I did. The 20 megabyte "MacIntosh Plus" Rodime 20+ has over a thousand hours of use with no crashes and no down time operating with my IIGS. It is also about 80% filled. I'm starting to lay awake at night thinking about the Jasmine 50 and 80 hard drives. Of course, that is not directly possible now since the maximum size storage area ProDOS recognizes is 32 megabytes. But, I figure that will change soon. Or, there is no reason the hard disk can't be partitioned into several volumes of less than 32 megabytes each, or—hmmm, should make another good article for the Journal in a few months!

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THE BEST OF THE TCS "PI EDUCATORS" BOARD

by Peter Combes

Apple Support

DAVID HARRIS ON 11/02

Does anyone have info on Apple's possible support for innovative uses of computer systems for assistance services? My mental health organization has asked me to get any info...

PETER COMBES ON 12/17

Have you seen the Apple pamphlet, "Learning doesn't have to stop when school does"? It contains an interesting chart of "a few of the thousands of Apple Home Education software titles available," classified by school level and subject. A good list, provided your favorite software isn't one of the thousands left out.

Current Topics

PETER COMBES ON 11/02

We now seem to have emerged from the Corvus crash, so we can restart the conversations that we were having. Some of the points we were discussing were:

1. Has anybody used any of the SAT programs?
2. Any current developments with Smalltalk?
3. Has anybody taught the more exotic Mac word processors?
4. Shall we start uploading lesson plans?
5. Has anybody any experience with the various educational bulletin boards?
6. Anybody want to add to this list?

Job Aids for the TCS

PATRICIA KIRBY ON 11/02

How about we educators devising a clearcut set of job aids on how to use this system? Since we may have some expertise among us—seems a natural for instructional sorts of folks. After being trapped into writing a message that I couldn't get out of despite frantic attempts to wade through the huge blocks of text in my WAP handout, in time so I didn't get cut off the Board for lack of entries, this came to mind. Maybe something like Compuserve offers—a tree, with branches in color and short, clear wording as to what you get if you do thus and so in the system. Yes, I would like to add to the list as to interests in the relationship between learning style and use of computers.

Other BBS

JOHN MASSEY ON 11/02

FYI: The National Science Teachers Association has a BBS in Washington (202) 328-5853. It has boards for specific fields such as Biology, Astronomy etc. Plenty of educational related downloads but almost all IBM related. Try it.

JESSICA WEISSMAN ON 11/04

A while back there was a local ASTD bulletin board, set up as an interest section on a FIDO board. Is it still around?

Software

JOHN MASSEY ON 11/02

I've uploaded an interesting demo of an educational program based on the use of AppleWorks Database and Spreadsheet. Called Power of Nation States, it shows a very innovative use of AW for teaching Global Studies and World Geography. The file is large since it takes up most of a 5 1/4 disk when unbunnied and umsqueezed. Check the AW downloads, #33 (I think). If there is interest, I could upload just the program introduction and a lesson plan as separate files to allow you to determine if there is interest in getting the rest of the program.

DANNY GROVEMAN ON 11/16

This is my first time on this board, so I am sure that I have missed many such discussions in the past. Having been in the computer business for four years, it has always struck me what a difficulty it is to know what educational software is worth using. I have both an Apple //e and a Mac, but have not been able to tap into any resource that reviews and recommends educational software on any kind of evaluative basis. Namely, does it work? And what does it do? Also, if there is anyone that reads this board that has access to the list (if there is such a thing) of software used in Montgomery County Public Schools or knows where to find one, please let me know. It occurs to me that the educational power of the personal computer has been largely neglected if not downright ignored. Anyone else have the same perception? I work at Computer Age in Beltsville 937-0300. Call me. Or leave a message so others can benefit.

JESSICA WEISSMAN

The Educational Software Selector (TESS) is a publication put together by a national teachers group. It is administered by Cordata, a company in Bethesda. I'm sure they could give you some help. There are also numerous ed tech and computer-in-the classroom publications which regularly review software. Even Family Computing gets into the act. And if you want to know about a few good things for the Mac, an article in a WAP Journal from early spring lists quite a few, with reviews.

PETER COMBES ON 11/17

Perhaps we should check out which relevant publications are subscribed to by the WAP office. As a first step, lets make up a list between us of what publications would be useful. The list might start:

Educational Software Selector (TESS) Cordata
Family Computing.

Anybody like to continue the list?

DAVID KREISBERG ON 11/24

I found out yesterday that Sunburst has upgraded their M-ss-ng L-nks programs. You can contact them using their 800 number (which I don't have handy, unfortunately). They will send new copies of the disks wo/ charge and ask that you return the old disks when you receive the updates. When I called them today I told them that I hadn't sent in my registration cards yet, and they insisted on sending the upgrades right away, even though I hadn't finished the paperwork. This is typical of the 1st class service

contd.

I've gotten from Sunburst—excellent technical support, too.

HOLGER SOMMER ON 11/25
What is Sunburst's M-ss-ng L-nks program... please explain.What does it do?

DAVID KREISBERG ON 11/30
This was one of the programs ordered for our school that I haven't had a chance to preview yet. From what I've read, it allows students to read selections in which some letters from the words are missing. Students fill in the missing blanks. There are options, I believe, for how many letters are missing from words. Additional customizing features are part of the upgrade. The program has received some awards and is popular in many of the schools in our county, but, as I mentioned, I haven't used it yet. My favorite program from Sunburst is The Factory in which students create products using a variety of punch, stripe, and rotate machines. Students can play against each other or the computer. Students learn a lot about proper sequence, rotation, and planning. I've never seen a class of students (or adults) who didn't get turned on by this. There is also a free videotape available from Sunburst that gives an interesting demo of the program in a large group setting. The video is free for preview (30 days I think).

DAVE GIBSON ON 12/01
Could you give name address and phone number for the source for the program and the videotape. How much is it ? What kind of instructor's manual does it have ?

JERRY WALZ ON 12/01
Does anyone have any experience with Design from Meta Systems? I understand it's an implementation of Rico's Writing the Natural Way.

PETER COMBES ON 12/17
MindPlay is offering EDSIG a review copy of ROBOMATH—a MindPlay program now available for the Apple Macintosh 512KE, Plus, SE and II. "ROBOMATH was the winner of the 1987 Parent's Choice Award and has consistently received A ratings from national reviewers and magazines. It is a popular math program for ages eight to sixteen. ROBOMATH's arcade action inspires players to practice multiplication and division as they rid their town of trash by defeating the TRASHBOTS. To answer math questions, players choose the quick-answer method or use the screen to work out problems with a step-by-step process that prompts development of long division and multiplication skills. Challenge Upgrade offers customizing features for the number of digits, range of numbers, remainders, decimals, built-in times tables, test questions and performance summaries. Both the home and school editions include one backup disk. If you would like to review this, please leave me a message here.

LOU PASTURA ON 12/18
I am looking for a software package for the Apple II designed to help a child who has dyslexia. The subject areas of major interest are reading and spelling (anything to do with language). Math does not appear to be a problem. If you know of such a package or have any idea(s) regarding whom to contact to try to find one or get more leads, please leave a message here.

SATs

PETER COMBES ON 12/17
I am still getting requests on the EDSIG Hotline for info about SAT preparation programs. Has nobody on the board used any?

PAUL BRUENING ON 12/22
I've used two programs at my school with high school students. The first is VOCABULARY BUILDERS by SEI. It is an intensive vocabulary drill program similar to the verbal section on the SAT. The student can drill randomly or go through the entire list of words on the disk alphabetically (which would take hours and hours!). The other program is the SAT PREP COURSE, but I'm not sure of the author/publisher. The different programs match the areas of the SAT and record the student reponses and then calculate the results. The questions are read from a book (not a very effective use of the machine!). The big question is do these programs really help? Some people believe that intensive preparation can increase SAT scores and other think it is possible to only increase scores slightly. It's an interesting question.

DAVE LAVERY ON 12/27
The experiences that I have had with these type of programs and courses have been reasonably positive. I attended a SAT preparation course prior to taking the tests, and used an automated review program and books prior to taking the GREs after getting my BS. In both cases, the preparation was an advantage for the following reason—I learned what TYPE of questions to expect, and what instructions to expect for each section. This was very advantageous when taking the actual tests, as less time was required to digest the instructions, and more time could be devoted to actually answering test questions. In general, this could mean an addition to the test score of up to 40-50 points in each section. The actual material learned by these preparation courses rarely—if ever—transferred (i.e. none of the test questions ever supplied material that could be used in the "real" tests), so their value in this sense was minimal. Final evaulation: all three preparation methods—courses, programs, and books—can benefit the test taker equally. But, the books are ever so much less expensive, and just as useful. Has anyone else had any other experiences?

PAUL CHERNOFF ON 12/27
Remembering back to the days when I took my GRE's, some study is helpful. I remember one section which was not difficult to answer ONCE you understood what they were asking you. After a few hours (3 at the most) I finally figured out what in hell they wanted and aced that section (my only perfect score in my life). I understand that this section has since been removed from the GRE's. sigh. Anyway, studying (this includes courses) for standardized tests is helpful according to the reasons Dave gave. These tests are far from "context irrelevant" and partially measure how well you think in a very particular manner.

DAVE LAVERY ON 12/27
Sounds like your experience was very similar to mine. The section of the GRE exams which seemed to benefit the most from preparation work was the analytical section of the test. After being out of school for five years, it was with some trepedation

contd.

that I approached taking the GREs, and especially this section—which seemed to have instructions that were written by the same guy that transcribes the directions on those "some assembly required" items from the Orient (i.e. "insert tab A in slot Q, stand on head, spin around three times and put sum in box R"). After working through five sample exams in the preparation books, I was able to figure out what was expected, and just skim the instructions on the actual test to verify the directions. I firmly believe that the time saved was crucial toward getting the score I did.

DAVID GURSKY ON 12/27
The flip side to what the two of you have been discussing is what does this say about higher education in the United States? [Other than not much.] I attended one of the better high schools in the country and a good college, but nowhere along that path did anyone bother teaching us how to think or learn. There was a great emphasis on memorizing ideas, concepts and so on (notable exception to this were the Math courses, where we were told, "Here's a theorem. Either prove it or disprove it." Very effective.).

DAVE LAVERY ON 12/27
I do not think that this is the flip side to our discussion, but rather a discrete contention in its own right. What I find interesting about your statement are the comments that you attended one of the better high schools in the country and a good college, and yet no one taught you to think or learn. Seems to me that these are almost mutually exclusive. I attended an average Northern Va high school and an average engineering school in the Appalachian backwaters, and learned to think while attending both. I discovered early on, and I think this point is reinforced by our previous discussion, that the ability to learn in school, or college, requires that at least 50 per cent of the work be done by the student. No teacher in the world can force-feed enough information to a student who is unwilling to help themselves in the learning process—they can go to Harvard or MIT and come out as dumb as they went in. Conversely, a student willing to make a determined effort can make the best of any school, whether it is in an inner city slum or a rural one-roomer, and end up as a Rhodes scholar. Is this all the teacher's fault? The school system's? The parent's? Society's in general? Arguments can be made for any and all of these suppositions, but as long as we continue to place the blame on a nebulous "educational system", and shrug off the responsibilities of ourselves and our kids, we will never see an improvement. As you can tell, I can get somewhat involved with this topic—it comes from being married to an educator.

PAUL CHERNOFF ON 12/28
I agree with you David. I am convinced that the GRE's did not measure anything of value (besides the ability to understand and follow instructions, something which we value very much in our society). My grad school did not even use GRE scores for deciding admittance. In my readings of cross-cultural intelligence testing two main lessons came out. The first being that intelligence tests are very culture sensitive and make many, many assumptions about what intelligence is (though the writers cannot define intelligence, they are sure that they are measuring it). The other lesson is much more interesting. North Atlantic cultures (UA, Canada and Western Europe) are very test oriented. If you go to someone in the street and ask them to take a test, they will try to do as well as they can for the sake of doing well. In almost all other cultures people will not work hard on a test UNLESS it is in some manner relevant to them. In other words, they think that the testers are BOZOS, and don't like wasting their time to fill out a form for someone else's benefit.

Lesson Plans

LEE RAESLY ON 11/05
Before the 'Little' crash, I posted a message asking what people thought of the idea of two new download areas. One for Lesson plans, Grade School and the other for Lesson Plans, Jr. High & High School. The idea would be to share those that we particularly liked, probably mostly for special ideas, special events, 1 to 3 day max. subjects, etc. What do you think? Maybe we could even publicize it to teachers in all the schools in the area. Might get a pile of new members! Take Care, Now!

On Line University

PETER COMBES ON 11/08
According to the November issue of ONLINE TODAY, the Electronic University Network was a product of Telelearning Incorporated. Telelearning's ownership of EUN was recently sold to Compulearning. For a variety of business reasons, Compuserve has chosen not to pursue this relationship.
For more details on Compulearning, write to Compulearning Inc., 1150 Sansome Street, San Francisco, CA 94111. The toll free number for calls within California is 800/631-6699; for calls outside California, the number is 800/225-3276.

KIM CIMMERY ON 12/18
I called toll free number for Compulearning. The courses they offer are not set up for Macintoshes. About two years ago I contacted them and they said the same thing.

HARRY ERWIN ON 12/21
One of my eighth graders came to me Saturday after reading the Gould article in the latest Natural History. His question: Why do the Fairfax County Schools use the biology text rated worst by Gould in his review? My guess is that the reason is that the text in question is the most mealy-mouthed about evolution. This question didn't come out of the blue—the son with the question is currently collaborating with me on a simulation program intended to give some insight into a currently unsolved question in evolutionary biology. (He's programming; I'm directing—saves my time and teaches him some evolutionary biology at the same time.) So my question is why do the Fairfax County Schools use the worst of the
available biology textbooks?

DAVID GURSKY ON 12/24
I remind you that reviews tend to be subjective ("One man's passion is another's poison..."). Not being familar with the article or reviewer in question, it would be inappropriate for me to speculate further...

PASCAL NEWS
by Robert C. Platt

PIG. The next meeting of the Pascal Interest Group will be held on Thursday, February 18, at 8 p.m. at the WAP Office. New participants are always welcome. As indicated in Dana Schwartz's December WAP Acrostic, Mike Hartman has retired as Chairman and we are looking for a volunteer to lead the group. Please call me if you can serve.

The December meeting featured a discussion of Lightspeed Pascal on the Mac and a presentation by Walter Urban of an algorithm for extracting the log of a number.

USUS. I received the Winter 1987-88 issue of the USUS Newsletter. USUS is a user group for the UCSD p-System. It holds two meetings a year and draws members from around the world and from all sorts of machines, although a large number are Apple II and III users. Membership is $35 per year. (USUS, Inc., P.O. Box 1148, LaJolla, CA 92038.)

The p-System. For our newer readers, a explanation of the UCSD p-System may be in order. When microcomputers first appeared in the mid-1970's Kenneth Bowles, a Computer Science Professor at the Univ. of California San Diego, realized how valuable a universal operating system and programming language would be. This system would behave the same regardless of the computer on which it was used. The result is the p-System. It is the only operating system that will work on all of Apple's computers—from the Apple II through the Mac II! It works just the same on IBM PC's, DECs, HP's, you name it.

Bowles realized that command-line user-interface was a serious barrier to beginners learning to user microcomputers. Instead, all of the commands from the p-System are selected from menus. The same menus of commands apply on all implementations of the p-System. The p-System also included a file structure. (This file structure later was adopted with some modifications on the Apple III as SOS, "the Sophisticated Operating System" which became the forerunner of ProDOS.) IBM originally selected the p-System to be the primarly operating system on the IBM PC. But when its publisher priced it too expensively, the majority of IBM users soon shifted to a CP/M-clone marketed by Microsoft called MS-DOS.

Although the p-System can be used as a stand-alone operating system, it has also become popular running as an application under other operating systems. Thus, the p-System can be hosted by MS-DOS, ProDOS 16 on the IIgs, and HFS on the Mac. In these hosted systems, the user creates large data files under the host system which the p-System then uses as "virtual volumes" (a fancy term for make-believe disk drives.) Hosted p-Systems have the advantage of using devices and features of the main operating system such as RAM disk and also assist in exchanging data back and forth to applications written for other operating system.

On the Apple II, the p-System is more popular than you might suspect. Apple Pascal, Apple PILOT, Apple FORTRAN, Apple LOGO, Wizardry, pfs:file are among the programs which run under the p-System. The first integrated word processor-spreadsheet-data base package which came long before AppleWorks was the Incredible Jack—a product that is still available for the p-System.

The mysteries of the p-System are explored at our monthly PIG meetings. Because of the universality of the p-System, these discussions are applicable to the Apple II, Apple III, IIgs and Mac.

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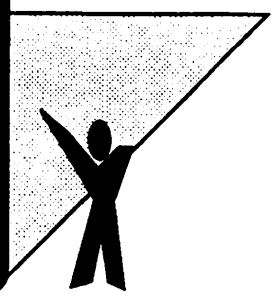

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GUTENBERG 3.0 (ProDOS): A Review

by Mark Blass

Gutenberg has always been somewhat of an enigma. Readers of *Nibble* and *A+* magazines may remember the single-column advertisements for the Canadian-origin word processor, Gutenberg Senior, which prominently featured the rather forbidding visage of the program's namesake, Johannes Gutenberg. Why use such a non-descriptive name for a word processor instead of following common practice and calling it "Word Something" or "Something Write"? In fact, Gutenberg is very aptly named for what it does. Long-time WAP members may have read the three previous Journal reviews about this fascinating software package. The first two, by C.K. Mesztenyi and P.K. Wong, respectively, in successive Journal issues (October and November 1983), reported on the original 1983-vintage Gutenberg Senior and its Junior companion. However, in February 1985, H.J. Silverstone wrote the definitive review of the newly released Gutenberg Senior, version 2.0. Silverstone's five-page article, which was written without the benefit of the yet-to-be-printed user's manual, visually demonstrated many of Gutenberg's unique features—its ability to download as many as twenty-one different fonts at any time, even in the same line, all while perfectly microjustifying that line, its user control over every dot on the printed page, and its infinitely changeable formats—because it was written and printed using Gutenberg and an Imagewriter printer. I saw the exquisite pages (for a 9-pin dot matrix printer, anyway) that Gutenberg was capable of squeezing out of as little as 64K of Apple RAM and an Imagewriter I, and quickly mailed off the not-unsubstantial price to Scarborough, Ontario.

No written description, not even Mr. Silverstone's fine review, could have prepared one for the labor, pleasure, and frustration that began when the four double-sided disks and accompanying 768-page hardbound user's manual arrived the following week. Living with Gutenberg has been like owning a cornucopia that spews forth new goodies on demand. The program is limited only by the user's creativity and imagination, and always offers some new untried feature to discover. Compared to my workplace word processor, the elephantine Multimate Advantage II, with its 11 disks and thirst for 384K of RAM in which to wallow, Gutenberg is a palate cleanser at the end of the day. It is neither a swift gazelle, nor particularly user friendly, but is a finely-crafted tool for Apple II writers who believe that visual layout and composition enhance the quality of the written word. The Macintosh's success attests to the extent of that belief. This article is not intended to re-plow ground already covered in previous reviews. Readers who wish to see the variety of Gutenberg text output should either consult Mr. Silverstone's review or request a copy of the 16-page introduction booklet from Gutenberg Software Ltd. (address listed at the end of this review) Instead, after briefly discussing Gutenberg's philosophy, it will move into a description of version 3.0, the newest, most flexible, and possibly the last, incarnation of Gutenberg.

A first-time Gutenberg writer can not simply peck out a letter to Aunt Martha, press a few additional keys and expect to see his letter rolling off the platen.

Gutenberg's promotional booklet describes it as a multipurpose, multi-language word processing and text formatting program. The program is appropriately named for the inventor of moveable type, because it is most in its element when producing longer, intricately formatted letters, articles, reports, and books. Its weighty version 2.0 user's manual was completely written on Gutenberg, uploaded from floppy diskettes to the publisher's front-end typesetting system through Gutenberg's GLOBAL utility to translate its codes to those of the publisher's system, and then directly typeset in 3 hours on a high-speed phototypesetter. Gutenberg's power and sophisticated features are wasted, and it is less at home, as a "shoot and run" word processor for many quick diverse jobs. Because its input files bear no resemblance to its printed output page and need to have many imbedded commands in the text, and the development of several user-customized formats are necessary for best results, writers who depend on speed would probably be happier with other word processors. Indeed, Gutenberg is not for "everyman". But it is a powerful tool for writers of correspondence, books, publicity, journalistic features, and academic works, as a result of its ability to transform draft material into several different required output formats (eg., rough draft/double-spaced, finished report single-column/double-spaced, finished report double-column/single-spaced) in a few moments.

Long-time WAP members may have read the three previous Journal reviews about this fascinating software package.

Much of Gutenberg's power is derived from its user-definable formats, which govern all aspects of the printed page. That dependence on formats which are external to the typed input makes Gutenberg strictly a "you don't see what you get" word processor. As a user gains experience with Gutenberg, he learns to mentally connect his input with the ultimate output. Some things, such as automatic page breaks (manual breaks can be inserted anywhere in the text) can not be seen and adjusted without reference to a test printing. A first-time Gutenberg writer can not simply peck out a letter to Aunt Martha, press a few additional keys and expect to see his letter rolling off the platen. That effort would yield a shapeless mass of words pushed together on a page. But, when that same letter is properly implemented with a few imbedded codes to link it to its appropriate Gutenberg format, the resulting output will have perfectly placed headers, footers, date, salutation and sign-off, none of which is apparent from the bunched text on the screen.

A Gutenberg format is simply the set of instructions which govern how the text will be printed. Certainly, every word processor contains some sort of similar instructions which determine what must be done at the top and bottom of each page, at the

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ends of sentences and paragraphs, at the left and right page borders, and so on. Gutenberg differs from most other word processors in that its formats can be dumped to a printer, examined, copied, changed to free the writer from the restrictions imposed by the word processor's designer. Whereas most word processors offer some number of "rheostats, knobs and toggle-switches" with which to fine-tune user preferences, Gutenberg's formats give the user access to the "brain" itself—the whole nine yards. A dump of a Gutenberg format reveals what resembles an arcane computer language, with op codes, delimiters, conditionals, and arguments. In fact, they are based on a sophisticated, logical programming language that you must learn (but probably never master) in order to actually write new formats.

The fonts guide is so attractive that it's fun to show it to one's IBM buddies and hear them say, "You did that on an Apple?"

Gutenberg comes with a variety of useful macro formats—letters, reports, resumes—which can be used, as is, to produce most desired outputs. But it also provides a much greater number of supplementary formats and format modules which invite the user to combine, customize, or write his own from scratch. Version 2.0's arsenal of supplementary formats includes 25 different headers and 12 different footers from which to choose; of course these can be modified or the user can create new ones. Similarly, there are wide choices of paragraph styles, manual and automatic enumeration modes (outlining), column layouts, footnote styles and tables, all of which can be moved into any macro format. I have several ongoing applications—personal correspondence, business correspondence, reports, press releases, congregational mailings—each of which has its own unique format. Having a customized format allows me to concentrate solely on my text without having to consider the placement of paragraphs and graphics, and the content of headers and footers. All the document's peripherals—headings, closings, customized letterheads—are built into the format and automatically printed in their proper places each time that particular format is invoked.

This separation of format and input text requires a mental digression from typical word process usage. For example, if most of my business letters conclude with the sign-off "Yours truly,", and I wish to print a single business letter that ends with a "Cordially yours,", I make that change in the format, not in the letter. If I find that I want to close half my letters one way and half the other, I would maintain two separate formats, each differing from the other only by the text contained in the closing format command. Similarly, I maintain two personal letter formats, one that closes with "Love,", the other with "Sincerely,". Although Gutenberg's word processing philosophy may at first seem awkward, it makes more sense when considered in the context of computer usage: a little extra work up-front to yield a lot of time savings later on.

Font-downloading flexibility (only to an Imagewriter) is another major Gutenberg feature. Gutenberg version 2.0 "limits" the user to "only" 21 different fonts at any time, although the ProDOS version opens this up to include any font in the same directory. The old version came with about 52 downloadable fonts and 18 screen fonts which can not only be shown on screen (Hebrew, Greek, Cyrillic, etc.), but can also be printed. For semitic languages, such as Hebrew, which travel from right-to-left, the screen can be reversed at the touch of a key. Furthermore, accents and vowels can be placed exactly where needed.

One of the Gutenberg disks contains a 24-page supplementary user's guide to the latin fonts. This guide explains how fonts occur in families—light sans-serif, medium sans-serif, shaded sans-serif, light serifed, medium serifed—and illustrates how the members of each family—text, italics, bold, small caps, condensed—work together to produce harmonious text. Naturally, each font can be printed in a variety of widths, proportionately or monospaced, with perfect line microjustification. The fonts guide is so attractive that it's fun to show it to one's IBM buddies and hear them say, "You did that on an Apple?" Gutenberg comes with utilities to allow the user to modify existing fonts and characters or to create new ones. Although the PI font includes all sorts of useful downloadable characters—15 different fractions, zodiac signs, card suits, medical symbols, a maple leaf (what else from a Canadian word processor?) it lacked five- and six-pointed stars; I was able to create each from scratch in about five minutes and permanently store it as part of an existing font.

Still another element of the Gutenberg largess is its PAINT program, which permits the user to import, modify or create graphics which can be inserted into Gutenberg documents. I used PAINT to create a large old-English "M" (based on a modification of the "W" in the Washington Post masthead) which I printed in the letterhead on my correspondence until my wife complained it was too pretentious. Gutenberg's designer, John Wagner, once remarked that he had taken eight hours with PAINT to draw the complex "Gutenberg face" logo that appears in Gutenberg advertisements, the user's guide, and the opening screen of version 2.0.

Enter Gutenberg version 3.0 (ProDOS). Amazingly, version 2.0 (Mighty Mouse) accomplished its powerful good deeds on a 64K Apple with one disk drive (two preferred). John Wagner managed this task despite the inherent limitations of the available hardware by devising his own operating system, exchanging portions of programs in RAM as needed, and limiting the amount of text file in the text editing buffer to 4K bytes (about 500 words). All of these limitations slowed the program's editing and operations because it had to perform many disk accesses to retrieve text pieces as the writer moved from one area of the document to another, and to retrieve downloadable fonts as required during printing. The nonstandard operating system created text files which could only be run through a spelling checker or sent to non-Gutenberg users after conversion to a DOS 3.3 file. The format buffer was also only 4K bytes in size, which necessitated the maintenance of different kinds of formats—reports, letters, resumes—instead of allowing the use of only one, large all-purpose format. And, Gutenberg's awkward copy-protection scheme required the user to use a master "key" disk in order to access certain program functions.

The advent of greater Apple hardware capabilities, 3.5" drives, expanded memory cards, hard disks, and, finally, the Apple IIgs, gave Wagner the tools he needed to completely revamp Gutenberg, to bring it, so to speak, into the 20.88th century. Gutenberg version 3.0 was heralded in a May 1987 mailer to owners of older Gutenberg programs. In an act of kindness, Gutenberg Software Ltd. offered the new release, for

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a limited time, for only $25 to registered Gutenberg Senior owners. However, the new Gutenberg requires a lot more hardware than its predecessor. Only the Apples //e, //c, and IIgs computers are supported, as are only the Apple DMP and Imagewriters I and II printers. Furthermore, the program requires a minimum of 800K of disk storage, albeit in several combinations: 512K RAM card with one 3.5" drive; 1 Meg RAM card with one 5.25" drive; ProDOS-supported 1 Meg RAM disk and either one 3.5" or one 5.25" drive; ProDOS-supported hard disk and either one 3.5" or one 5.25" drive. Many printer interfaces are supported and Gutenberg will add new ones on request.

Gutenberg version 3.0 arrives on four double-sided 5.25" floppies or one 3.5" 800K disk, depending on your hardware configuration, along with four printed pages of instructions to get started. The eight floppy sides contain program files, one contains 15 formatting examples which can be examined on screen or dumped to the printer, two contain the 87-page manual, and the last two contain the download and screen fonts. Copy protection is gone, although Gutenberg Software Ltd. asks owners to install a secret password to prevent unauthorized use. Basically, this is a form of honor system. Some people believe that the outrageous prices being charged for various software packages justify their theft. Although Gutenberg is fairly expensive (US$360), most owners will agree that its complexity and power are commensurate with its price and will not give away copies.

The new Gutenberg features two 24K byte text editing buffers which greatly improve editing operations such as search-and-replace and paging through a document, because the entire text file can now reside in RAM. Text that is larger than 24K can easily be chained. Traveling around a Gutenberg document is much quicker than negotiating a Multimate text file on a two-floppy XT clone, although Multimate's cursor speed is much faster than Gutenberg's. The IIgs' faster clock speed seems to have no positive effect on Gutenberg's cursor speed. Data can be moved between the two buffers, which facilitates windowing to import information from other files. Furthermore, the format buffer has been enlarged to 18.75K bytes, allowing one large format file that will handle most formatting requirements to be loaded.

Many new editing commands have been added, most of which are multiple-choice. For example, the "D" (delete) command calls up a single line menu that prompts whether the desired delete is for a word, sentence, paragraph, macro, all screen material above or below the cursor, the line to the right or left of the cursor, or between two cursor strokes. Other new commands allow entire sections to be instantly changed to either upper or lower case. More than 100 help screens can be invoked on the fly while writing, individually from a help menu, or just scrolled through alphabetically from beginning to end, or from one chosen point to another. Paragraphs, which were inexplicably limited to about 2,000 characters in Gutenberg version 2.0 can now exceed 20,000 characters in length.

Of course, all of the old version's unique goodies have been carried over to version 3.0. Macros to perform mundane editing command insertions or automatically type frequently used words or phrases can be written and saved. Gutenberg's search-and-replace scheme is one of the most powerful around. Multiple changes can be simultaneously performed: a single search-and-replace (either global or discretionary) could change all occurrences of "dog", "wristwatch" and "hat" to "schnauzer", "Rolex" and "Stetson", respectively. Searches can have arcane conditions: one search feature can locate only those occurrences of "dog" that are immediately preceded by "spotted" and change "dog" to "dalmatian"; simultaneously, all other "dog" occurrences can be changed to "schnauzer'.

As before, Gutenberg provides four ways to view text on the screen: high resolution (which shows specialized characters), low resolution using Apple's own character set; each of these is available in either 40- or 80-column widths. Four screen fonts (instead of two as in the previous version) can be used simultaneously along with an unlimited number of downloadable fonts. For example, a typical user-set configuration would be to have a Latin screen font in the primary position, a PI font (special symbols) in the second, math symbols and Roman/Italic floating accents in the third, and a Hebrew font in the fourth position. Alternately, a Bible scholar might keep Hebrew and Greek simultaneously available. Each downloadable font has available a companion screen font such that unusual characters can be displayed on the high resolution screen. An open-apple/keystroke combination invokes on-screen keycaps displays of all four current screen fonts. Version 3.0 did not come with the variety of Latin fonts, including eight-dot high capitals and outline type, but provisions are included for importing these fonts from version 2.0 font disks.

Although Gutenberg is fairly expensive (US$360), most owners will agree that its complexity and power are commensurate with its price and will not give away copies.

Gutenberg version 3.0's announcement and price list implied that first-time Gutenberg purchasers who begin with the ProDOS version can purchase the huge version 2.0 users manual for $50. This highlights a conundrum for first-time users: I believe that the on-disk 87-page manual and additional application examples do not provide enough instruction in Gutenberg's usage. To understand formatting and, in fact, the entire Gutenberg philosophy, one must read the version 2.0 manual, or at least have it for reference. But, the program has been changed so much—new features, new commands, old commands which work differently—that trying to segue back-and-forth from old program manual to new program will be confusing to new users. Unless Gutenberg Software Ltd. expands the ProDOS version manual, the best way to learn Gutenberg is to start with version 2.0 and go through the exhaustive tutorial which occupies the first 228 pages of the user's guide. That tutorial is quite detailed and includes many "what if" experiments (printing something, making a change, printing again, and so on). Experienced Gutenberg users will still have to learn many new things—the non-text editing operations are entirely different—but will understand the formatting philosophy and be up and running in fairly short order.

Gutenberg Software Ltd.'s user support has been excellent for the price of a long-distance telephone call to Ontario. John Wagner usually seems to be available weekday afternoons and has patiently answered my questions. What better source than the program's designer? There are also two Gutenberg help

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sources listed in the WAP Hotline, one in Canada, the other in the metro D.C. area. I don't know whether these gentlemen are still using Gutenberg, but would be interested to know whether other WAP members are using Gutenberg, either version. (My address is 429 N. 27th Street, Allentown, PA 18104-4828)

Gutenberg version 3.0 represents a new level of Apple word processing and text formatting power. Experienced Gutenberg users will be pleased with the many new convenience features and the program's smoothness. New users will be amazed at the boundless universe available to them. Again, new users should understand that the tradeoff for Gutenberg's power is a learning commitment well beyond that required by the typical "Word Something" word processor. But, much like the joys of programming, users who get hooked by Gutenberg will not object to late nights playing, "What if I make this change?" And, all Gutenberg users will continue to impress their readers with crisp, well-formatted documents.

New users should understand that the tradeoff for Gutenberg's power is a learning commitment well beyond that required by the typical "Word Something" word processor.

I mentioned earlier that version 3.0 may be Gutenberg's last incarnation. When I called John Wagner to inquire whether the disk-based version 3.0 manual would be made available in printed form, he said he didn't think he'd have time to do this because he is now working on development for the Mac. Gutenberg owners shouldn't regret this move, because he's taken an Apple word processor farther than any word processor has been before (one bold step for word processor-kind) However, Mac development in Scarborough, Ontario is definitely good news for our confreres who inhabit the back half of the WAP Journal.

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ON THE TRAIL OF THE APPLE ///

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

NEW PD DISKS!

/// SIGers, I am happy to announce that we have added FOUR new disks to our growing Public Domain offerings. Here's what they include:

THREE.SIG.1013: A3 Diagnostics

This is a double-sided disk that includes the latest version of the Apple /// diagnostics program. Side One has the instructions and is bootable, since it contains our Menu.Maker program. As with other disks, we've included a Text.Dump program so you can print the instructions from BASIC. The SOS.Driver file also contains the .ATTACH Driver that lets you dump what you see on the screen to a printer as well. Side Two has the actual Diagnostics program. You will discover that it is NOT listable but will copy and boot without any problems.

THREE.SIG.1014: BASIC Boot Disk

This two-sided self-booting disk has a number of programs on it. Side One contains the BASIC boot menu and programs as written by /// SIGer Jim Salerno. It's basically the same program found on our Profile at the office. From the BASIC.Boot menu, you can automatically handle a number of utility operations, all from BASIC. For you folks trying to learn how to program, this disk can give you a number of ideas. On Side Two, we have put a number of printer control programs, and programs that will make labels for you. Some changes may have to be made to a particular program so that it will work with your printer (that is, you will have to change the control codes, etc.).

THREE.SIG.1015: Best of ///s Company

Another double-sided disk with a ton of basic information about your Apple /// and how to get the most out of it. This disk is self-booting on Side One and includes tutorials on how to put a battery backup in your ///, install a clock kit, upgrade to 256K, etc. There is additional information on the emulation mode, getting information from a Mac to a /// and back, laser printers, many reviews, etc. These were all downloaded from /// SIG member Ed Gooding's ///'s Company BBS in Richmond, Virginia, the best source of /// information in the US!

THREE.SIG.1016: AppleCon

As mentioned last month, this is the Applesoft to Business BASIC conversion program originally placed into the public domain by Apple in 1981. It will read an Applesoft program from a DOS 3.3 disk, and convert it (to a point) into Business BASIC, saving the result onto a SOS/ProDOS disk as an ASCII text file. Both sides are self-booting (Side Two is in Pascal). Side One contains the instruction manual. I have also included other information designed to help in the conversion process. That includes PEEK-POKE and CALL translations, as well as information about converting other Applesoft Keywords to Business BASIC. Much of that information was taken from the manual for SOSTRAN, a Sun Remarketing product (available but no longer advertised) which has a treasure trove of information about converting from one BASIC to the Other. Efforts are underway to try to convert this program to read ProDOS files and as a standalone ProDOS program (for the GS).

FUTURE DISKS

I have made excellent progress in getting the Taylor Pohlman Solftalk articles on Business BASIC ("The Third Basic") formatted properly, etc. I hope to be able to announce the first release of disks next month. To maintain the sequence, all five Pohlman disks will be released one after the other, as disks 1017-1021. It has also been decided that to conserve space, only 1017, the first disk, will be self-booting. The rest will have the Menu.Maker program resident, so all you have to do is boot the first disk (or any /// SIG self-booting Business BASIC disk) and at the prompt place the proper disk into .D1.

Also a disk with fonts and one with WPL programs. Former /// SIG member Bart Cable donated a number of programs to the SIG. Bart, by the way, has gone over to the MS DOS world (we won't hold that against him) and was the hit of the recent Garage Sale. /// SIGer Trish Babylon was seen gleefully running away from Bart's table with programs bulging out her arms. Bart, who had just made a big sale, was also seen smiling a bit!!

At our SIG meeting in December, by the way, we discussed ways in which members could contribute to the SIG. One way is to contribute a program or two that you may have written, or adapted in some way, to the PD library. We will collect these and put them onto appropriate future offerings. We are also very much interested in short articles on how you use your machine, how you developed a program, etc. They don't have to be long, just of interest to all. Anyone interested in giving a program during a SIG meeting would also be welcome.

WPL ON THE MOVE

One of the most powerful features of Apple Writer is WPL, Word Processing Language. The programming language allows you to automate many of the tedious word processing chores, like mail merge, etc. that you do on a daily basis. For me, I discovered it could also help with the formatting chores involved with the Taylor Pohlman disks mentioned above. So I wrote a program, called "PD.CON" that I think you'll find very useful.

The first thing you have to do is decide how you want to format the text. For example, to use a text file within the Menu.Maker program, it must be 78 columns long. 79 is too long (it will wrap to the next line). For readability, it should also be continuous text with no big spaces between pages. The way to do this is set up a Print/Program menu that can be loaded into memory and which will format the text file properly. Here's how mine looks for the PD.CON WPL Program:

Print/Program Commands:

Left	Margin	(LM) = 0
Paragraph		Margin (PM) = 0
Right	Margin	(RM) = 78
Top	Margin	(TM) = 0
Bottom	Margin	(BM) = 0
Page Number		(PN) = 1
Printed Lines		(PL) = 66
Page Interval		(PI) = 66
Line Interval		(LI) = 0

contd.

```
   Single Page          (SP) = 0
   Print Destination    (PD) = .RAM/FILE
   Carriage Return      (CR) = 1
   Underline Token      (UT) = \
   Print Mode           (LJ,FJ,CJ,RJ) = FJ
   Top Line (TL) :
   Bottom Line          (BL) :
```

Note that the printed lines and page interval lines are the same, that the right margin is set to 78 and the print mode is full justify. For speed, I have set the print destination for a RAM disk with a file name of FILE. You can change the print destination (disk drive or hard disk) to match your system's setup.

Now, with the Print/Program Commands set, lets get to the actual PD.CON program:

```
PD.LOAD P PD.CON by Dave Ottalini; WAP /// SIG
        PND
        QCPD
   P Load the Print/Program file.
START PPR
        NY
        PPR==============================
        PPR       PD Format Conversion Program
        PPR==============================
        PPR
        S.RAM/FILE
        PIN Load which file?: =$a
        NY
        L $a
        PPR
        PPR Hold on now...I'm working as fast as I can!
        P This is the body of the program.  It loads the file,
        P  then prints it with the proper settings, as
        P  contained in the Print/Program file.
        B
        PNP
        NY
        L.RAM/FILE
        P Now, load the converted file back
        P into memory, clean it up and save it
        P back to the proper location.
        B
        F///A
        S $a
        Y
        OE.RAM/FILE
NEW     P
        PPR
        PIN Another File?: =$C
        P If you want to convert another file,
        P hit "Y" or "y". Otherwise, reload
        P the "startup" values and quit.
        PCS/$C/Y/
        PGO START
        PCS/$C/y/
        PGO START
        PPR
        NY
        PDO.D1/STARTUP
        PPR
QUIT    PQT
```

This is basically how the program works: It first loads the new print/program commands and then clears memory. The empty file FILE is saved to the RAM disk (since you can't print to disk unless there is a file present first) and you are prompted for the text file you want to format.

Once designated, that file is loaded and the processing begins. It is printed to disk, allowing the file to be formatted properly according to the print/program commands you set up. Memory is cleared and then the newly formatted text file is brought back into memory, cleaned up a bit and automatically saved back to disk for you. Now that's convenience!

At this point, we erase the .Ram/FILE file and ask if you want to format another text file. If you don't, the program automatically re-runs the WPL STARTUP program for my system. If you type "Y" it heads you back to begin the process all over again.

You Apple II Apple Writer users can adapt this program quite easily for your own use. You'll need to change the Clear Screen command (\) and the pathnames for the disks, since the Apple II uses slot,drive designations.

This is one of the programs we'll place on the upcoming WPL disk and would welcome any other contributions you might care to make. WPL is really a great addition to Apple Writer (one reviewer said it made the difference between being a good program and a great program). For more information, you can get our PD disk 1016, which has the 1.41 version of Apple Writer on it, as well as a tutorial on WPL. I would also strongly recommend you get the 2.0 manuals from Sun Systems Recycling, which are excellent (they come with the 2.0 version, the last official /// version of Apple Writer). Sun's number is 1-800-821-3221. Normal cost is $75 but they have sales throughout the year.

FINALLY

Speaking of Sun, they have come out with a new "Apple /// Do-It-Yourself Troubleshooting Guide" which you might want to get. Cost is $19.95 and it should be available by the time you read this.

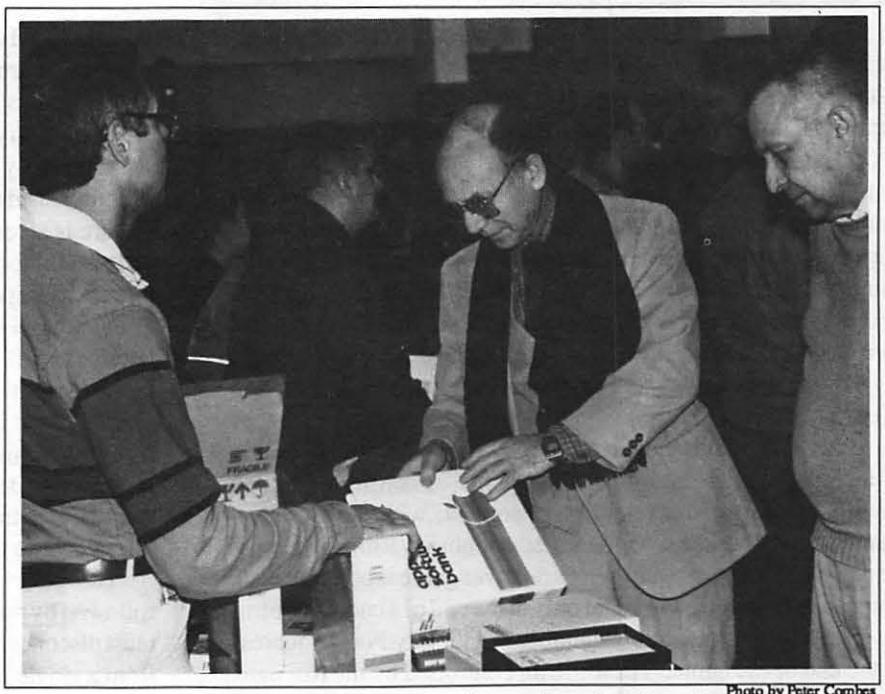
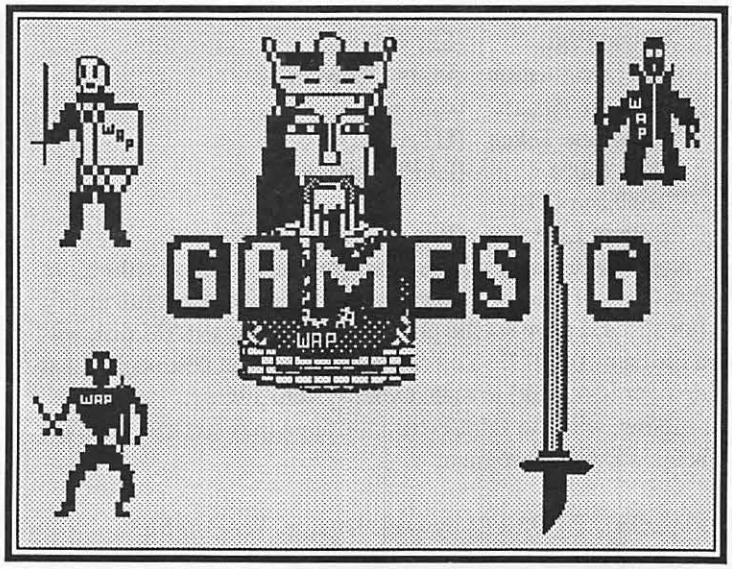


Photo by Peter Combes

Is that thesaurus version English or American?

GAMESIG NEWS
by Steven Payne



Charles Don Hall began our January 7th session by proudly unveiling Santa's cure for Wartow-envy: a shiny new black Porsche 930 turbo, his Christmas gift, complete with whale tail (and two batteries!). Members spent the rest of the meeting sending the tiny vehicle through Joey Chitwood stunts off the edge of tables.

Chairman Charles went on to announce that **Wizardry IV** is finally in the stores, along with **Leisure Suit Larry in the Land of the Lounge Lizards** for the Apple II and GS. Origin Systems has postponed **Ultima V** "till the end of the month," with strong rumors that it may not even appear before April. While waiting, avid Apple II adventurers can try their hands at **A.D. 2400** ("like a science-fiction **Ultima**, with robots instead of orcs"), or **Death Lord** ("an oriental version of **Ultima III**") from Electronic Arts.

Ray Hakim also noted the upcoming visit of Sir-Tech's Brenda Garno at our April 7th meeting, and announced that **Legacy of the Ancients** will now finally run on the GS. Members suddenly veered into a discussion of what kinds of computers the different game companies use in creating their products. Then "retired" chairman Thomas Johnston described **Superstar Indoor Sports**, while yours truly talked about **Trust and Betrayal: The Legacy of Siboot.**

Unfortunately, since none of our GameSIG wizards has yet learned a "repel snow" spell, and the first white stuff of a forecasted blizzard had already begun piling up outside, the meeting ended abruptly as members ran for the parking lot to escape ahead of the storm. (I didn't even get the chance to retell the boring story of my visit to the Infocom offices in Cambridge, MA, where I failed to find the white house and never solved the initial "get past the receptionist" puzzle!)

Among the new programs passed out for review were:

Defender of the Crown (Mindscape, Cinemaware, Mac 512K or better, 800K disk): a simulation of Norman/Saxon conflicts in Crusader-period England, with swordfights, jousts, and battles;

Superstar Indoor Sports (Mindscape, Apple II series with 128K, joystick): sports simulation with bowling, darts, ping pong and air hockey.

GameSIG reviews of **Guderian, Scrabble, Alternate Reality: The Dungeon**, and **Trust and Betrayal** appear in this issue. The next regular meeting will be held on February 4th, 1988 at 7:30 PM in the main WAP Office. See you there!

GUDERIAN: A Review
by Chris Hancock

Guderian (Apple II with 64K, color monitor recommended) is Avalon Hill's computer version of the popular boardgame *Panzergruppe Guderian*. It simulates the German drive on Smolensk in 1941 in preparation for the final push on Moscow. It continues the series of conversions which Avalon Hill started with **Gulf Strike**. In fact, the game mechanics are similar, but with a number of additions. The graphics have been changed slightly, allowing play on monochrome systems, but I still find things far easier with a color monitor. With the game, a very clear and complete player's manual is provided, including a good introductory tutorial. A map card completes the documentation.

The game is played on a map with each square representing 10.5 km, and is at divisional level. Individual units are regimental in size with step reduction for the Germans. Only one scenario is included, which lasts for twelve turns. Each turn features multiple phases of movement and combat, with the Germans having a mechanized second movement phase. Either side may be played by the computer, or a two-player game is possible. The game may be saved to disk, but only at the end of a complete turn.

The object is to control a number of 'Victory Point Squares' at the end of the game. These are all controlled by the Russians at the start. The German player also receives additional victory points should the Russians exercise the option to withdraw units from other fronts for use in this arena. Neither player earns victory points by simply killing the enemy.

Order entry may be from either the keyboard or joystick, the latter being by far the most efficient. Movement of units may be accomplished easily, either individually or as a stack. This latter feature is an excellent aspect of game mechanics. It is particularly useful for the German player since divisional integrity is an extremely important factor in achieving effective combat results.

Neither player knows the strength of a Russian unit until it enters combat. This is meant to simulate the newly drafted nature of the Russian army. It certainly adds to the fog of war. After a unit has been in combat its strength can be checked at any time by either player. Leaders are only used for the Russians and are important in determining supply, which make them prime targets for the Germans, especially as they need to be up close to the front lines because their effective range is limited.

The game is characterized by pitched battles, generally followed by major German advances. One feature which I found most disconcerting at first is that a defender may only be attacked from a single square. Not having read the rules "carefully" the first time, I naturally placed as many units in as many adjacent

contd.

squares as I could, in order to maximize my odds. Much to my dismay this turned out not to be allowed. Since withdrawals from non-disrupted units are also not allowed, it was a sure sign that things in that particular session were not to go well. However, I quickly discovered that the one-square restriction on attackers is not a hindrance. In fact the key to German success lies in disrupting Russian units, which negates their zone of control, thereby facilitating breakthroughs during the mechanized movement phase. It is also possible to carry out overruns in either phase, again creating possible breakthroughs. It is often possible to get at the Russian leaders in this way or to cut off whole groups.

There is no airpower in the game, which seems somewhat odd since it played a major factor. For those historical perfectionists this may be a criticism, but considering the generally balanced nature of the whole game I suspect that to have included it would have required a major restructuring.

Historically accurate or not, **Guderian** represents a really interesting simulation which always kept my interest at a high level. Achieving an overwhelming victory for either side would be something out of the ordinary. It is, therefore, a well balanced game, always stretching the players throughout the whole game. I highly recommend it.

SCRABBLE: A Review
by Stephen Jablon

Scrabble (Leisure Genius, Mac) is compatible with all but the original 128K Macintosh. One can play with 2 to 4 players. The computer players can be assigned from skill level 1 (scoring about 200 points in a game, an average score) to skill level 8 (often achieving scores above 400). The program has a built-in electronic dictionary of, the manual claims, over 20,000 words. The computer challenges you by asking,"Are you sure?" when you type in an illegal word. You can override the challenge by clicking in the 'yes' box. The dictionary contains many unusual words, but it is easy to find a word which it does not understand, for there are simple words which it challenges, about 1 out of every 4 turns. From levels 1 to 4 the computer uses only certain sections of its dictionary. From levels 5 to 8 the entire dictionary is used to decide on a word.

You can select the option of whether or not to have the racks visible to the other players. If you choose the hidden racks option, the manual instructs you not to look when it is the other person's turn. Personally, I don't like to have to bother by looking away when it is the other person's turn, so I usually choose the Show Racks option. You can also view the thoughts of the computer player, if you wish to see what words it is thinking about. At the click of a mouse button, you can find the letter distribution, tiles left, and points for each letter. The game keeps a running total of scores, and you can ask the computer for a hint. If you want, you can turn the timer on, giving you any time from 30 seconds to 5 minutes for a turn. You can turn the timer off, extend the time, or shorten the time while the timer is running. The game has an excellent save feature, enabling you to start and stop when you wish. This game is definitely better to play than the board game version. Aside from the fact that you don't have to worry about tiles sliding out of place and carefully moving the board onto a shelf somewhere in order to save your game, you have all of the extended features listed above. My only (minor) complaint is that the vocabulary could be larger, giving you the "Are you sure?" message less often. I give it a seven out of ten.

ALTERNATE REALITY: THE DUNGEON - A Review
by Charles Don Hall

Alternate Reality: The Dungeon (Datasoft, Apple II series, $39.95 list) is the second game in a series. The premise is that you have been kidnapped by aliens and taken to another world; your eventual goal is either to seek revenge on your captors or to return to Earth. This goal cannot be reached in either of the two existing games.

Note that you do not need the first game in the series to play this one. In fact, I strongly recommend that you not bother with the first, **Alternate Reality: The City**, one of the worst role-playing games in recent memory. The goal is simply to wander around and around the city killing monsters; there are no puzzles to solve, no spells to cast, and the only available magic items are a small selection of potions. Originally, **The City** was designed to be the "backbone" of the series; it contained entrances to future releases in the series—for example, **The Dungeon**, **The Palace**, and **The Arena**. However, the way that characters are stored on disk has been changed, and **The City** no longer serves its original function. Once you've left **The City** and entered **The Dungeon** there is no returning. **The Dungeon** is the new backbone to the series, and contains alternate entrances to **The Palace**, **The Arena**, and other scenarios (none of which are currently on the market).

Alternate Reality: The Dungeon is an infinitely better game. There are a variety of spells available, dozens of magic items, and several quests to complete. Fortunately, it is possible for a newly-created character to survive; there is no need to import a character from **The City** (although doing so makes the game much easier).

As the title indicates, play takes place in a four-level Wizardry-style dungeon. The first level is 64-by-64, which makes it the largest level I've ever seen in a game of this type. The other three levels are 32-by-32, 16-by-16, and 8-by-8. The goal of the game (as opposed to the goal of the series) is to reach a certain room on the lowest level. In order to do this, you must find the Oracle of Wisdom and complete the minor quests that it gives you.

Alternate Reality: The Dungeon has many features that make it different from the average fantasy role-playing game.

contd.

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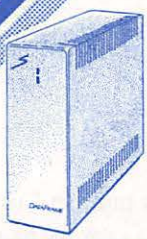

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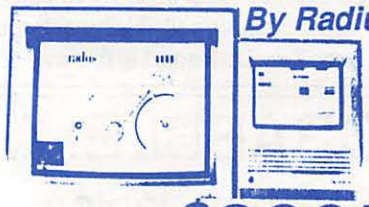

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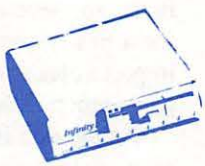

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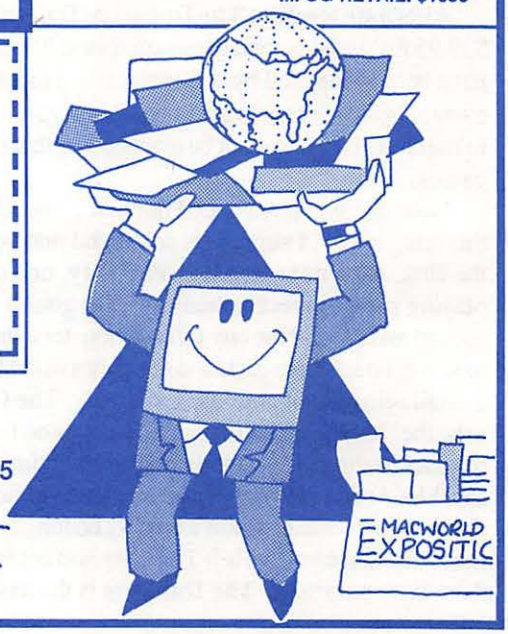

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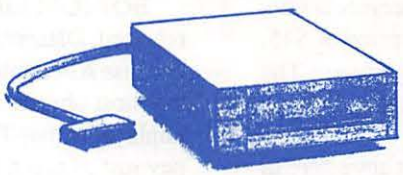

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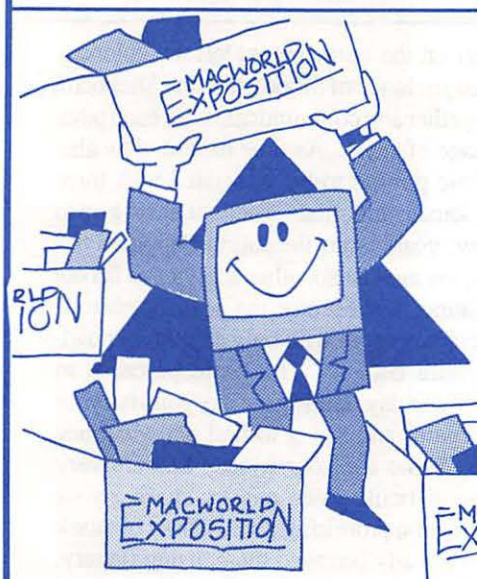

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For example, in most games, one keypress will move the character to the next square in the maze. In this one, it takes several steps (usually about 4), depending on how much weight the character is carrying. This takes some getting used to, but is not as difficult as it was in **The City** (where there was no "Location" spell, and where it was hard to see the boundaries between squares).

A sad story: when a character dies, he can only be resurrected by using a built-in utility, which causes him to lose attribute points. It is very easy for low-level characters to die in the game, and it gets even easier as your attribute points go lower. Your character also dies if you leave the game without saving it, so you can't save yourself by pulling out the disk before the final blow is struck. For the same reason, a power failure will kill you. I was also killed three times by program crashes. The solution is obvious: make sure you have two disk drives and a fast copy program (*Diversi-Copy* is a good choice), save the game every fifteen or twenty minutes, copy the saved character onto a backup disk, and then re-boot. If you get killed, copy the backup disk onto the character disk. This presents a new problem: disk copy programs are very boring to use, and you might find yourself making mistakes. For example, on my third day of play, I copied a dead character onto a living one. On the fifth day of play, I copied one program disk onto the other program disk (they aren't write-protected), and had to send them both back to Datasoft for replacement. Since I'm a reviewer, I got the replacements free, but ordinary mortals have to pay the outrageous price of $15, which is three times what most other companies charge. The moral is to make lots of backups of everything, and to force yourself to pay attention to what you're doing.

Another sad story: it's almost impossible to get anywhere in the game without the "Detect Secret Doors" and "Location" spells, but you can't cast spells until you've learned them at one of the Wizards' Guilds, and the Wizards' Guilds are all hidden behind secret doors. I might have given up in disgust if I hadn't read an issue of *QuestBusters* that gave the guild locations. I'll pass them on: if you want to play a virtuous character, go to the Wizards of Law at 49N, 62E (accessible from the sewers). If you want to be evil, join the Wizards of Chaos at 58N, 50E (accessible from the well-lighted area). By the way, there are a total of eight guilds—four good and four evil—each offering a different selection of spells.

Another sad story: if you pick up a dead monster and carry it into the tavern, the barkeeper will say (for example), "Get that dead orc out of here!" and throw you out. About halfway through the game, something strange happened, and I kept getting thrown out of the tavern with the message, "Get that [several spaces] out of here!" when I wasn't holding any dead monsters. If I tried and tried to enter, I'd eventually get in; luckily it's possible to play the game without entering a tavern. I don't know if this was a bug in the program, a problem with my computer, or a problem with one of the disks.

The game is better than it sounds, though. The quests are interesting, and you have a wide variety of magic spells and items at your disposal, and there are lots of different monsters. It's basically an entertaining game, but it's just that you keep running into irritating features that will drive you crazy after a while. I found the game strangely addictive, and played it all the way to the end.

BOTTOM LINE: After **Alternate Reality: The City** was released, Datasoft evidently listened to the complaints they got, because **Alternate Reality: The Dungeon** is like **The City** with the most obnoxious flaws removed. **The City** was completely unplayable, but **The Dungeon** is not. Hopefully, Datasoft will pay just as much attention to the next round of complaints, and the third installment in the series will be a phenomenal game. **The Dungeon** is a good game for veteran role-players who are willing to overlook its quirks, but novices will get little pleasure out of it.

TRUST AND BETRAYAL: THE LEGACY OF SIBOOT - A Review

by Steven Payne

Game-designer Chris Crawford is best known as the author of the award-winning **Balance of Power**, the East-West geopolitical simulation in which your side tries to achieve world dominance through diplomacy, bluff, force, etc., while avoiding a nuclear showdown. In **Trust and Betrayal: The Legacy of Siboot** (Mindscape, 512K Mac, 800K drive), Crawford moves away from such urgent global conflicts to the imaginary realm of Kira, moon of the planet Lamina. Yet while this new setting is remote, the issues are not. The inhabitants of Kira interact with each other according to all the familiar behaviors of love, hate, flattery, ridicule, combat, fear and forgiveness, apology and gratitude.

According to the background story (presented in a lengthy novella included in the game package), you are Vetvel, one of seven acolytes, each representing a different species on Kira. The colony on Kira had been established by the Laminans as an experiment in peaceful coexistence among the different species, just before a nuclear war on the home planet left the colonists stranded. Under the wise guidance of Siboot, the first Shepherd, Kirans learned to live together and communicate with each other via the telepathic language of eeyal. As time passed, they also discovered their telepathic powers to be associated with three types of auras—tanaga, katsin, and shial—each set having up to eight components. Now, years later, the fourth Shepherd has died, and you must compete against six other acolytes to fill out the perfect 8-8-8 set of auras, and become the next Shepherd.

You and the other acolytes begin with only a limited knowledge of one another's aura counts. The game proceeds in successive phases of night and day. During the day you visit your competitors, striking bargains and trying to find out what they know about the others. Some are your friends and are very helpful; others are more difficult. You can try sharing your information in return for theirs, promising not to betray or attack them, revealing who has already betrayed them, using flattery,

contd.

ridicule, intimidation, and so on. However, revealing someone's aura count is considered an act of betrayal, as is telling *about* a betrayal that has already occurred; violating promises is also a frowned upon. Naturally, those who discover that you have betrayed them will lose confidence in you and your promises, and will subsequently become much less cooperative. Therefore, you must carefully arrange your deals, and be wary of unreliable characters who are likely to tell others of your bargains.

Once the day is over or you have made as many deals as you can, you return home and prepare for mental combat against the other acolytes. Here a tanaga ("fear") aura defeats a katsin ("trust"), a katsin aura defeats shial ("love"), and shial defeats tanaga. Each of the acolytes chooses an aura and an opponent to fight with; the victor of a combat round gets to keep the aura of the loser. Typically, players will try to win the auras they most need to fill out their sets. Therefore, to succeed in combat, you have to figure out, on the basis of what you know about the aura counts of the others, which auras they are likely to play. For example, if you know that Wiki is missing two shial auras but has a full complement of tanaga and katsin, while you need katsin auras, you would probably want to attack him with your tanaga, since he will probably be playing his katsin in an effort to win a shial. This may sound very complicated, but is really rather simple once you realize that **Trust and Betrayal** is something like a cumulative "rock-scissors-paper" game with bells and whistles (remember "rock breaks scissors, scissors cuts paper, paper covers rock"?). As soon as someone fills out the perfect 8-8-8 set of auras, the game is over, and he or she becomes the next Shepherd; otherwise the play continues through additional days of further bargaining and nights of combat (with the added twist that the other characters will remember if you've done them wrong!) until someone wins.

All of the transactions in **Trust and Betrayal** are carried out in an icon language representing eeyal (see the accompanying screens). Thus, if you want to visit Skordokott, you simply click on the "go to" icon (representing a walking figure) and then on the icon for his house. Then you can "greet" (waving hand) Skordokott "warmly" (large smile) or "coolly" (frowning face). The meaning of any icon can be seen simply by clicking on it, and a narration box (which can be turned off) will describe the transaction in plain English. Other buttons give you the chance to change your mind before executing any command. Menu commands give you ready access to a description of each character, a convenient table of your present knowledge about the others, and a summary of what has transpired so far that day. The game has its whimsical moments, too. Chris Crawford has his own little self-description in the character menu, and from time to time random events occur, where you are presented with a story and asked to pick one of four options; your choice could affect the outcome of the game.

The options menu at the beginning of play allows you to choose the difficulty level (easy, medium, hard) and length (short, medium, long) of the game. A game is longer if you have more blanks to fill in your auras, easier if the other characters think you're wonderful. At the hard difficulty level, your opponents' choices of auras in combat will be determined not solely by their own needs but also by what they think *you* need and are likely to play; thus you have to pay attention not just to what you know about *them*, but also what they know about *you*..

So far I've been able to win most games by always selecting the "nice guy" options; other characters don't fear me, but they tend to be more helpful. Clearly, beneath the fantasy/science-fiction premise, Crawford is trying to teach us something about the value of honor, friendship, reliability, and so on. Still, I imagine more reckless players could win even if they chose all the "nasty" options, so long as they always saved the game just before combat (in case they guessed wrong in choosing an aura and opponent).

If there had been more disk space, it would have been nice to have the option of playing another character besides Vetvel, or an additional menu item indicating whom you have visited so far that day (when interrupted for a few moments I tend to lose track). The ending is a bit anticlimactic, and perhaps could have been spiced up with a short message indicating (when you lose) what you *should* have done and why, so that you can improve your play the next time. Still, **Trust and Betrayal** is a beautifully designed program: no bugs, an extremely easy-to-use interface, and everything works like a charm! For some reason, Crawford dislikes calling this a "strategy" game (perhaps because of the psychological gamesmanship involved), but I don't see anything wrong with the term, and I don't know what else is involved in your choice of options if not strategy. So I would happily recommend **Trust and Betrayal** to anybody who enjoys a well-constructed strategy game, especially one which call upon your social skills and character. The many fans of Chris Crawford's previous works will not be disappointed!

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DESKTOP PUBLISHING SIG MEETING—January 6

by Cynthia Yockey

Members of the Desktop Publishing Special Interest Group got so involved with announcements and the question and answer session that only a quarter hour was devoted to the demo of the evening by member Nancy Schmitz: Doug Clapp's Word Tools. But don't despair: the most positive thing Schmitz had to say about the program was that it wasn't a total waste of money. In addition to Schmitz's presentation, the group saw a videotape promoting Kwikee Inhouse Graphics.

Doug Clapp's Word Tools

"Doug Clapp's Word Tools gives you the profile of a document," said Schmitz. "It doesn't really evaluate your writing, but it does raise style questions and can be customized to help you if you don't know some things like the difference between 'effect' and 'affect,' for example. But the program is more trouble than it's worth. It doesn't recognize Microsoft Word 3.0 files, so you have to convert the document to Word 1.0 or a text file. It promises too much and gives too little."

On the other hand, if you need to know how many times you used any given word in an article you're writing, this program can tell you and is probably less trouble than counting them manually—but not necessarily as accurate.

Kwikee Inhouse Graphics

SIG-member Dana Martin of the Washington Times obtained a tape promoting a new service from Kwikee, a graphics company that has supplied conventional clip art to newspapers for over 40 years. Kwikee has become an Apple value-added reseller and provides both its Inhouse Graphics package and a hardware bundle that includes a Macintosh, large screen monitor, LaserWriter, modem, hard drive and CD-ROM drive (which alone goes for $1,495). The Inhouse Graphics package is comprised of slightly modified versions of Quark XPress and PictureBase, plus a communications program and a download service. It is priced at $220 per month, or $600 per quarter, or $2,250 per year, and includes quarterly mailings of a CD-ROM disk (whether it's full or empty, I'm not sure).

Announcements

Highlights of the news discussed are as follows:

• All 1988 meetings of the Desktop Publishing SIG will continue to be held in the PEPCO Auditorium starting at 7:30 pm, but now we can stay until 10:30 pm instead of the former 10 pm deadline.

• Frostbrite laser paper is now $9.60 per ream; thanks to Darla Fera and Kathleen Dunten of Thompson Publishing for organizing this.

• Beware the General Computer Personal Laser Printer, according to the company's own release notes, which Tom Piwowar, SIG chairman, acquired and read aloud to the group. It works on QuickDraw, so it's incompatible with advanced programs like Illustrator that rely on PostScript; it doesn't work with any spooler; and it prints the square of the number of copies you request (i.e., specify three and you get nine); and the list goes on. It costs less than a PostScript laser printer, but it may not work with all the applications you need to use.

• Scoop, a page layout program, announced it has had lousy sales results from restricting its distribution channel to dealers and will now be available through discount mail order houses (the press release Tom read didn't use exactly those words).

• Version 3.0 of PageMaker has been officially announced; however if you send in your upgrade check without their special order form, they will return it, but probably not until you have smugly tossed out the order form. So wait for the form to get the upgrade. But if you don't own PageMaker and you want it, buy it now, because the 3.0 version price is going up $100 to $595 for the Mac and $795 for the PC, while the upgrade is only $15 if you bought it after November 2, 1987.

• CAP '88, the Computer-Aided Publishing Conference, will be held at the Sheraton Washington Hotel near the Woodley Park metro stop on the Red line from February 8-11. Registration for conference sessions is $395; Tom Piwowar will present a session on "Hardware Management Considerations." You can get into the exhibits for free if you get the registration form by calling (301) 294-8710 (in Rockville), or watch the newspapers for ads near the time of the conference that offer a free pass. If you just show up at the door, it will cost $10 to see the exhibits.

Multi-Finder Experiences

Much of the Q&A was devoted to members' experiences with Multi-Finder. The main experience now is that few people have enough RAM to be able to use it; since the slide in the value of the dollar is driving up the price of RAM chips, the adoption of Multi-Finder as a standard could take some time. Programs that do not work well in Multi-Finder include SuperPaint and Excel. Microsoft is promising an upgrade to fix this, but until it's out, members were told that Excel does not work unless it is loaded into the first meg of RAM, so to get it to work in Multi-Finder, it has to be installed last because MF loads backwards (i.e., the last shall be made first).

Miscellaneous questions and answers included the following:

• If a file announces it is damaged and will not open, try opening the application it was created with first, then go to File and choose Open. Usually it will present the name of the stubborn file and open it successfully. If it does, immediately choose Save As and create a new copy, which should not give you any further trouble.

• Disk Express can speed up the function of hard disks by overcoming disk fragmentation, a pernicious problem characterized by the computer having to search in several places on the drive to bring up the entire file you want. Disk Express is smart enough to take all these files and re-assemble them into one place. It also groups the files it expects to change the least often (applications), and the ones it expects to change the most often (documents).

• INIT stands for "initialization" and an INIT is a set of instructions that lives in the System Folder and is activated at

contd. on pg 50

NEWSROOM FOR THE APPLE IIGS: A Review

by Chuck Ward

The "NEWSROOM" is a program for writing and printing newsletters, or small newspapers, on the Apple II series of computers. The version that my wife and I have was originally purchased for our Apple IIc. When we traded up to the Apple IIgs, we also upgraded the NEWSROOM program to work on it. The revised Program primarily contains new printer codes for use with the built-in printer port of the Apple IIgs. In fact, of the programs that we had purchased for our Apple IIc and later tried to use on the Apple IIgs, the most frequently-troublesome problems were difficulties in printing (or the absolute inability to print) the resultant documents on our Imagewriter II printer. Upgrades were available for most of the programs we had purchased for the Apple IIc. Programs that have never been upgraded included ASCII Express and Supercalc 3a. Thankfully, AppleWorks worked from the beginning—never any printer problems. The Program works with 1 disk drive (5.25 inch), but two drives (both must be 5.25 inches) will improve Program performance and avoid having to swap disks many times during use of the Program. Even so, many disk swaps are needed, since you work with 3 sets of disks, the Program disk, several Clip art disks, and one or more data disks. The Manual recommends separate data disks for banners, text and graphics. I have found that 1 disk can contain all three without difficulty.

The NEWSROOM seems primarily to be designed for high school students to easily prepare brief (1 or 2 page) newsletters with graphics included. The Manual that comes with the Program stresses this aspect of its use. We use it, on the other hand, to prepare a visually interesting one page newsletter which we mail to our children and parents (who live a distance from us) about 4 times a year. We just finished writing the one to be included with our Christmas cards.

Make no mistake about it, this is a review of the NEWSROOM version for the Apple IIgs. The version that we had purchased for our Apple IIc would not work on our Apple IIgs. Specifically, it would not print the newsletter we had created. In addition, the color menu screens produced by the NEWSROOM Program on the Apple IIgs (with the Apple Color RGB Monitor) are just barely acceptable. I also haven't been able to completely print a newsletter using the new hardware set-up. The last line of newsletter text does not print. I have contacted Springboard several times. They sent me a new Program disk which also did not work, and a vague suggestion that I print the newsletters we prepare on another Apple IIgs with the older ROM chip. A suggestion by another WAP member, to turn off the print buffer on the Apple IIgs' Control Panel prior to printing, solved this problem.

I have suggested to Springboard that they either correct the problems inherent in using the NEWSROOM on the Apple IIgs or offer a replacement program, such as their new Publisher, which they say will also use their NEWSROOM graphics. They refuse, saying that the Publisher is a different program altogether—but have yet to suggest an alternative that works. So much for customer satisfaction.

The Manual (86 pages long) that comes with the NEWSROOM Program is both annoying and poor. It is written generically, i.e., to be used by the owners of any computer that NEWSROOM works on (including Apple, IBM and Commodore). Only one or two pages specifically and briefly discuss how to achieve optimum performance on the Apple II computer. The last part of the Manual tells you how to organize, run and produce a school newspaper using the NEWSROOM. It contains a glossary and 2 pages of proofreaders' symbols. What it doesn't tell you is that if you're serious about producing a school newspaper, the NEWSROOM is a difficult program to do it with, especially if you have an Apple IIgs. You would, in my opinion, be better off producing the newsletter using AppleWorks and importing graphics using Pinpoint's Graphic Edge or the GraphMerge option on the original Pinpoint Desk Top Accessories disk. At least then you could use the fabulous library of Print Shop graphics, something the NEWSROOM won't let you do.

I found the directions for use confusing, and the order of operations to produce a newsletter illogical. The Manual suggests making the banner or top of the newsletter first, then creating the art work, called "clip art" and finally writing the text or copy for each story. I think the order is reversed. We always prepare our text first, add the graphics, and then select or design a banner. The story panels are very small and will contain only a few sentences, especially if you use art work in the panel. A one page newsletter will contain a banner and 6 story panels. Each story panel can contain one or more pieces of art work. You can combine story panels to make longer stories, but with some difficulty. You can also print just a banner, although I can't imagine why you would want to. You can also print pages with just story panels, eight per page. Thus there is some flexibility. The text editor is very awkward to use and text is hard to change. Most of the text-editing functions that make the Apple IIgs an easy computer to write with are not available in the text mode, all in the name of making the Program work on 3 different computers, I assume. The Manual is of little help here. The graphics editor for the art work is much more sophisticated, although still elementary when compared with programs like Print Shop. You can combine pictures, reverse or flip them, and modify them to your taste. This latter process is tedious, however, and requires the user to add or delete pixel-by-pixel. You can even produce crude graphics from scratch using the editor. There is also a module that lets you transmit completed newsletters to other computers via a modem. The directions in the Manual take up two and a half pages and again are short on detail.

The directions for printing also lack detail and the printing options are limited. You cannot make multiple copies, for instance. Nor can you print in color. NEWSROOM includes only 3 fonts (type styles), each available in 2 sizes. To configure the NEWSROOM to print on the Imagewriter II using the Apple IIgs, you must (just prior to printing) select, in order: Printing Press; Change Setup; Imagewriter II or Imagewriter II (wide); Linefeed = Yes; Slot 1; Apple IIgs Printer Port.

This configuration will then be saved on the Program Disk for future use. In addition, the Apple IIgs' Control Panel must have

contd.

Printer Port selected by Slot 1 and the Print Buffering feature must be "off".

You move the cursor by using either the cursor-control (arrow) keys or the mouse. You then select the various Menu options using the Option key on the Apple IIgs (or closed-Apple key on the IIc). The "Return Key" so widely used by Appleworks and other, friendlier programs, does not work on the NEWSROOM. The only pleasant surprise was that I discovered, by accident, that the mouse on my Apple IIgs works very well with the NEWSROOM program. In fact, it speeds up the selection and editing of the chosen graphics dramatically. Later, I found a brief mention of the use of the mouse on Page 7 of the Manual.

The graphics that come with the NEWSROOM Program are cute, but are primarily primitive drawings of various animals. You will want to purchase (surprise) the graphics disks (called clip art) available from Springboard if you're serious about using the Program. They are available for approximately $30 from Springboard, but can be purchased by mail and in discount stores, such as Egghead Software and Babbage's, for about $20. Other sources of graphics disks for the NEWSROOM include: Beagle Brothers, San Diego, California, which has 3 Minipix disks; and B.C. Software, Fresno, CA which has several interesting graphics disks available for both the NEWSROOM and Print Shop. The program, Clipcapture, published by William Miller, Racine, Wisconsin, allows you to convert Print Shop graphics to NEWSROOM Clip Art.images; the Program disk for Clipcapture also contains many Newsroom graphics. It even allows a limited amount of editing and reduction in size. There is some distortion in the graphics when they are converted from one program to the other, but the results are acceptable.

I know it's unfair to compare NEWSROOM and Print Shop, since they are designed for different purposes. But we own both programs and the contrast is great. One program, Print Shop, is user-friendly and the other, NEWSROOM, is much more difficult to use. I was able to use the Print Shop the first time I booted the disk (after configuration) without referring to the Manual at all. With NEWSROOM, I have difficulty with the program each time I use it, even with the Manual open and in front of me.

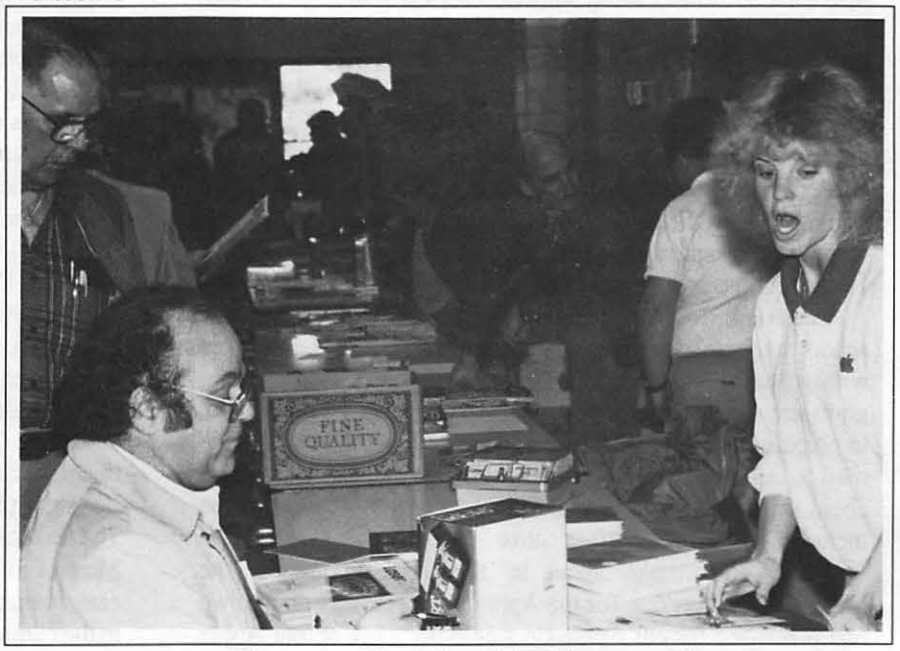
The NEWSROOM is published by Springboard Software, Inc., 7808 Creekridge Circle, Minneapolis, MN 55435 and is sold for $49.95. The Clip Art Collections, Volumes 1 and 3 are sold at $29.95 each, while Clip Art Collection, Volume 2 is priced at $39.95. These are all list prices. All the Springboard products can be purchased by mail order for much less. Programs Plus, Stratford, Conn. (1-800-832-3201) sells the NEWSROOM for $35 and the Clip Art disks for $18 and $25 (plus shipping), respectively. As you might expect, all the disks are copy protected.

Desktop Publishing SIG contd. from pg 48

start-up. They can be disabled by removing them from the System Folder. INITs can be used to help utility programs install themselves and can be written to do jobs like screen blanking, or practical jokes like you name it. They can also conflict, so be careful how many you drop into your System Folder at a time.

• Laszlo Berty explained his Ad Center concept, which is probably advertised elsewhere in the Journal. For $175 per week, desktop publishers and Mac graphic artists can have two hours per day of access to equipment such as a Varityper (600 dpi laser output), clip art, design library and a color slide machine, in addition to the opportunity to meet and network with other people in the same business at that site. The office is located near Rt. 7 and Rt. 123. He also announced a training program for would-be entrepreneurs, especially those who wish to set up similar ventures. His number is (703) 827-5967.

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.



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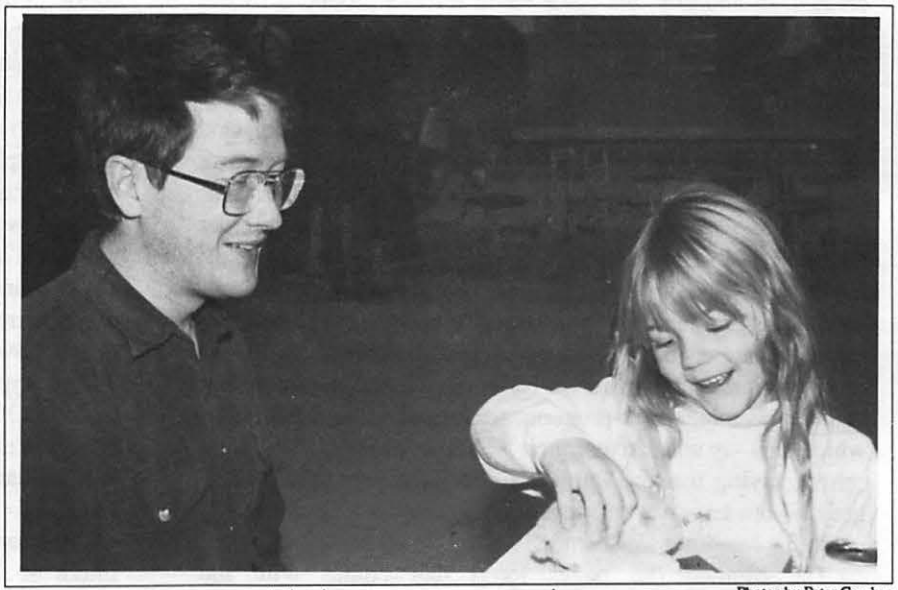

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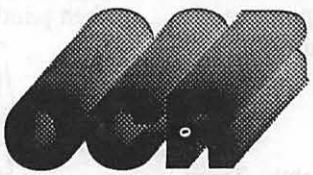

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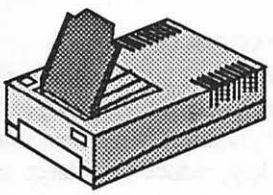

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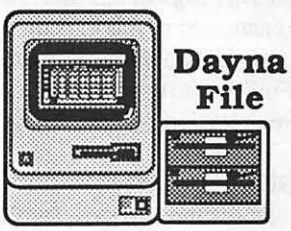

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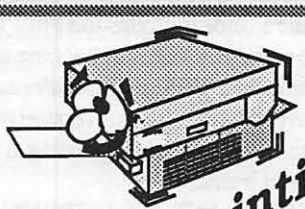

LaserPrinting Over 700 PostScript Fonts Available

ON THE ROAD AGAIN

Done in Cricket Draw using a linear radial fountain. Larger letters were set individually and the smaller letters were set in blocks and kerned to them in white.

by Jay Rohr

RESPONSE

In his Dec. '87 column in the "Journal," Lynn Trusal mentioned that he would "like to see other readers submit to the Journal their ideas on how various Mac applications can be combined to produce a better result." This is an excellent idea, but in a roundabout way, this may be what we're all writing about.

How's this for a combination: PageMaker, FullPaint, SteppingOut as basics; and then add some CricketDraw for special effects (except that the NEW VERSION of CD cannot even translate text files into PM under the PICT format!), M'Word for text only files, XPress for superior type control, and Illustrator for rotated type. That's it for now.

That's for page make-up, art, and design. DAs may include SmartScrap, DA-Switcher, Camera, and ArtGrabber, with MacDialer for names, addresses, phone nos. and Calendar for appointment lists (SideKick).

These form the basis of our electronic publishing operations. HyperCard is fun but I have found it difficult in its present version as a utility for integration into the production and publishing environment. The Proportion Wheel Stack is a step in the right direction, but not much else is at this time. I like OverVue as a database for my books, article references, VCR and cassette tapes, and client lists because of its import/export capabilities in many programs. Occasionally we use Silicon Press, but Servant and MultiFinder will have to wait for a RAM upgrade someday.

THE BASICS

The Basics mentioned above were not come by lightly. They came about by long, long hours of experimenting with other programs and applications. The field for our productivity, then, has narrowed down to just these programs in order to achieve the fastest and the best in productivity for which we are paid. As a matter of fact, business is booming for our Macs.

If the Editor includes the FullPaint Tips page in this issue, it can be seen why one can become so enamored of this excellent program. And YES, as I mentioned months ago in my column, you have to have a special version of FullPaint to run with the SE. See the FullPaint ads regarding a free revision for the SE for registered users.

FULL PAINT & STEPPING OUT

Collect all kinds of art, digitized and scanned images. Don't be afraid of the jaggies: a solution is at hand—a much better solution than that offered by either GraphicWorks or SuperPaint. The flexibility of FullPaint offers freedom to the artist or designer who wants to edit images to his/her liking.

Full page is 8 X 10". That's the first thing to remember. The second thing to remember is that any Paint or scanned/digitized image can be reduced or enlarged in FP, and my favorite tool for doing this is the Freehand Form Tool, alternating between white and black fill, and used almost exclusively. SteppingOut is first opened, and then FullPaint. FullPaint will not expand fully, but there is enough showing so that you may work in it. Clean out most of the greys in the original size so that you will have cleaner pixel lines that define your art. Alter it at this point also, if desired.

Take that cleaned-up art and reduce or enlarge it so that its dimensions are PROPORTIONATE to the 8 X 10" size, which you will be using. Use FP's ruler or MouseSpot and/or a proportion wheel, and get the art to its proper size. Using the Marquee carefully, select those proportionate measurements exactly and copy your work to the Clipboard. Open a NEW FP window, triple-click on the Marquee and choose Paste. Your graphic will now fill the 8 X 10" area. And now the fun begins—and believe me, it's worth it.

Expand your screen and start cleaning up some more, using the Freehand Form in white or black, and watch those jaggies disappear! It's so elating to refine electronic art this way. You can drop screens and patterns in at any level, i.e., the original or the blown up version. But remember, the blown up version is to be later reduced for LaserWriter output. So if you are using patterns or screens in the enlarged view, use the 50% gray and on down, and not the denser patterns which may become lost or filled in when printing.

Used in a national publication, this was clip art cleaned up as described in this article (except for the screen, which was left intact).

PAGEMAKER

Save your large graphic as is, when completed. You are now through with FullPaint. Open PageMaker, and Place your FullPaint graphic. Crop if necessary. Then, holding down the Cmd/Shft key, reduce your large graphic. You will notice that PM performs these reductions in automatic proportion scaling to utilize the LaserWriter's resolution to the fullest. You may try several sizes of your graphic and print it out to see which looks the best. I prefer the smaller sizes, but not always. Be prepared to be pleasantly surprised by your work of art and refinement.

PM itself is a surprise in that if you put a border around your work, it comes out where you put it on the screen. It is extremely accurate and easy to use. And it beats both SuperPaint and Graphic Works in final form because SuperPaint's LaserBits are

contd.

extremely difficult, tedious, limiting, and hard to line up several images while GraphicWorks has a problem with printing its own and LaserWriter screens—they break up unexpectedly.

I was able to produce a very professional-looking 56-page magazine using just the methods described above. This was done in exactly a two-day period, almost single-handedly except for some photos that had to be screened and dropped in place.

Additionally, I have collected a file of over 400 borders and images, and these are also refined using the same methods described above. On a graphics page in PM, it is advisable to keep the Smoothing function turned on. Quark XPress also contains an impressive array of borders and styles. (By the way, the System that comes with XPress contains a great font called PostScript Escape. If PostScript is your thing, don't lose this little gem. It's usefullness is unlimited for access to the LaserWriter, acting as a pass through command of instructions while in a program.)

PageMaker's primitive tools, of course, are a font invisible to the user, called Aldus font.

GRAPHIC WORKS

Several of the hottest new programs seem to be Canvas and VideoWorksII, but I have not had the chance to use these yet. In the meanwhile, we just received the new GraphicWorks manual, and it is superb. All functions are covered in great detail, and the tutorial is a very simple introduction to the program. All of the ink modes are covered in great detail, finally. Anyone using this manual and that wonderful program can hardly go wrong—except for some minor quirks in final output to the LaserWriter, as discussed above. And GWII does not have the Freehand Form tool in its paint pallet either.

AUTOMAC

This little gem of a macro utility has had some problems dealing with the new system and finder lately. An article by Howard Bornstein in *Macazine* stated that AutoMac used with MacPS can be a great power macro. I tried his directions given in the article and it simply doesn't work. A call to Bornstein did not prove fruitful; he returned the call but I was out.

Meanwhile, a letter to H.C. William Anderson, creator of AutoMac, was answered immediately. He mentioned that he was not familiar with MacPS, and that he considered that as a competitive product. (What about CE's Quick Keys?—looks real good since it spans all files and/or applications.)

Basically, Anderson is trying to work with the new System and Finder files to resolve the problem, which he admits exists. He is sending a beta (test) version for my examination and I will try to keep all concerned updated.

(Jay Rohr is Vice President, Production and Systems Manager of Creative Communications, Inc., Laurel, MD, specializing in graphics, electronic publishing, consultation and seminars on the art.)

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QUICK EDITING WITH QUICKEYS

by Louis M. Pecora

There is no doubt in my mind that almost everyone using system 4.1 and higher on a Macintosh should purchase QuicKeys from CE Software. In this article I'm not going to explain all the things you can do with QuicKeys. See the January 1988 issue of MacUser for a review of QuicKeys and a 5 mouse rating. Here I will show you some very nice, fast and, I think, elegant QuicKeys methods for deleting, cutting, copying, and pasting in your favorite word processor, text editor, or even graphics program. I will also add some nice things you can do with multiple clipboards, if your program supports them.

QuicKeys lets you assign various mouse clicks and drags, text, and other keystrokes to any single key stroke or macro, as it is often called. The keystrokes defined in QuicKeys take precedence over those defined in the program. In that sense it is much like Tempo, the well-know DA for the Mac. But it acts faster than Tempo and can do some things that appear to be difficult, if not impossible, in Tempo. To be fair, Tempo can do some things QuicKeys can't, but I've never found them useful for my work which covers a wide range of Macintosh applications. QuicKeys is a cdev/INIT file that resides in your system folder, but you don't have to do anything to install it. Just drag it there and reboot. You do need system 4.1 or higher.

Now consider the following process in which you copy a block of text from one point in a file to another (count the steps): (1) select the text block, (2) copy it to the clipboard (usually cmd-c), (3) move the cursor to the insertion position in the text, (4) click the mouse button to set the insertion positon, and (5) paste in the clipboard (usually cmd-v). With QuicKeys this can be decreased to three steps *and* the process is physically easier. You don't have to hit more than one command key and it's an easy one—no taking your eyes off the screen.

Other block text operations are also made easier with QuicKeys. All make more "natural" use of the mouse. Also this can be done with graphics objects, too. This is the beauty of QuicKeys!

Fast Copy and Paste

Let's start with the above copy and paste, something that is done often in all types of programs. We need to define some basic QuicKeys operations and string them together into a single QuicKeys sequence which can be done with one key stroke. We will condense the copy (step 2), the mouse click (step 4) and the paste (step 5) into one QuicKeys keystroke. This means we need to define these steps individually as keystrokes of some sort (cmd, cmd-opt, or whatever keys) and then define a final keystroke which links them in the proper sequence. It's a little like programming, but on a *very* simple level.

Since QuicKeys is a cdev you access it through the Control Panel. Call it up and, using a dummy document in your favorite program, define the following:

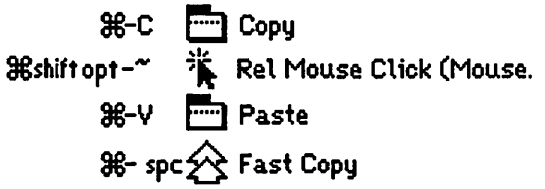
[1] Select Menu from the QuicKeys Define menu. Define Copy as an Edit menu selection (the Edit Menu in your program, not in QuicKeys). Assign to it the keystroke cmd-c. This just duplicates the usual cmd-c, but it gets the action defined in QuicKeys.

[2] Define a Mouse Click relative to mouse location and assign to it the keystroke cmd-shift-opt ~ or some other obscure combination not likely to be used for anything else. This one will only be used in a Sequence so it doesn't need to be convenient. In fact you can define this general mouse-click to be a Universal keystroke, since it will be useful in many sequences defined in many programs. Be sure to choose mouse location, not screen location, and click in the box next to the window name to turn *off* the window choice since you want your mouse click to be where you put the cursor, which will not be at the same place or in the same window all the time. This will be clear below when we string these together into a sequence.

[3] Define Paste as an Edit menu selection. Assign to it the keystroke cmd-v. This just duplicates the usual cmd-v.

Now we will string these together to make one QuicKeys action.

4] Select Sequences from the QuicKeys Define menu. Using the usual Mac double-clicking selection technique select step [1], [2], and [3], in that order from the QuicKeys functions available. Assign to this sequence the keystroke cmd-Space. That may sound odd at first, but the keys are in a good position for easy access at any time during editing. You should have the following QuicKeys keystrokes in your QuicKeys window:



Copying and Pasting is now as simple as (1) selecting the block of text to copy, (2) moving the cursor to the insertion point (no need to click the mouse button here), and (3) pressing cmd-Space. Think about it. You can move around the page copying and pasting just by keeping your left hand near the cmd-Space combination and using your right hand to guide the mouse around the page (assuming you have the usual Mac setup). The following QuicKeys shortcuts will also use the spacebar. This way these editing techniques will keep your left hand in the same place, your right hand on the mouse and your eyes on the screen.

Fast Deletion

Deletion of a block of text usually requires selection of text and pressing the "Clear" or "Backspace" key. You have to remove your hand from the mouse and look down at the keyboard. Now you can define a deletion which keeps your hands on the mouse and keyboard, in fact in the same position as for the above QuicKeys copy and paste. So, define the following QuicKey:

[5] Using Menu under the Define menu in QuicKeys define Clear from under the Edit menu (in your program) as cmd-opt-Space or using Alias in the QuicKeys Define menu define "Backspace" (delete) or the "Clear" key, if you have one, as cmd-opt-Space.

Now to delete a block of text select it and hit cmd-opt-Space.

contd.

Fast Paste

Suppose you have something on the clipboard that you want to insert. The following QuicKeys Sequence will give you a quick paste.

[6] Select Sequences from the QuicKeys Define menu. Then select in the following order, relative mouse click (number [2] above) and Paste (number [3] above). Assign the keystroke opt-shift-Space to this Sequence.

Now you can paste quickly by moving the cursor to the insertion position (no need to click the mouse button, it's already built into the QuicKeys Sequence) and hit opt-shift-Space.

Fast Cutting and Pasting

Cutting and pasting can be similarily done; however, there is a caveat here which weakens the usefulness of this technique. Whenever you cut a block of text from a paragraph the word or text processor automatically rearranges the text *before* getting the next event from you. In the case of a QuicKeys fast cut and paste the next event is a mouse click. Hence, the cursor can be inserted at the wrong point in the text (because the program rearranged the text before the click) and the paste will not be in the proper place.

This is highly dependent on how each individual program handles the cut and rearrangement and also on where in the text the cut and paste are to take place. I've found that in a text processor like QUED/M which I use for writing programs, cutting and pasting between two different lines is no problems because each line is terminated by a carriage return and text rearrangement is minimal and does not interfere with the cut and paste. You will need to check out each program to determine the usefulness of this QuicKeys technique.

I admit that any nice feature is quickly degraded by having the user remember exceptions, but I recommend you try the cut and paste sequence in your programs. You may find some in which it is useful. If anyone out there figures a way around this, please let me know. Note that none of this affects QuicKeys cut and paste usefulness in a graphics program when you are cutting and pasting objects, since the program does not rearrange objects.

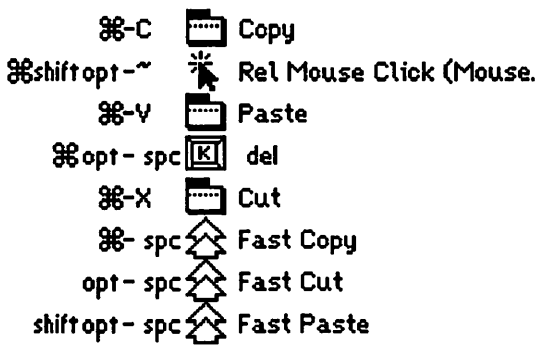
To create the Fast Cut in QuicKeys define the following Menu selection first.

[7] Cut as cmd-x.

Then define the following Sequence in the order given.

[8] Cut (number [6] above), mouse click (number [2] above), and Paste (number [3] above). Assign to this the keystroke opt-Space.

You now have a nice set of quick copy, paste, delete, and cut macros all doable with one keystroke. There are 8 of them and they should look like this:



The keystrokes are all done with keys grouped around the same location, the space-bar. This makes it easy to learn to do these things without looking and without removing your hands from the mouse. No more hunting and pecking around the keyboard for these operations.

Fast Multiple Clipboards

Some programs, like the popular text editor QUED, give the user access to multiple clipboards. You can cut and paste to any of them and hold things on them to be pasted later in your work. In the case of QUED you have 10 of them, numbered from 0 to 9. I will show you how to get what I think is better use of these by employing QuicKeys. I will model my example around the clipboards of QUED, but I'm sure the example can be adapted to any program which allows multiple clipboards.

In QUED you set which clipboard you want to use at the moment by pressing the command key along with the number of the board you want (cmd-0 to 9). You then use it like any Mac clipboard. There are two problems with this. First, it is easy to forget which board you have active, so you might accidentally copy over its contents. Second, the process of accessing multiple clipboards requires many keystrokes. Enter QuicKeys.

Let's agree to keep the 0 clipboard as the general use clipboard. Anything on it is disposable and it is always the active board. The other boards will hold more "permanent" things and be kept "unactive". Now set up a fast "copy to" and "paste from" clipboard 1 as follows.

[9] Using a Menu choice or an Alias under Define, assign the keystroke cmd-shift-0 to the selection of the number 0 clipboard.

[10] Using a Menu choice or an Alias under Define, assign the keystroke cmd-shift-1 to the selection of the number 1 clipboard. Note, this supplants the FKEY for ejecting the internal disk. If you still want this, then define this as some other key stroke, you are not likely to use much.

[11] Define the "fast copy to clipboard 1" Sequence: [10], [1], and [9] and assign to it the keystroke cmd-opt-1.

This activates clipboard 1, copies text you've selected to it, and reactivates clipboard 0, so clipboard 1 remains "hidden" and you have no fear of copying over its contents. Now to be able to paste from it,

[12] Define the "fast paste from clipboard 1" Sequence: [2], [10], [3], and [9] and assign to it the keystroke cmd-1.

This clicks the mouse button, activates clipboard 1, pastes from 1 to the insertion point, and reactivates clipboard 0. Note that the mouse click is built in so you only need to position the cursor at the insertion position. With sequence [12] selection of clipboard 1 (the QUED cmd-1) is replaced by a paste from clipboard 1 (QuicKeys cmd-1). This is more natural since you will store things on clipboards 1 to 9 that will presumably be pasted several times. Obviously, [11] and [12] can be modified to work with the remaining clipboards. Just replace the number 1 by the number of the clipboard you want to work with.

Now it may happen that you want to paste things from several boards sequentially. In that case with the above sequences, because of the built-in mouse click, you will have to move the cursor after each paste. If you find this a nuisance, you can define the following alternate fast paste from clipboard 1, 2, or whatever,

contd. on pg 73

MacNovice Column

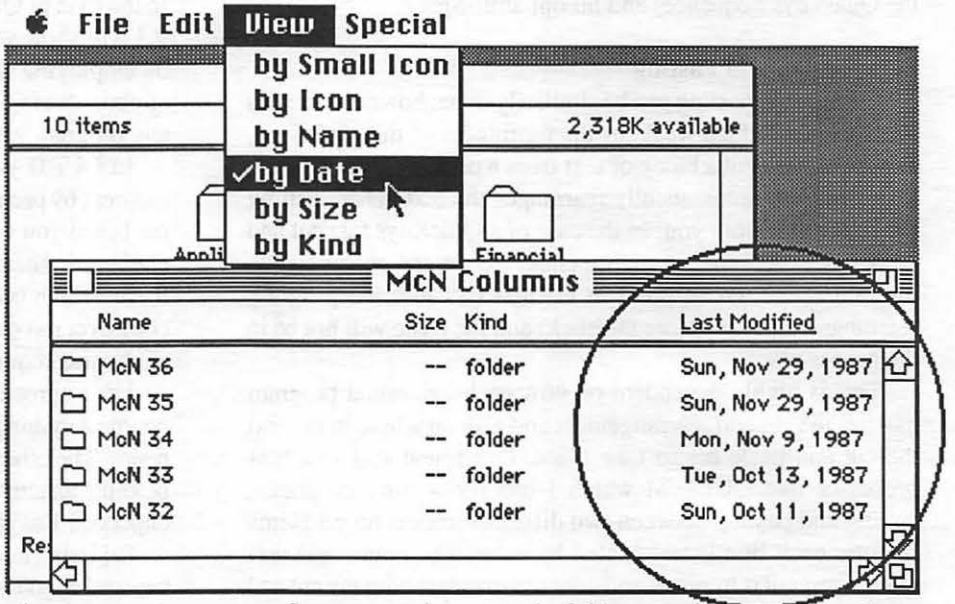
by Ralph J. Begleiter

Macintosh Finder Maze (Part 3): Make the Finder Work for You

Now that you've discovered how to maneuver within a Macintosh application, using documents nested within folders and still more folders within folders, here's a chance to take advantage of the features the desktop Finder itself offers to MacNovices.

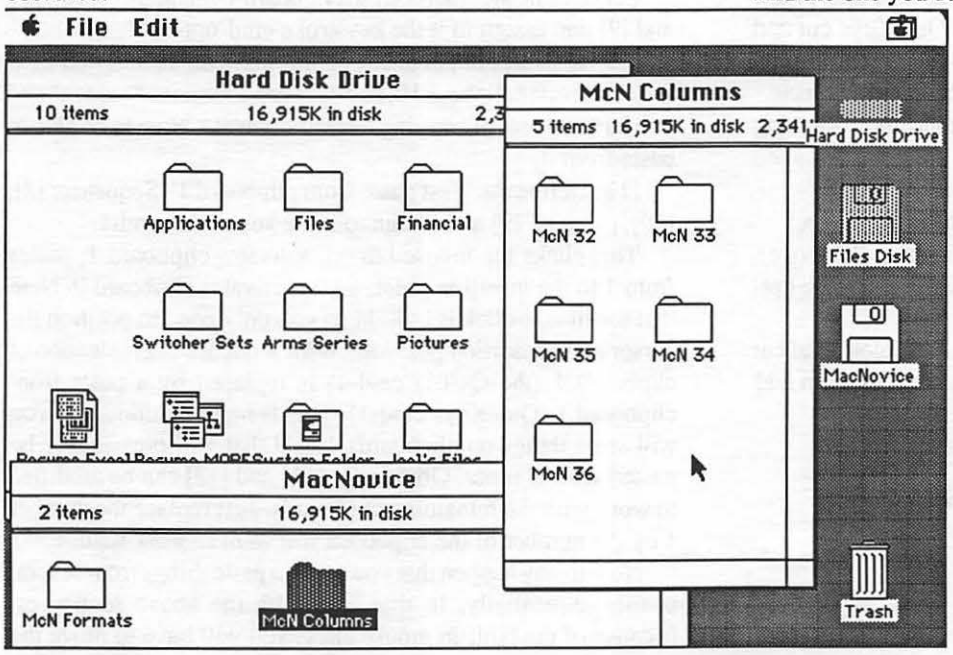
Don't be afraid to experiment with desktop layouts which help you get your work done faster. Remember, you can resize the windows which appear on your desktop, you can define how those windows will display their information, and you can even tell your Mac which documents and applications you want to start-up with when you first turn on the computer.

First, try *sizing* your desktop windows so they complement, rather than conflict with, one another. Arrange nested folder windows so when you open them successively you can still see the contents of previous windows, if that's important to your work. Generally, it's not a good idea to fill your desktop screen with very large windows. They'll keep covering one another. Use the smallest size window which meets your needs. Remember that it's always easy to switch to the largest window view in a flash, by clicking in the "grow" box in the upper right-hand corner of any window. Also, don't forget that if icons disappear beyond the scope of an open window, you can always SCROLL the window to reveal what's obscured.



Next, take advantage of the VIEW menu in the Finder. If you've created a pile of letters to your best friend, place them in a folder with your friend's name. Then, after opening that folder, choose BY DATE from the VIEW menu. Instantly, your letters will be sorted on the screen, most recent at the top. A handy way to view documents which have similar names.

Suppose you've created a folder containing correspondence of a more general nature. Instead of viewing the Correspondence folder's window contents by ICON, choose BY NAME from the VIEW menu. In a flash, your correspondence will be listed alphabetically by the title of each item, an efficient way to help find the one you're looking for.

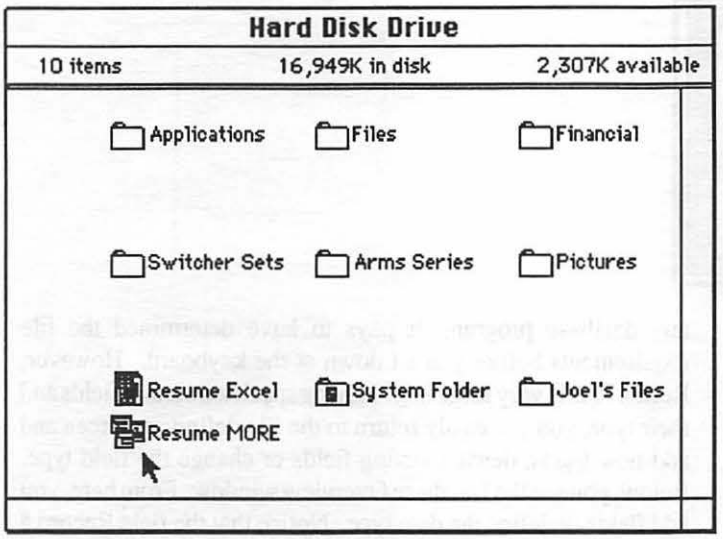


No doubt you'll find uses for the other "view" formats available in the Finder. For instance, as you build a large document, such as a chapter or a long letter, over a long period of time, you might save each version separately, in case you want to retrieve an early section which was modified later. If you display the various versions BY SIZE from the VIEW menu, they'll be sorted roughly by the most complete.

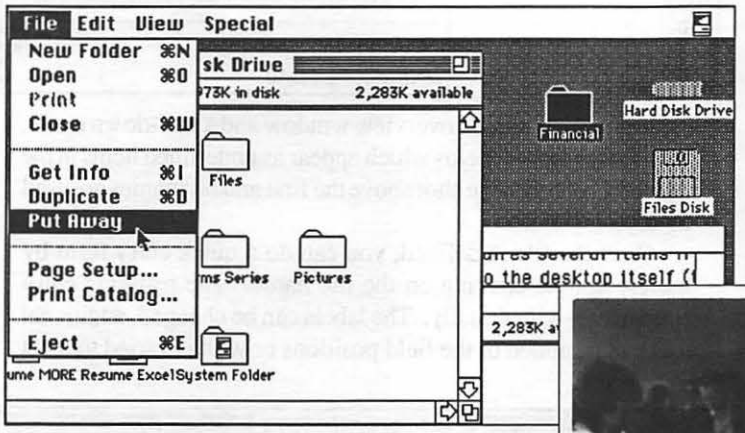
To put as many items in a small space as possible, try using the SMALL ICON view. Some of the more complex icons appear muddled in this format, but it may be useful for some MacNovices.

If you find that a printed list of documents in a folder may be of use to you, bring the appropriate folder to the front of the desktop, open it, and choose the most useful "view" from the VIEW menu. Now, select PRINT CATALOG from the FILE menu. You can easily print a list of everything in the folder, presented as you've selected it from the VIEW menu.

contd.



When you're engaged in a project which requires several items from different folders, drag them from the folders onto the desktop itself (the area outside any folder windows). When you're through using them, select each item and choose PUT AWAY from the FILE menu. The Finder will automatically return each document or folder to its correct place on the desktop.



If you use work disks separated by type of application (such as a MacWrite disk, a MacPaint disk, a spreadsheet program disk, and so on), you can use the Finder to get you to your work more quickly. Insert one of the program disks, open its window and select the application you want to start with. Now, choose SET STARTUP from the SPECIAL menu.

Macintosh will ask if you want to make the chosen application the "startup" application. If you click "yes," the next time you startup your computer with that disk, it will automatically begin running the application you've chosen, without first going to the Finder and its desktop.

In the latest version of the Macintosh Finder (version 6.0), which includes the MultiFinder, you can even select several applications and desk accessories to be opened immediately upon startup.

Finally, to help you keep a neat desktop, the finder will automatically straighten out your desk whenever you ask it to. Simply open a folder or disk window and choose CLEAN UP from the SPECIAL menu. Documents and applications will "jump" to a predetermined (but invisible) grid in each window, making rows and columns easier to view and browse. If you hold down the COMMAND (cloverleaf) key before choosing CLEAN UP, the Finder will even eliminate unused space in windows, "dealing" its contents from top-left to bottom-right in the window until everything's back in place.

As you undertake the process of reorganizing your electronic desktop, take advantage of the helping hands the Macintosh Finder offers. It'll help you find your work more easily and make you work more efficiently.

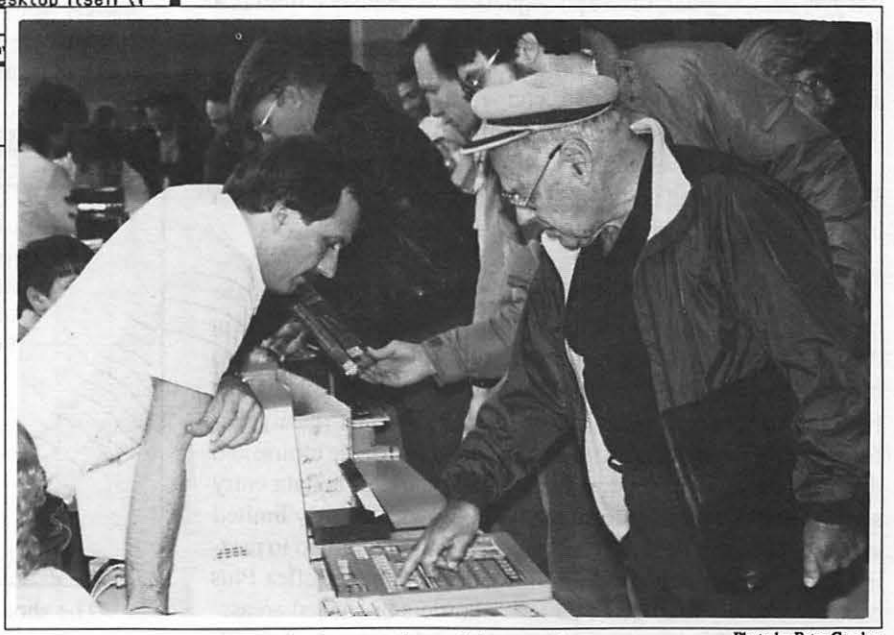


Photo by Peter Combes

But that's not a bonafide word!

Softviews by David Morganstein

Reflex Plus (Borland). This is an enhanced version of the earlier Reflex relational database package. Perhaps the greatest changes are reflected in the accompanying documentation which has been greatly improved. While Reflex Plus does not offer graphical data elements, it is a very strong, easy to use program. With it, you can quickly create a simple single-file data base or, if your needs require it, you can build and link together several different files.

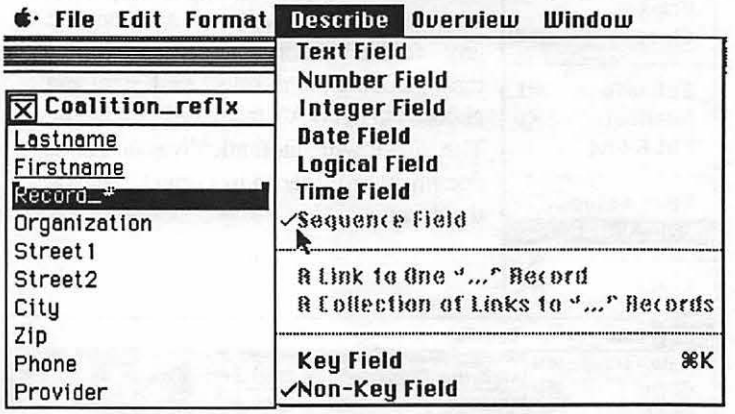
For those unfamiliar with the term "relational database", it means a program which allows you to construct more than one data file and then enter or display data into these files in a related way. For example, you might have a customer file, an invoice file and a transaction file. The customer file describes the companies to whom you sell, one record per customer. The invoice file describes each invoice you complete on a customer. The invoice file has one invoice per record. The transaction file contains one record for each item sold to a customer. You need a link between the invoice and customer files so that when you write an invoice and specify a customer number, the program will extract from the customer file and all of the customer information. This represents a link between one customer and all those invoice records with a specific customer's number in them. Similarly, the invoice record must contain the total dollars sold determined by adding up the cost of each item (multiplied by the number of those items that are sold). Therefore, there must be a relational link between a single invoice record and multiple transaction records.

Reflex supports the following data types: text, number, integer, date, logical, time and sequence. A sequence field is a sequential number from one to the number of records in the file. Importantly, it does not support graphics fields. If you need this ability in a relational database, you will have to consider other programs like Helix, dBase Mac or 4th dimension.

Reflex Plus allows you up to 4072 bytes per field, up to 254 fields per record and up to 4080 characters per record. You can have up to 200 linked database files and 15 open windows.

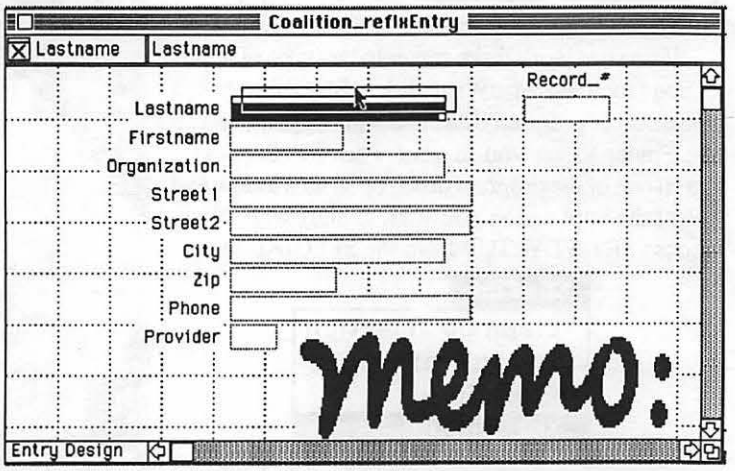
How It Works. The steps involved with most database packages are: defining a file and an entry screen, entering data in the file and then creating various report formats. If the program offers relational capabilities, you may also need to establish links between various data files. Reflex Plus allows you to easily perform each of these steps. It makes excellent use of the mouse and the Mac's interface in the way in which you define data entry screens and reports. Unfortunately, it allows for fairly limited graphics in the entry screens. Basically, you are limited to pasting in a MacPainting or a PICT formatted graphic. Reflex Plus does not allow you to generate fancy borders or shaded areas.

Defining a file is very simple and straightforward. As with any database program, it pays to have determined the file requirements before you sit down at the keyboard. However, Reflex Plus is very forgiving. Having specified certain fields and their type, you can easily return to the file definition screen and add new fields, delete existing fields or change the field type. Below, you see the Database Overview window. From here, you add fields or define the data type. Notice that the field Record # is described as a sequence field. Since you can only have one such data type per file, the menu item with the check mark is dimmed, preventing the addition of a second sequence field..



Using the database overview window and a pull-down menu, you designate Key fields which appear as underlined items in the file definition. (In the shot above the first and last names are used as keys.

Once the file is defined, you can do a quick entry form by merely double-clicking on the file name. The resulting entry form can be edited easily. The labels can be changed, additional text can be added or the field positions or widths varied to meet your needs.



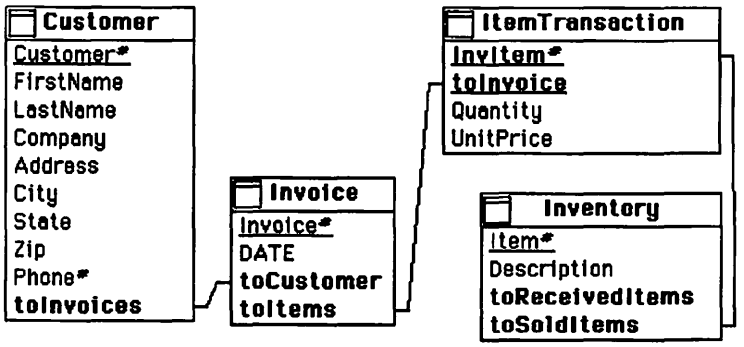
The shot above shows you the Entry Design window. You see a field which is selected and in the process of being moved

contd.

into place. By grabbing the lower right hand corner of the field, it can be resized. To demonstrate the incorporation of graphics, I have added a painting at the bottom right. On the negative side, Reflex Plus does not offer formatting the entry of items such as "nnn-nn-nnnn" to designate a Social Security number. It does allows for range checks on any field.

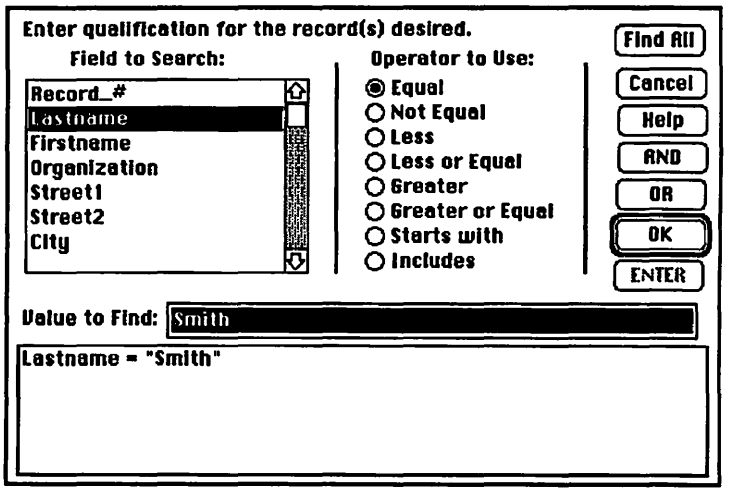
Several other database packages which have similar features do not offer a scrolling spreadsheet-like display of your data which can be used to edit the file. Both Helix and dBase Mac allow you to create an attractive columnar display of your data; however, you can only view the contents, you can not edit them. Reflex Plus does permit this kind of entry screen.

You can easily connect files together by clicking and dragging between them to establish links needed to make use of Reflex Plus' relational capabilities. In the following database design, supplied as one of many examples accompanying the package, you see four interconnected data files. You can create a report that draws together data from any record from any file. An invoice for example, would begin with an invoice number. Entering a customer number would allow you to pull items such as name and address from the appropriate customer record. Similarly, entering an item number and quantity could be used to create a new transaction record showing that a number of units of the item had been sold. The same link could locate the description of the item from the inventory file and make note of the items which had been taken from inventory. Each link can be single valued (point to only one record) or multi-valued (point to several records).



After spending hours entering data into a file, you will be ready to get something back! Reflex Plus provides great versatility in defining selection criteria and sort orders for your reports. The selection dialog box you see below offers a fast way to designate your choice of records for inclusion. Notice that after selecting the field to search, the operator to use, and entering the string (or constant) to compare with, Reflex Plus creates a formula which summarizes those choices. Several such logical statements can be "and"ed/"or"ed together to define virtually any selection.

Performance. While this is a hard measure to make, let me offer a few observations. First how compact are the data files? I took a dBase file that required 192K in McMax. When converted to Reflex, it took up 260K. Instead of just storing the commands needed to generate them, reports are stored with the data that appears in them, that is, those records and fields that match the selection criteria. As a result a report containing five fields on 1300 records takes up 84K. A second version of the exact same report but sorted differently takes up another 84K.



The time to sort the 1300 records on a 16MHz computer (SE with an accelerator board) was just under 20 seconds. On a plus or regular SE, I would guess about four times as long.

Differences from Reflex. Users of the previous Reflex program will find a number of new features. The entry form now offers: default fields (values which appear in a new record thereby speeding up data entry), calculated fields (values which are computed from other previously entered fields), and display-only fields (which can not be edited). Records can be grouped. Reports can utilize your choice of font. The maximum record size has been increased from 1000 to 4000 characters.

Documentation. As mentioned earlier, the single most significant addition over the original package is the documentation. Reflex Plus comes with two manuals, a 180 page tutorial and a 575 page reference manual. The tutorial contains two major sections, the first dealing with a single file and the second describing a multi-file application. The manuals are well written and easy to follow. The index is thorough and references both manuals. The program comes with a half dozen useful sample databases, all of which are described in the reference manual. One example of particular interest to me discusses the preparation of 2-up mailing labels.

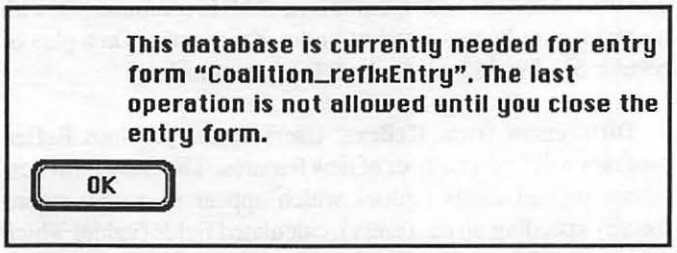
Things I'd Like to See Changed. I found the menus a little bewildering at first. As you move to different windows, new options become possible. Given the number of features offered, you may find it takes a little time to sort out which menus do what and where to look for a particular function.

Reflex Plus offers a wide variety of formats for importing data from another source. Disappointingly, it can not read the file structure (field name or types) for any other format. You must first create a matching record layout in Reflex, entering all the field names and types. Links must be defined between pointer fields, before the design is saved; otherwise, the pointer fields become ordinary text fields and can't be used as links. If the imported data do not match the type specified by the Reflex file definition, you presented with a cryptic message telling you of a problem but not telling you which record or which item caused the problem. What is more, you can not tell Reflex to ignore the offending record and continue the importing process. It just halts leaving you to figure out what to do next.

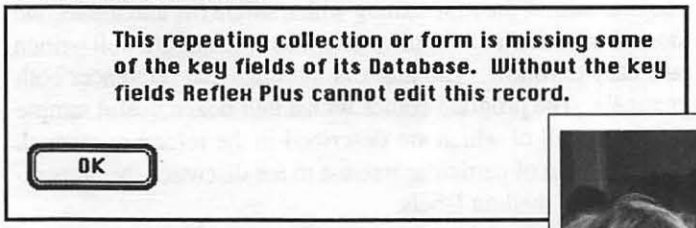
contd.

When editing a screen, especially a columnar report with a long repeating rectangle that might go off the screen to the right, the only way of selecting more than one item (field entry box or label) is to shift click on each one. This can be an unnecessary time consumer. For example, if you shorten a field and want to move everything to the left to take up the slack, you either move them one at a time or shift click on everyone to select them.

When changes are made to the file while a report window is open (but behind the entry window), the report contents are not changed. You must issue a "Calculate" command, like a recalculate in a spreadsheet set to manual calculation, to create a current version of the report accurately reflecting the current records. Occasionally, you will get messages like the following, that imply things must be done in a certain order. For example, to get to the utility window, say to resequence a sequence field, you must first close all entry report windows.



Problems I Encountered. I have not yet resolved a problem I found when using a sequence field as a key field. Somehow, I "lost" some of the key fields in the sequence numbering. Since this field is automatically generated by Reflex Plus, I'm not sure how it was lost. Using the utility that is supposed to resequence the fields did not eliminate the problem. As you can see from the following dialog box which appeared when I tried to edit records, I am not being permitted to proceed, though I don't know what corrective action to take.



I stumbled on another problem dealing with the sequence numbering. If I enter a new record, the sequence field automatically fills in the next record number. If I delete that record and add another record, the sequence number increases again, leaving a "hole" for the record that was deleted.

I had trouble importing a dBase file. A number of the records appeared to contain data unacceptable to Reflex Plus. As I mentioned before, Reflex did not tell me which records were problematic and so I don't know how to fix the dBase file to make it acceptable. I ended up importing all of the "offending" fields as text, a disappointment.

One area where Borland has allowed for greater flexibility in fact may cause users some trouble (it did cause me some). The data type for each field in the record (text, integer, date, logical, etc.) is defined when the file is created. When constructing an entry form, you have the option of defining the field types as well. Using the file definition window, I changed a data type of one item and then tried to edit the changed field using an entry form. Reflex complained that the field type was wrong! All I had to do was make the same change in field type in the form design window and away I went. However, the fact that fields in the file and in the entry form both have a type yet they must be the same can cause confusion. The purpose for this approach is to allow you to create computed fields in the report. These fields must be given a type and a display format (e.g. numeric displayed as dollars and cents).

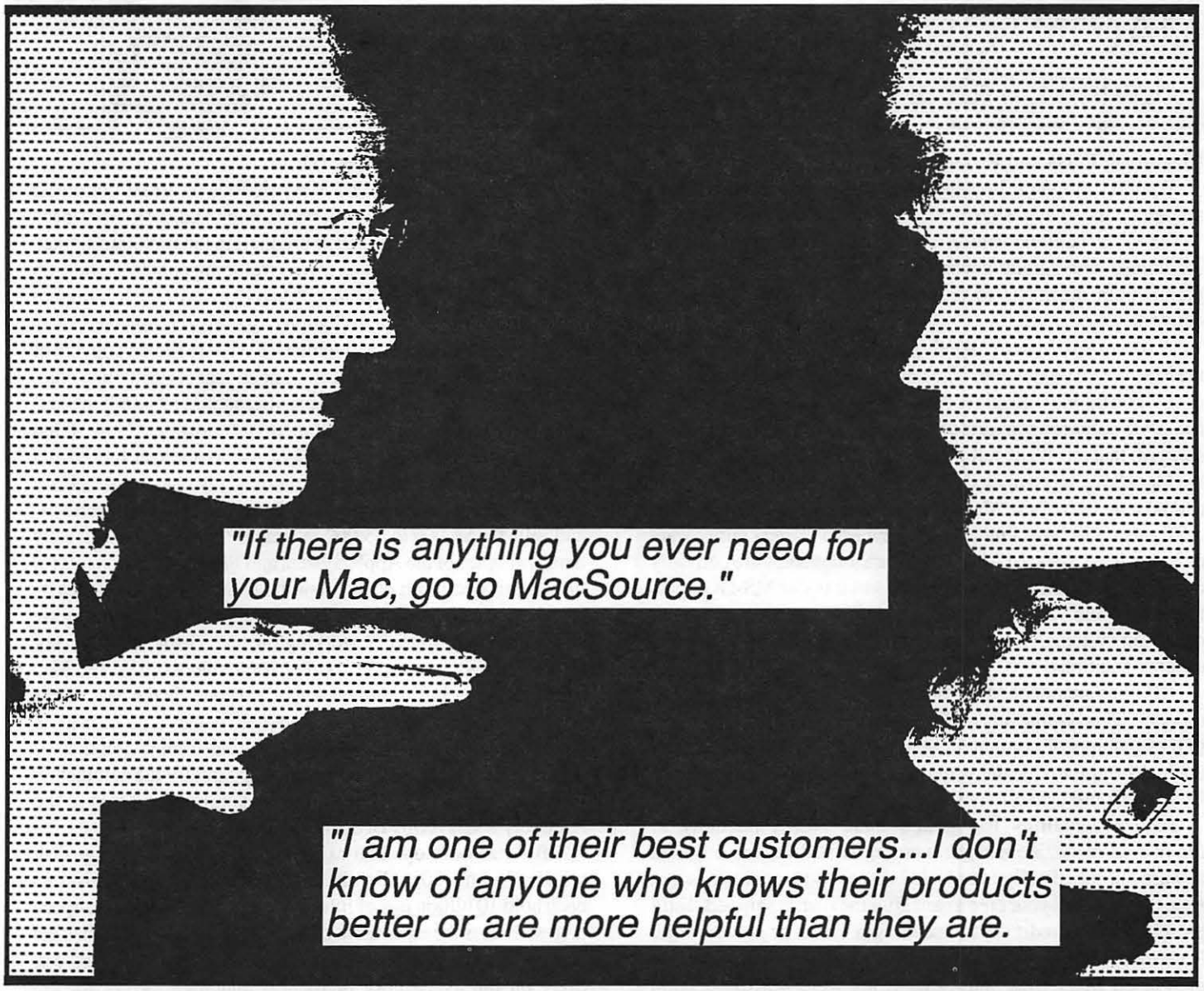
Limitations. As said earlier, Reflex Plus does not handle a graphics data type. It doesn't have a language, something that many applications developers find a real shortcoming. Given that Helix does a pretty good job without offering a formal procedure language, this may not in fact be much of a shortcoming.

There are a number of options I have seen on other databases which I consider very helpful. Reflex Plus does not offer a multi-valued field, that is every record has the same number of items. dBase Mac, for example, allows for variable length records. Multi-valued field are vert powerful for dealing with lists of unknown length, say employment dates, salaries and location for salary history. Reflex does not allow you to create abbreviated custom menus for end users. They will have to learn how to navigate through Reflex Plus menus to activate the options they require.

Summary. I found Reflex Plus to be a strong package. If you need a relational database, don't require graphics elements and are going to use the program yourself (as opposed to writing applications), it should be near the top of your list. Borland International, 4585 Scott Valley Drive, Scotts Valley, CA. 95066-9987. Phone: (800) 255-8008 Price $279.

Photo by Peter Combes

Great! Now I can afford the LaserWriter.



" You are right...they saved us a bundle when we asked for help in choosing the right hard drives and laser printer for our needs. They were really helpful in setting up our system and showing us how TOPS works so we can share our hard drive as well as have our PC on the network."

"Yes, I recently went to MacSource to use their workstation to scan some graphics and use their laser printer, and while I was there I tried the new Felix, a neat alternative to using the mouse; in fact, I bought one for my Mac Plus.

"Did you see their DaynaFile for converting PC files to Mac files in a flash? We are definitely getting one of those for the office. By the way, did I tell you we just ordered our MacViewFrame LCD projection monitor from them? No one else in town has it. You just set it on an overhead projector and, voila, you can project "live" images from the Mac. Great for training and presentations! Give Tony or Jim a call if you want to know more about it. 521-9292."

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MACINTOSH BITS AND BYTES

by Lynn R. Trusal

Macintosh Facts and Rumors

Apollo Computer, Inc. and Information Presentation Technologies, Inc. have signed an agreement to jointly market "uShare", a communication product that integrates Apple's Macintosh with Apollo's workstations running Unix. This will permit both machines to share data transparently through a network.

A recent article in *PC Week* gave the AST Mac286 card for the Mac II a mixed review. The main negative factor was the use of color on the RBG display. Although the Mac286 card running MS-DOS software supports color, the screen-refresh rate was so sluggish that *PC Week* felt it was virtually unusable. In reality, the Mac286 card is two cards that are connected by a ribbon cable and take up two of the Mac II Nubus slots. I still think that the AST cards will have limited use. Few Mac owners either want or have a need to run MS-DOS software unless they are currently doing so. In addition, the real need is to transfer MS-DOS data to the Mac and vice versa so that data files can be used in both operating systems. For this purpose, there are other better and cheaper solutions.

IBM has announced the "shipment" of its one millionth PS/s model. This is quite misleading since it does not say how many of these "shipped" computers were actually "sold." How many are in distributor or dealer warehouses is the real question. Even Compaq Computer seriously questions what IBM really means!

Mail order firms has gotten more recent publicity in *MacWorld* magazine and the warning is still for the buyer to beware but specifically to only do business with companies that state they will bill your credit card after the item is shipped. I still prefer use of a credit card to sending a check or money order because of the protection the law provides. The most favorable mentioned Macintosh mail order firms were MacConnection and Programs Plus, both of which advertise in *MacWorld*.

Icon Review is seeking to re-emerge from it recent problems as one of the troubled mail order Macintosh software firms. They have obtained venture capital funding and hope to get back on track and rescue their reputation tarnished by back-orders, back-payments and unpaid bills. They now promise to not charge a credit card or cash a check until the merchandise is shipped. A recent article in *MacWorld* illustrated the problem of mail order software.

A new laser printer that offers 1200 or 600 dpi has been announced by Printware of Saint Paul, MN (612-454-9522). The 600 dpi resolution matches the Varityper VT-600 and the 1200 dpi matches the maximum resolution of the Linotype 100 model. Printing speed is based on resolution with 8 pm at 600 dpi and 2-3 ppm at 1200 dpi. Since this is a laser printer and not a typesetter there is no need for photographic development. The printer uses PostScript compatibility but apparently not from Adobe. Printware developed its own PostScript interpreter. The 7201Q model includes 5 MB of RAM and an internal 20 MB hard disk. The exact date of availability was not announced and the expected price is in the range of $16,500 which is considerably less than the $30,000+ Linotype 100.

The U.S. has slapped trade restrictions on Brazil for unfair trading practices. Both Microsoft and Autodesk have been unsuccessful in marketing their products in the Brazilian market. Brazil is trying to protect its own developing computer industry by keeping out U.S. computer products by use of the Informatics law passed in 1984. Apple Computer has also complained about the copyright laws in Brazil which have led to illegal copying of Apple software. Microsoft complained that six Brazilian companies were not allowed to import Microsoft's MS-DOS operating system due to a Brazilian "functional equivalent" law. It has even been reported that a model of the Macintosh has been a successful seller in Brazil even though it is made with mostly foreign parts and some from the U.S. It is made by Unitron S.A. and sells for $4,000 to $5,000 in Brazil. The company illegally bundles copies of the Apple System and Finder. Components for the illegal Macintosh come from the U.S., Japan, and Korea.

There are no Macintosh clones on the market but rumors are circulating that Tandy is working on one. I for one have not figured out why someone has not been able to clone the Mac ROMs without infringing on Apple's patent. Is the Mac ROM with QuickDraw so sophisticated that it can't be cloned in deference to the MS-DOS clones resulting from the cloning of the IBM ROM BIOS? The answer is apparently the complexity of the 128 and 256K ROM of the Macintosh compared to the relatively small ROM BIOS in the IBM.

IBM has developed an experimental magnetic storage disk with tracks only 20 millionths of an inch wide. The 3.5" disk can each hold 10 billion bits of information or 620,000 double-space pages. That is the equivalent of 1.25 gigabtyes on a 3.5" disk the size of the current Macintosh disk. Still no word from Apple or Sony on the availability of the 1.6 megabyte drives for the Macintosh. IBM currently offers 1.4 megabyte 3.5" drives for its new PS/2 models.

Refilling LaserWriter Toner Cartridges

I decided to try one of the advertised companies for refilling LaserWriter (Canon engines) toner cartridges. I saw an ad for New England Word Processing, Inc., 61 Crawford Street, Needham Height, MA 02194 (617-449-6630), and since I was attending Mac World Expo in Boston, I decided to take several empty cartridges along and drop them off. I'm glad I took three cartridges even though I only wanted to fill two. They tested each cartridge for drum defects and rejected one of the three because of several small pin-prick like defects. If the defects are not too deep, they may be removed by burnishing of the drum surface which is part of the refilling process. I also discovered I should not have discarded the green wand with the felt strip since they replace the felt ($3) to reuse the wand. A new wand cost $6 and if the drum is too severely scarred for reuse, it can be replaced for about $7. The refill itself cost $46.50, so with the refill, new wand and shipping it cost $54.75 to refill one cartridge. This would be reduced $3 if I had kept the original wand. The toner

contd.

they use is higher quality than the original and the sample I saw in the office produced a much darker output than my original. They also stated they refill the cartridge tank fuller than the original and therefore you get more pages than the original. I usually get 4,000 pages per cartridge. It was important for them to pre-test the cartridge since they do not give the user back the same cartridge. If they accepted a bad cartridge they would have to absorb the replacement cost of the drum. Cartridges can be filled with brown,blue or black toner but my impression of the blue was that it looked more like faded black and was not impressive for text. Perhaps graphics would have been more dramatic.

Another company at Mac World Expo said they give the same cartridge back and they too filled the cartridge about 90% compared to 70% when new. This company rep warned against filling the cartridge yourself since the drum needs to be tested, the waste toner reservoir emptied and some other tolerances checked. It was obviously in his interest to state that, but he may have a point. A list price of new cartridges is $115-$130 and a refill for $50 may be a bargain. If indeed the toner is darker and the cartridge lasts longer, it may not pay to refill them yourself. I would like to hear from anyone who has done their own refilling and is satisfied with the results. (See article "Rebuilding is an alternative to costly Canon printer cartridges," in the Aug. 25, 1987 issue of *MacWeek* for additional information.)

First Impressions of the Mac II

I have had the opportunity to use the Macintosh II for several months now and wanted to give readers some of my impressions. First, the vast majority of software that I tried worked without modification. This included, MacWrite 4.6. MacDraw 1.9.5, Word 3.0 and 3.01, Cricket Draw 1.0, Cricket Graph 1.0 (color), Adobe Illustrator 1.1, Excel 1.04, More 1.1, Graphic Works 1.0 (color), Map Maker 2.0 (color), Pyro (color) screen dimmer, PageMaker 2.0, Double Helix II, File Maker Plus, Red Ryder 9.4 and 10.0, Picturebase, Smart Alarms, Copy II Mac 6.5, Side-Kick, Suitcase, PowerStation, and HFS Backup 2.0. The following utilities also worked: Laser Print, Boot Edit, Resedit, Fedit Plus, Camera, Road Atlas, Font Manager, Disk Librarian, Font Display, Screen Maker, Disk First Aid, Pack It III. As you can see, the vast majority of Macintosh software does work on the Mac II. Many of the games and DA's may be another story. As stated in Jonathan Hardis's column, the Talking Moose and Super Laser Spool don't work.

Programs that work with minor modification include Full Paint and Super Paint. Full Paint can be partially expanded to use more of the 13" color screen but both Full Paint and Super Paint do not use the full screen of the new monitors. These programs function if you set the "monitor icon" in the control panel to color, 2-bits per pixel instead of 8 or 16. I found the correct answer in Jonathan Hardis's Column while Ann Arbor Software technical support incorrectly told me to use black and white, 2-bits per pixel. At the advice of Ann Arbor Software, I returned my original Full Paint disk and they quickly mailed me a free updated version 1.1 which they labeled SE. It does not require use of the 2-bit color mode but still does not use the full screen. In addition, the delete or back space key now functions properly. Apple reprogrammed the keyboard at one point and Ann Arbor needed to make a software fix to re-enable the back space key. Missing are the three small icons that permit getting rid of the menu and use of the full screen.

Excel 1.04 works very well on the Mac II and is very fast, but unfortunately it will not print 95% of the time to a LaserWriter. Microsoft is aware of the problem which appears to be a timing one and took my name and address to contact me when they discover what is wrong. After several weeks I was pleasantly surprised when a representative of Microsoft called me to get my mailing address. They had apparently fixed the problem and were sending me a free upgrade labeled version 1.05b to correct the problem. I was glad that a large software house like Microsoft has not forgotten that users made Bill Gates a billionaire (before the Monday crash!). Although Jonathan Hardis reported that the Jasmine and MacBottom do not now work on the Macintosh II, I can report that the HyperDrive FX-20 does work. I connected it to the external SCSI port and selected the internal Apple hard disk to be the startup disk. The HyperDrive icon appears just below the Apple HD 40 icon. It may not even be necessary to use the new HyperDrive software upgrade (version 3.1) on a Mac II if the FX-20 is connected to the external SCSI port and is not the startup disk.

I naturally like the speed, hard disk (40 meg), larger screen, etc. The color is excellent as many color demos will attest. I particularly like the one of Cheryl Tiegs! The extended keyboard is mainly for MS-DOS users and the function keys are not supported by many Macintosh applications at this time. One exception is Quark Xpress which does support the new extended keyboard. Microsoft Word 3.01 uses the "home, end, page up and page down" keys on the extended keyboard. I find that particularly useful with Word. Hopefully, later revisions of popular software will provide this support.

Color can be added to the desktop by using two additional Control panel icons and one replacement for the "General" icon. The new "General" icon permits color to be added to the desktop background. The other two icons are called "Kolor" and "Color." One allows the addition of color to the menu bar, pull-down menus, system text, scroll bars, borders, etc. The other adds color to the text boxes of the dialog boxes. Once I added colors to these options I finally felt that I was using a color monitor since most of the Macintosh programs do not yet support color for the text and background portions of the programs. A program called "Colorize" permits addition of color to other Macintosh applications but not to the program itself. In other words, color can be added to the scroll bars, dialog boxes, title bar, etc. of MacDraw but not to the MacDraw background, text or the object oriented graphics. This will await later release of color versions of the popular Macintosh programs.

Installation of the II was as easy as any Macintosh with several new cables and new places to plug them in, but no problems. Initialization of the internal hard disk was also very easy using the hard disk install icon on the utilities disk.

Problems with the Mac II have been limited. I still get my share of system bombs which are undoubtedly related to the software and not the hardware. I have noticed that when the screen freezes up or a system error occurs and needs to be re-booted, the Mac II often loses track of the internal hard disk and does not boot up even though it is designated as the startup device. The screen just displays the "question mark icon". I then have to use a system disk to reboot the computer, and use the hard disk install

contd.

icon on the utilities disk to recover it to the desktop. This has not happened recently. Anyone know what the problem is?

The Apple color monitor has excellent color but I have noticed a thin black line across the bottom third of the screen and the monitor. I have seen two Sony multiscan monitors and the same line is present. Someone told me that this is on all Sony monitors. It is not that noticeable and the Macintosh white phosphor monitor makes it more evident than it normally would be.

I have also been having a lot of Rf interference which causes the color monitor image to jump around on the screen. The jumpiness is minor but bothersome enough to make you seasick during word processing. I cannot be sure that something else in the room is causing the problem but it may be leakage from the Mac II itself. This problem has decreased and may be due to an external source in the room or from outside the house.

MacWorld versus DEC World

Digital Equipment Corporation, Maynard, MA, recently spent twenty million dollars to put on its DEC World in Boston. That's right $20,000,000!! They rented the Queen Elizabeth II and another luxury liner to wine, dine and accommodate 30,000 DEC customers from around the world. The extravaganza lasted 11 days and was run by 10,000 DEC employees. DEC estimated that the twenty million dollars will be well spent since they hope to generate one billion dollars in future revenue from the event. (Source - USA Today.)

Such an event would be impossible for Apple to top but just as DEC had to find several large ocean liners to put on its show in Boston, it is time that Mitch Hall Associates and MacWorld Magazine move the 1988 Macintosh World Expo out of Boston. It has clearly gotten too big for the Bayside Exposition Center. I would like to suggest it be moved to Washington, D.C. Washington is better able to handle an exposition the size of Mac World Expo, and it is more centrally located on the east coast. It would be easier for people from New York, Philadelphia, Washington, Atlanta, even Miami. How about it MacWorld?

Steve Jobs, What Are You Saying Now?

Steve Jobs recently predicted that sales of the Macintosh would peak in 1988 and then decline. He attributes this to the Macintosh software architecture reaching its limits next year. I assume he means the introduction of true multitasking and Unix on the Mac. If this is true, could the same be said of the OS/2 operating system on the IBM once these capabilities are achieved on those machines? He was quoted as saying, "Once you reach your peak, your greatest asset becomes your greatest liability." Jobs went on to say that a fourth wave in computer technology was imminent but he did not define what he meant. The first wave was the Apple II, followed by the IBM PC and lastly the Macintosh. He felt that to begin the fourth wave, the computer industry must produce machines that can handle more powerful programs. He did not say if Next, Inc., his new company, would be at the forefront of this fourth wave (Source - Investors Daily, September, 1987.)

Apple Goes After the Army!

For the first time, Apple Computer has gone after a large computer contract with the U.S. government. In this case, it has teemed up with Magnavox to bid on a potential 800 million dollar contract to supply 18,000 Macintosh II computers as part of a Command and Control System for the U.S. Army. Apple joined with Magnavox Electronics Systems because it needed an experienced integrator who could put the total package together. Without Magnavox's help, it is doubtful Apple could have successfully made a case for bidding on such a contract.

Apple will be competing against such giants as Hewlett-Packard and Unisys Corp. for the contract that will be awarded in the second quarter of 1988. Some analysts are pessimistic about Apple's chances to win such a large contract but it is perhaps even more significant that they bid in the first place. Without growing acceptance of the Macintosh in both the business and government markets, Apple would have been hard pressed to bid in the first place.

The act of submitting a bid also indicated that Apple is serious about cracking the U.S. government market dominated by Zenith and IBM. Apple is also competing for several other nondefense government contracts which are smaller in size. Government sales now only account for 1% of Apple's total revenues, but Apple hopes to raise this to 10%.

MultiFinder Update

I have had a chance to use MultiFinder version 1.0 on a Mac II with 2 megabytes of RAM and have some initial impressions about memory management. First, 2 megabytes is a minimum amount of RAM needed to use MultiFinder. With that much RAM you can probably install 2 to 3 applications depending on which applications they are. I was unable to print a file from Double Helix II due to lack of memory even though it was the only application other than the System, Finder and PowerStation that were open. Double Helix II uses 1,016 megabytes under MultiFinder. The following is a list of memory requirements for selected programs running under MultiFinder. The Finder uses 160K, Word 384K, PageMaker 480K, Full Paint 488K, More 480K, Cricket Draw 468K, Double Helix II 1,016K, and HyperCard 750K. The size of the System itself varied from 325K to 598K depending on the other applications installed.

I have been using it with PowerStation and ran into some glitches but it does function most of the time. Software Supply sent me some hexadecimal patches to apply to PowerStation using Fedit Plus. They will also be coming out with a MultiFinder compatible version of PowerStation in January 1988.

MultiFinder does not permit the user to determine the size allocated to installed applications by clicking on the application icon from the Finder, and choosing "get information." There is a "suggested memory size" and an "application memory size" which can be changed by the user. This will require some experimenting to see if you can decrease the sizes I listed earlier for certain applications.

The print spooler that is supplied with MultiFinder (i..e., Print Monitor) appears to do a good job of printing in the background and freeing up the monitor for other tasks. Super Laser Spool does not work on a Mac II. In addition, all of the desk accessories I had installed functioned ok under MultiFinder.

The user can switch between applications in two ways. You can choose the desired installed application by accessing it under the "apple." MultiFinder installed applications are listed below and separated from the desk accessories. The second and faster way is to click on a small icon in the upper right corner of the

contd. on pg 78

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	A
1	Excelling on your Mac
2	Part 17
3	by
4	David Morganstein

I received a letter from Ulrich Ernst who asks if there is a way to print out all names which have been defined in a spreadsheet, along with the cell locations to which they apply. I have been unable to find a way to do this. Can anyone help Ulrich?

In the December, part 16, column I discussed Deacon's problem. You may remember that he wanted to keep track of the number of hours each of his employees had worked. We had a simple table showing the hours down the left-hand column and the days of the week across the top row. An employee was designated by a single letter, A, B, etc. Deacon's log sheet looked like this:

	A	B	C	D	E	F
1		Deacon's Example				
2	Time	Mon	Tue	Wed	Thu	Fri
3	9:00	A	B	A	A	C
4	10:00	A	B	A	A	C
5	11:00	A	B	D	B	B
6	12:00	B	D	D	B	B
7	1:00	B	D	E	D	D
8	2:00	B	E	E	D	D
9	3:00	C	E	E	E	D
10	4:00	C	E	E	E	D
11	5:00	C	E	A	C	E

The SUM function was used in an array form to determine the number of times any entry in the logsheet was equal to a specific employee, say A. This gave a count of the number of hours A was scheduled. This provides Deacon with a method of tracking who has been assigned how many hours as he develops next week's schedule. We created a one-way table using the list of unique employee numbers down the left side of the table and then used the SUM function to fill down the counts for each employee.

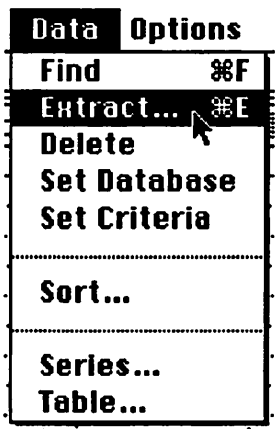
The only element of the problem I was not able to provide was a method of easily identifying the unique employee codes. Instead, I began by assuming you knew the codes for each active employee. In this particular example, that didn't represent much of a problem since Deacon only had a handful of employees. However, what if he had dozens? In such a case it would be no mean feat to create a list containing one entry for each employee. It would be quite a bit of work if the codes Deacon used were social security numbers, instead of a single letter.

Obviously there are many instances where you have a long list of codes, many of which are repeated, but you don't know how many unique ones there are or what their values are. At my office, Elizabeth does a monthly accounting of time spent by each person on their computers. She does this using a program called MacInUse, reviewed in the WAP Journal some months back. This program creates a single line of data in a file every time a "quit " command is given. At this time, the user enters a project number, in our case an eight digit code. MacInUse notes the time spent from program launch to quit and appends the time to each record. Elizabeth takes such a file, containing hundreds of entries with a varying number of unique project codes and determines the sum of the minutes charged to each account number. Again, we need to find the unique project numbers. In this case we will use them in a table along with a DSUM function to arrive at a total time charged to each account.

Before describing a solution to Elizabeth's problem, a partial word of thanks to Mark Pankin. At the December garage sale, he came up to me and said, "You should have used Extract Unique to find the Employee numbers". "Oh", I responded cleverly, "What is that?" Mark shamed me with the old adage, "When in doubt, read the manual". Although, not all solutions can be found therein, Elizabeth's can. (Of course, I can always fall back on, "How would I know where to look?". Enough of that!)

I say "partial" word of thanks to Mark because the Extract Unique doesn't quite solve Deacon's problem. Deacon's log sheet is a two-dimensional display. As you will see, Extract works only with Excel databases. Mark's suggestion won't find the unique employee numbers for Deacon, but it WILL find the unique project numbers for Elizabeth! (Actually with a tedious repetition of the Extract command, once for each day, followed by yet another application to the set of unique numbers found for each day, Deacon can get the correct list...but in a somewhat contorted way). If I have missed something here, Mark, please let me know!

To be candid, I have used the Extract command (found under the Data menu) on numerous occasions. Unfortunately, a little known "feature" in Excel has prevented my enjoying the benefits of Extract Unique (sounds like something you cook with...) as you will see.



The purpose of the Extract command is to locate and copy selected records in a database to another location in the worksheet. For example, I use this command when completing an order of parts. Before giving the Extract command, you must define a database, create criteria, and identify a location in which to place the extracted records. In my order example, the database consists of a price list of many items where a single order might consist of only a half dozen or so items. The database is at the top of my spreadsheet in columns A-E. The criteria appears in rows 37 and 38. The extracted records will appear below row 44, a row containing the names of fields in the database which are to be extracted.

	A	B	C	D	E
2	PartNo.	Quan	Description	Unit	Price
3	A1122	0	Widget	$1,234.00	$0.00
4	A2231	1	Thingamajig	$555.00	$555.00
5	B4433	2	DoHickey	$4,536.00	$9,072.00
6	C5433	0	Whatnot	$6,566.00	$0.00
7	M5084	1	Thingamabob	$765.00	$765.00
37	PartNo.	Quan	Description	Unit	Price
38		>0			
39			Sub-Total		$21,612.00
40			Tax	5.00%	$1,080.60
41			Shipping&Handling	2.00%	$432.24
42			GrandTotal		$23,124.84
43					
44	PartNo.	Quan	Description	Unit	Price
45	A2231	1	Thingamajig	$555.00	$555.00
46	B4433	2	DoHickey	$4,536.00	$9,072.00
47	M5084	1	Thingamabob	$765.00	$765.00
48	A6655	1	Large Widget	$7,652.00	$7,652.00
49	M0233	1	Gizmo	$3,245.00	$3,245.00

contd.

Column B, Quan, is used to indicate the number of items purchased in any given order. My criteria for extracting records is that the number of items ordered be greater than zero. (See cell B38). The Extract command is used to create a copy of the selected records (here, items ordered). I have duplicated the names of the fields I want extracted in row 44. Cell E38 totals the costs found in the area where the extracted records are placed (from row 44 down) and then adds sales tax and shipping costs. The Extract Unique is not needed in this example since only unique records appear in the price list.

Returning to Elizabeth's problem, we want to find the unique project numbers. First use the Set Database command to define the database (in the following mini-example it is the area from A1 to B11), and then choose Set Criteria to establish criteria (the area from A13 to B14). This "Criteria" is really a "select all" criteria since no formula has been given to identify a subset of the records. Now repeat the field names that will head the extraction location (A15 and B15).

	A	B	C	D
1	Project No.	Minutes		
2	901236	216		
3	901236	39		
4	901236	547		
5	900123	184	←	This is the Database
6	900123	235		
7	902654	57		
8	902654	596		
9	900123	675		
10	902654	125		
11	902654	54		
12				
13	Project No.	Minutes	←	This is the Criteria
14				
15	Project No.	Minutes	←	This is the Extract Area
16	901236			
17	900123			
18	902654			

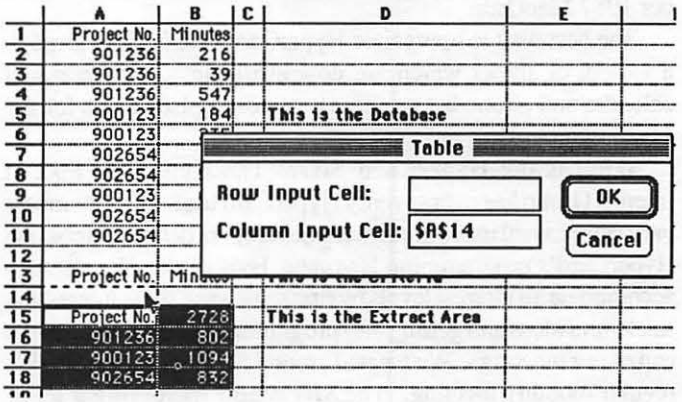
Lastly, to obtain the list of unique Project Numbers, select cell A15. Now pull-down the Data menu and give the Extract command. You will see the following dialog box. Check the "Unique Record Only" box. This will insure that only the unique Project Numbers will appear. You see them listed in cells A16:A18.

The reason I was unaware of the "Unique" option, is that I have always given the Extract command using it's keyboard shortcut, command-E (seen in the screen shot of the Data menu shown earlier). Oddly enough, if you use the command equivalent shortcut, Excel does not display the Extract Unique Records dialog box!

The final piece of the puzzle for Elizabeth is to place DSUM functions in the cells next to each unique project number using a one-way table. Before doing this, we must enter in cell B15 the formula to be used by the table command:

=DSUM (Database,"Minutes",Criteria)

This DSUM command results in a total for all minutes. To obtain the same computation for each unique project number, we select cells A15:B18 and choose Tables under the Data menu. Since this is a one-way table in which a column of project number is fed into a single criteria cell, we need only make one entry placed to the right of the "Column Input Cell" label. What cell is this and what does it do? This is the cell that will be used to hold each unique project number while Excel runs through the DSUM computation. In essence we are setting up a series of criteria, one for each unique Project Number appearing in the left-most column of the area that was selected when the command was given. Therefore, we need to enter the name of the criteria cell, A14, either by typing it in or by clicking on it. As soon as we click OK, Excel does all the rest of the work.



Although, Mark may not have solved Deacon's problem, he and Excel made Elizabeth's work much easier. Thanks!!!

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HYPERCARD SIG NEWS

by Robert C. Platt

What is HyperCard? Several WAP Journal readers called to question whether HyperCard will meet their needs. My advice is: First, HyperCard defies simple description in terms of past software. Second, HyperCard is worth any Mac user's time exploring, because it is a valuable model for software design and user interfaces. Third, HyperCard is not a high-powered data base. Heavy, large-volume data bases are probably better implemented on Omnis 3 or Fourth Dimension.

Concise and helpful overviews of HyperCard recently appeared in the December 1986 Byte Magazine and in the December 1987 MacUser.

The best way to appreciate HyperCard is to browse through a variety of stacks which are now available. They represent calendar and phone list programs, games, replacements for the Mac Finder, and so on.

What is the HyperCard SIG? The HyperCard Special Interest Group has over seventy HyperCard users. Our members vary from casual users to software developers deeply emersed in HyperCard's programming language, HyperTalk. We strive to accomodate all interest levels by first reviewing some interesting stacks and ideas and getting into programming details toward the end of our meetings. We meet at around 11:30 as part of WAP's regular monthly meeting. The SIG is also sponsoring a set of three tutorials, which are described elsewhere in this issue.

Where can I find StackWare? The WAP software library ("the Disketeria") has two disks of stacks, and SIG librarians led by Brook Grayson are completing additional disks. (See the Jan 88 WAP Journal p. 82 for details on Disks 136 and 137.) We have downloaded 30 disks worth of stacks from various on-line services and are sorting through them.

Other groups are starting to collect and sell stacks. The Walking Shadow Press, PO Box 2092, Saratoga CA 95071, (408) 354-7833, has begun to publish a free newsletter *The Stack* for HyperCard enthusiasts.

Heizer Software, noted for its distribution of Excel templates, is selling stacks on a shareware basis: 1941 Oak Park Blvd, Suite 30, Pleasant Hill, CA 94523, (415) 943-7667.

International Dataware, Inc., 2278 Track Zone Blvd., San Jose, CA 95131 publishes *Diskette Gazette*, which offers stacks for $6 to $12 each and also includes various HyperCard tips.

HyperSource, 2619 South 302nd St., Federal Way, WA 98003 offers a free stackware catalog, (206) 946-2011.

Midnight Stax, P.O. Box 502, Hazelwood, PA 63042 is selling stacks in the $5 and $10 range. They charge $2 for their catalog.

Who belongs to the HyperCard SIG? Of course, membership is open to all interested WAP members. In order to facilitate communication within the SIG, we have developed a SIG membership stack. Many thanks to Bill Baldridge for designing the background, complete with a digitized photograph of Bill Atkinson! We will try to have a Mac available at our next meeting to collect further data for the stack, including your areas of interest.

Is the APDA documentation worthwhile? I ordered the "HyperCard Technical Reference" from APDA for $20. I must say that I found little that has not been covered either in Danny Goodman's book, the Help Stack or the WAP Journal. Two welcome additions are "HyperCard Stack Design Guidelines" from Apple's Human Interface Group and a rough draft of an appendix on XCMDs and XFCNs.

What are XCMDs? HyperCard allows you to extend the HyperTalk language by inventing your own commands. To do this you can either paste in XCMD resources from other stacks, or write a routine in your favorite programming language to perform the specific task. When you compile your routine, you can save the resulting 68000 machine language program as an XCMD resource and use ResEdit to paste it into your stack.

Several details are worth noting:

- XFCNs are like XCMDs except they return a value.
- XCMDs and XFCNs can be stored in any stack (in which case the command will only be known in that stack), in the home stack (in which case the command will be known in all of your stacks while that stack is used as your home), or in your copy of the HyperCard application.
- HyperCard also includes Pascal routines which permit your XCMs to call back to HyperCard to obtain additional information, evaluate expressions, etc.
- Because XCMDs frequently call the Mac ROMs and must be 68000 code, the XCMD feature makes porting HyperCard and its stacks to the IIgs or other machines virtually impossible.

Will XCMDs Be Discussed At SIG Meetings? Yes, although programming details may be beyond many of our members. HyperCard SIG members hold deeply felt beliefs as to the merits of various programming languages such as Pascal, c and Forth. Hence, language-specific issues may be deferred to other SIGs such as the PIG, SigMac Programmers, and FORTH SIG.

OH OH #2

by John A. Love III

ERRATA: With reference to my article "A Long Word Wiser, or OH OH", on page 68 of last month's Journal, please make the following changes:

1. Change the line which reads "repeat for nbrSource" to:
   repeat with cardNbr = 2 to nbrSource
2. Change the line which reads "go to stack sourceStack
   —end up here !!" to:
   go to card cardNbr of stack sourceStack—end up here !!

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MS WORD 3.01 MAILMERGE

by Robert C. Platt

A recent task was to send a personalized Christmas letter to 6,000 persons using Microsoft Word. I'm sharing my experience with you as a hands-on guide to using Word's mailmerge feature as well as an illustration of connectivity between a Wang 2200 and a Mac.

Getting the data out of the Wang. (Mac purists can skip ahead to the next part.) The names and addresses are stored in a Wang database called AIMS. This data was then mail-merged into a Wang word processor program called DATA 3500. The retrieval document looked like this:

^001 ^002 ^003,"^004","^005","^006","^007",^008
^009,"^010:"

(Unlike the easy-to-use Mac interface, each field in the data base is assigned a separate three digit number.) The first three fields are the first name middle initial and last name of the person. Because Microsoft Word wants fields separated by commas, listing the three fields together separated by a space will combine them as a single field when handled by Word on the Mac. The other fields for company name, and addresses can contain commas. Because Word would later treat the commas in the data as field separators, the Wang was asked to surround each field with quote marks and separate them with commas. Field 008 is the state and field 009 is the zip code. Because these fields can be treated together by the Mac, there is no need to place a comma between them here. Field 010 was the salutation for the letter. Just for fun, I added a colon here, although I could have just as easily added it in Word.

Running this retrieval produced over 6,000 records of output, which were "printed" to an ASCII disk file on the Wang. That disk file was then transferred to the Mac using a telecommunications package on the Wang and Red Ryder on the Mac with a null modem cable connecting the two machines.

Using Word MailMerge. The file which contains the names and other variable information is called the "data document." Because my data document came from another computer as an ASCII file, I opened Word and opened the document. It contained one line for each letter with each field separated by commas. For example, a line might look like:

```
Fred W. Flintstone,"Bedrock Quarry,
Inc.","10 East Pebble Dr.","",Bedrock,VA
22202,Fred:¶
```

By selecting Show ¶ from the Edit Menu, I was able to check for multiple spaces and to make sure that there was only one carriage return (represented by the ¶ sign) per person. Note that if your data for a person is longer than the current margin, the data may word-wrap onto two or more lines. That is still ok, so long as only one carriage return (¶) appears at the end of each person's item. An empty item (which does not contain any characters, is represented by two commas or by ,"",. I now need to name each field in my data document by adding a line at the top:

```
name,company,address1,address2,city,state,salutation¶
```

I can then save my data document. I called it Christmas.

Although I generated by data document on a different computer, you can also type the information using Word, or paste it in from another Mac program.

Creating the form letter. A Word MailMerge requires a second document, called the main document which contains all of the information which does not change between letters and which contains the instructions for incorporating the information from the data document. A pair of special characters are used to separate these two kinds of text. Information enclosed with the symbols « and » are instructions, the rest of the main document is treated as text to be incorporated in the final document. You can type the « symbol by pressing the option and \ keys at the same time. A » symbol is the shift-option-\ combination.

The first step is to tell Word which document to use as a data document. My first line was «DATA Christmas». The keyword DATA tells word that the rest of this instruction is the name of the data document. Don't forget to include the word DATA. If the data document is in a different folder than the main document, specify the full pathname of the data document: /MyDisk/Christmas.

To incorporate a field from the data document, just enclose the field name in the funny brackets. For example, «name». However, some of my addresses had a company line, and some had two address lines while other people were missing this information. If I were to just list these fields in my letter, the addresses would have blank lines when those fields were not used. Fortunately, the IF command allows me to test whether those fields are present. The carriage return following these fields must be placed within the scope of the IF command. Similarly, if my data document does not have a salutation field, I wanted to add the salutation "Gentlemen:" to the letter. Because this is an alternative to printing Dear «salutation», the word Gentlemen is placed between ELSE and ENDIF commands. Here is my final main document (with returns showing as ¶):

```
«DATA Christmas»¶
                        December 1, 1987¶
«name»¶
«IF company»«company»¶
«ENDIF»«IF address1»«address1»¶
«ENDIF»«IF address2»«address2»¶
«ENDIF»«city», «state»¶
«IF salutation»Dear «salutation»«
        ELSE»Gentlemen:«ENDIF»¶
  I'm dreaming of a white Christmas, etc.
```

Once my main document has been typed correctly (no small feat since any mistake will be replicated 6000 times), I can print my letters. Before I print, I must make sure that my main document is open and if I have several open documents, it must be the top or "active" document. I then select "Print Merge" from the File menu. If you accidentally forgot to enclose a field which contained commas with quote marks, the merge will stop with a DATA RECORD TOO LONG error message. This does not mean that you need more RAM in your Mac, but rather that you must handle the extra comma.

Word's MailMerge has many more powerful features such as the ability to incorporate blocks of text from other documents by using the INCLUDE command, prompting the user for a field by using the ASK command, or by keeping field names in a separate file. However, you should try a few simple form letters before advancing to these other commands.

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A TIE THAT BINDS: The Compatible Systems QuickShare Board

by Robb Wolov

Connectivity! The term fairly screams at you from almost every computer publication. C-0-N-N-E-C-T-I-V-I-T-Y! THE buzzword for 1987 and for the foreseeable part of 1988. And, like most such terms, means *imprecisely* what the user wants it to mean when the user happens to use it. To IBM, it means being able to connect IBM microcomputers to IBM mainframes. For "pre Sculley" Apple it meant strictly Mac-to-Mac Appletalk. For "Sculley era" Apple it means the ability to hook every Mac to any other machine (read IBM compatible) in the office to exchange data simply, cleanly and inexpensively.

Merging the Mac into the "real" world of MS-DOS (messy DOS) can be an exercise extending anywhere along a spectrum from simple file transfer to full out running of MS-DOS in a window. (DOS-in-a-Box?). It seems that with the official "opening" of the Mac, there has been more attention paid to the art of connecting the Mac to the outside world as well as a comparative flood of hardware to make all of this possible.

There are a number of solutions of various complexities, flexibilities and power. This is good, since no single solution will suffice for all applications. The gamut runs from a simple two computer lash-up, serial port to serial port via a "null modem" cable to a full power Ethernet system.

There does appear to be a philosophical shift in the Mac'ers interpretation of connectivity from the time of the original March '87 announcements. While there was great fanfare and hoopla with the announcement of coprocessor boards from AST, and finally after some delay and stumbling, these "IBM's on a card" are being delivered, the real necessity seems to be in FILE EXCHANGEBILITY. Do not misunderstand. There are situations where strict MS-DOS processing is the only answer. For those folks, that solution should be available. That is the beauty and flexibility of small computers. They become what we need them to become. But, at the risk of second guessing the world, a majority of Mac users would probably be quite content with being able to simply exchange data and be media compatible. As I have commented in these pages, the elegance of the Mac is in its operating system, otherwise it is just another 68xxx box. If you don't think so, how come you are not subscribing to Amiga World?

Ten years from now we will look back in some horror (God, I hope so!) at our numerous text, graphic and formatting standards. They are complex and unfortunately there will be more to come. Though not nirvana by any means, they do serve as a sort of Rosetta Stone to the computer community. More and more of our applications allow the relatively easy opening of files from a variety of formats, ONCE THEY ARE IN YOUR MACHINE. Getting them in as effortlessly and as transparently as possible to the user is part of the promise of networking.

This somewhat long-winded preamble is in introduction of the Compatible Systems "QuickShare Board", a new product with some interesting capabilities. Briefly, the QuickShare Board (QSB), is a SCSI based (Small Computer System Interface) data link system that links only one IBM PC or PC clone to any Macintosh equipped with a SCSI interface. Once this link is established, the Mac can directly access any IBM peripheral or network available to the PC. The IBM still can function as an independent computer, but the Mac looks at the IBM world "through" the PC as if the PC were one extended Mac peripheral. The beauty of this system is that all hard disk drives of the PC appear as Mac drives on the Desktop, and are as easily accessible.

The QSB is composed of a SCSI interface card which fits into one of the IBM compatible's internal slots, plus utility and set-up programs for both the Mac and the PC. With software supplied with the QuickShare board, the Mac user can create a "virtual disk", a logical partition, on any disk connected to the PC using part, all or none of the available space. In addition to being able to read any MS-DOS files on any drive connected to the PC, the Mac can now treat this partitioned sector as it's own drive, storing Mac files on it and even using it as the boot disk by storing the system folder on it.

By using the SCSI interface, significantly faster file transfers are possible than with Appletalk based systems such as TOPS (however TOPS allows multiple Mac's to access multiple PC's). Compatible Systems claim a minimum of 1.4 MIPS (million instructions per second) transfer rate on a Mac Plus up to 4.2 MIPS on a Mac II.

All Mac virtual disks appear under their own icons on the desktop and are accessed in exactly the same way as any other Mac hard disk using the Hierarchal Filing System. All floppy disk drives on the PC are accessed through a Mac application called "PC Transfer". Working through a very "Mac-like" dialog box which is arranged much like the DA/Font Mover, PC Transfer should make any Mac'er feel right at home allowing quick format transfers by writing back and forth directly between IBM and Mac floppies or any networks connected to either system.

The IBM is definitely subordinate to the Mac in this system. The virtual disk on the PC containing your Macintosh files appears to the PC as one huge MS-DOS file. The IBM operator can not transfer any one particular Mac file from the Mac's portion of the disk into the PC's remaining space. The Mac operator must transfer it for him from his end of things.

The virtual disk on the PC can be backed up (all of you do back up your files?—Of course you do!) using any of the numerous MS-DOS utilities for the purpose onto MS-DOS media. But, you will probably choose to back them up as you would any other Mac disk through the Macintosh. I'm fond of DiskFit, and repeatedly backed-up and restored a 20 Meg Seagate ST-225 being totally dedicated to the Mac with no problems whatsoever.

Being partitioned as a virtual disk under MS-DOS is cause for certain anomalies. Disk cache programs, those that use the IBM's RAM as a buffer for data to speed hard disk accesses, seem to have no beneficial effect. Disk "defrag" programs, such as DiskExpress, which collect files into contiguous sectors after they become physically scattered about a hard disk from repeated rewrites, will wreak absolute havoc on HFS files. It is better to backup, erase, then restore to defrag the IBM based hard disk.

contd.

In the appropriate application, what with the still relatively high costs of hard disks for the Mac and stand-alone IBM compatible floppy drives, the QuickShare Board can be an economical answer. In my situation, I was about to retire my old trusty IBM into which I had installed a beefed up power supply and a 20 Meg Seagate ST-225 hard disk. I had long since transferred my data files to the Mac, courtesy of my dealer via his TOPS network. But, I could not bear to part with 20 Megs of storage (especially in this age of multiple HyperCard stacks and clip-art. With the QSB I essentially converted the old IBM into an oversized housing and power supply for the hard disk, devoting the entire 20 Megs to the Mac.

Additionally, the 360K IBM floppy effectively gives one a Dynafile™ for transferring media. I can now write files at work on an IBM clone in MS Word (for the IBM), store it on a 5 1/4" floppy, take it home, pop it into the PC, load it into the Mac and open it with MS Word (for the Mac). Neat! This new storage peripheral plus the new Apple Share file translation package now supplied with the version 5.0 system upgrade make a very powerful combination.

The QuickShare Board is not the universal answer for all interconnection problems, but it uniquely offers a fairly low cost effective upgrade path for IBM users to merge their old systems with their new Macs rather than replace them, as well as offering a file and media exchange mechanism.

Documentation accompanying the QSB is in the form of a spiral bound manual that takes the user step by step through the hardware and software installation, as well as a clear technical explanation on the workings of the QSB and file exchange techniques. In spite of my being experienced with the internal hardware workings of the IBM, I feel those less technically initiated will feel just as comfortable setting up their own QSB.

The written tone of the manual is quite friendly and personal and seems to have been written in the context that most readers will be direct purchasers and deal directly with Compatible Systems rather than through a local dealer. Technical questions placed to Compatible System's single listed telephone number (non 800) on multiple occasions prior to purchase were rapidly greeted on the first or second ring by personnel who made a point of identifying themselves by name and who were technically knowledgeable of their product. This is a nice respite from the multiple "operator hand-offs" you get from the bigger outfits.

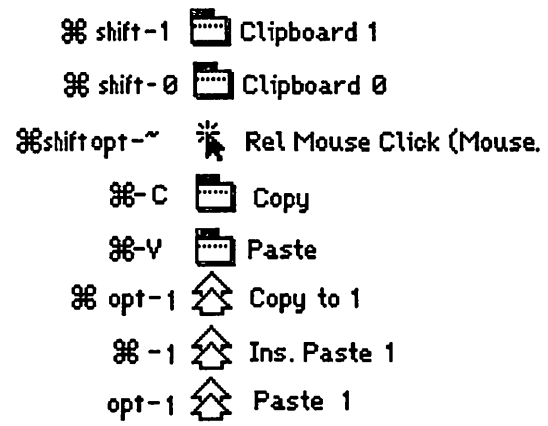
One last point to make, most likely due to physical restrictions of the IBM's backplane, the QSB only contains one SCSI system socket (DB-25). This fact will necessitate that the PC always be the last item physically on a daisy chain of SCSI devices (though the SCSI device number can be set to your choice by software during set-up). The cable supplied has a SCSI "system" plug (the smaller female plug that connects to the Mac) at each end and is satisfactory to connect the PC and Mac directly. If you have any other SCSI devices, you will have to supply your own system cable (larger peripheral device plug at one end and smaller system plug at the other). Though the cable supplied is clearly pictured in the company literature, this fact was not made quite clear and did necessitate a quick emergency trip to my dealer for the appropriate cable.

The QBS retails for $465 and includes all software, the IBM SCSI interface, a DB-25 to DB-25 SCSI cable and DB-25 compatible terminator block.

Quick Editing contd. from pg 55

[13] Define the Sequence: [10], [3], and [9] and assign to it the keystroke opt-1, 2 or whatever.

This just leaves out the mouse click. The paste-insertions are done at the present insertion point, not at the cursor (mouse) screen location. Your multiple clipboard QuicKeys macros for clipboard number 1 should look like this:



Credit where Credit is Due

I would love to be thought of as the originator of these short cuts, several of which I think make elegant use of the mouse as it should be used. They are actually modeled (crudely, in some cases) after many of the editing features in the text editor FastEddie. FastEddie was a shareware editor written by one Daniel Grossbard of Austin, Texas, that I think had a lot over the highly touted QUED. Among its features were faster and more elegant versions of most of the above QuicKeys macros. The only thing I've added is a fast paste, but this is actually unnecessary in FastEddie. These features show why a mouse can be an extremely useful input device for a computer, if used sensibly and creatively. You can't jump around so quickly and easily on a two dimensional screen copying, cutting, pasting, etc. using keystrokes. (This is one reason why the current trend in some Mac advertising extolling almost totally non-mouse capabilities of the programs escapes me, except, perhaps, to captivate IBM defectors.)

Anyway, FastEddie died when the big change to system 4.1 came. I gave it up with great reluctance, but my hopes for a replacement have been rewarded, in a sense, with QuicKeys. The fast copying, etc. can now be done in any program! You can, of course assign any keystroke to the above actions I've defined. I like the ones grouped around the space-bar. You might like others. The choice is yours. Learning these special keystrokes is actually quite easy. Think of how often you copy and paste, delete, etc. You'll learn them fast and remember them easily because of their utility. I find their use addicting, especially in text editors for writing source code.

QuicKeys, of course, allows a lot more than I have space here to go into. I'm still learning what it can do. That's not because it's hard to use. Far from it. Its ease of use and speed actually allow things you don't normally think of, like scrolling of any front window in any application, if you like—pick your key (cmd-≠ and cmd-Ø are mine). QuicKeys might at first seem pricey ($99), but it's one of those things that you fall in love with and you end up souping up *all* your programs with it.

BEST OF THE MAC ITEMS FROM THE TCS

by Dan Hughes

Data Bases

LEE DUER ON 11/30

Thanks to all who replied to my message about mailing lists—we feel pretty good about using Word and Filemaker Plus. My friend does not have Word yet and that brings up some more questions.

1. Should he purchase the new version -
2. or - purchase the old version ?
3. The Macbottom HD20 he's using with the 512K Mac is NOT a SCSI driven drive and if he does upgrade to a Mac+ can he still use it - OR - in view of what I have recently read about the fate of the Mac+ in about a year, would he be better off to sell the Mac 512K, the Macbottom HD20, and get the SE or even MacII? Keep in mind that his short term requirements are to immediately set up a database of customers, do mail merge with sales letters and address labels. Use Jazz to maintain his checkbook and other normal spreadsheet things. Long term (a year or so), be able to do desktop publishing for marketing/sales brochures and other sales material.

I feel the timing is proper now for him to be able to make a decision based on what expertise the answers to the above questions provide and as usual I thank you for the assistance you have all been so far (when you think of the knowledge base our Pi group has the potential to provide—it actually is a feeling that humbles one and makes it clear the value of belonging to this organization).

MARK OSTROFF ON 12/21

I found it!!! The name of the package is MergeWrite. It will do mail merge with MacWrite or any other WP package that saves in MacWrite format. It can read data from Record Holder Plus, or any other DB package that can write an ASCII format file. MergeWrite also allows conditional inclusion of items so that you can "personalize" a form letter!! You can also print all of your list or just part of it, and can sort by ANY combination of fields in ascending or descending order. MergeWrite requires 512K of memory, is ImageWriter and LaserWriter AND Switcher compatible. The list price is $49.95 from Software Discoveries, Inc.,137 Krawski Drive, South Windsor, Conn. 06074. To order by phone, call (800) 437-5200, Operator 229 from 8 am to Midnight, 7 days a week. They take MasterCard, Visa and Amex. Shipping and handling within the U.S. is $5 per copy ($10 per copy for outside U.S.).

Desk Accessories

LOUIS M. PECORA ON 12/01

Beyond a doubt, DiskTop 2.0 was the best DA what ever happened for the Mac. I've just updated to DiskTop 3.0 and, friends, its better! e.g., double click on any file name to launch it (document or application) from anywhere! Almost everything can be done by keystrokes. Lots more!! Of course it's bigger (all 89K worth), but for the bucks, it is plain dynamite. I've gone for hours on the Mac without ever returning to the finder. CE Software has some good stuff out there and DiskTop is the best.

JERRY WALZ ON 12/01

Louis, I agree with you on DiskTop 3.0 and CE in general. Try their new QuicKeys too. You can launch from within an application to another without going to DiskTop. For example, I go from Word to Excel by pressing Shift Option-E—Word does a safe close and then Excel opens. Option-M and my MacDialer DA opens, Option-C and my calculator is active . It's a great piece of software. I use it on my MacII w/extended keyboard at work and just got a DataDesk Mac 101 extended keyboard for my Plus at home so I can use all the neat QuicKeys functions. Only negative is price $99 retail or $69 from MacConnection.

TOM BICE ON 12/19

Can't access DA's with Multi-Finder on. Checked memory. Seems OK. What to do?

BILL BALDRIDGE ON 12/19

Hold down the Option key while selecting the DA. Multifinder requires this to avoid memory conflicts.

BAILEY WALKER ON 12/23

Do you have the file "DA Handler" in your System Folder? It's part of the new system update and is required to use DA's properly with MultiFinder.

JON HARDIS ON 12/23

I goofed. In the January '88 Mac Q&A Column, I gave a patch for using Suitcase on the Mac II under Multifinder. (Suitcase is a product that allows you to keep DAs outside of the System file, hence the involvement of this Board.) Where the answer says 0086, change it to 008C. You'll be glad you did.

Desktop Publishing

NANCY SEFERIAN ON 12/01

The little apple in the top left hand corner of the menu is flashing off and on. What does that mean?

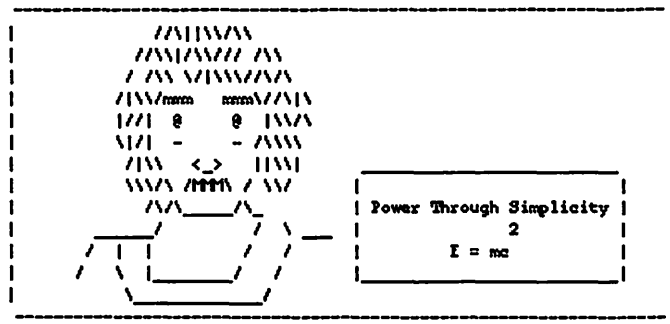
HOLGER SOMMER ON 12/01

Nancy, your alarm clock went off. Go to the control panel and reset the alarm clock. The best way to learn about the fonts and characters is a DA called KeyCaps or print out the fonts and look at the characters on paper.

HOLGER SOMMER ON 12/21

I have the Character graphics in a text file and use Mockwrite to copy them out and paste them to the modem in RedRyder. It would take too long to develop the graphics online. It takes about 30 min to make a 15 line graphics, sometimes longer if I cant find the right characters to get the right expression. Here is the intro to the `Science and Technology board:`

contd.



Entertainment & Education

WAYNE WALKER ON 12/02

How can you use Autopilot to shoot down the MIG? I just got my copy of Falcon, but I had to send the manual back due to printing errors that left several pages blank.

DAN HUGHES ON 12/03

Just press A and you go into Autopilot and the MIG is automatically tracked and when you see the square in the cone of vulnerability, hit the space bar with an air-to-air missile HUD selected! Alternatively, you can press Option-D and go into a semi-demo mode, where the MIG is automatically tracked but you can shoot with the space bar whenever you want. Try it.

STEVEN PAYNE ON 12/23

I'm reviewing TRUST & BETRAYAL for the Journal. I can't compare it with BALANCE OF POWER, since unfortunately I never played the latter. In this game you play Vetvel, one of seven acolytes on Kira, a moon of Lamina (follow me so far?). You must compete against other acolytes representing the other six races, for the position of Shepherd. To do so, you must acquire all eight parts of three aura types. Each of you is lacking certain parts, and each of you knows one thing about the auras of the other characters. Basically, the three aura types are tanaga (power), katsin (love), and shial (truth); as in the game of "scissors, rock, paper," tanaga conquers katsin, katsin conquers shial, and shial conquers tanaga. Soooo—during the game you spend the day visiting the other characters and trying to get them to betray what they know about the others, and (hopefully) promising not to attack or betray you. You can use threats, pleading, flattery, deals—all represented by icons which you click on to communicate with other characters. Then at night you try to figure out who to fight in order to win the extra aura pieces you need. You might choose to fight with a piece of your tanaga against a character you expect (on the basis of what you know) to attack with katsin. If you guess right, you win his or her katsin. If he or she comes after you with shial, though, you lose. So you try to guess on the basis of what holes the other characters would be trying to fill. Chris Crawford describes this as a "radical new approach to computer games" which "calls on your intuition, ethics, and social abilities." Maybe so. To me it seems more like "rock, scissors, paper" with bells and whistles, but I enjoy it anyway. Any more questions?

Graphic Arts & Design

DAVID GURSKY ON 12/24

Now one nice thing did happen while I've been modemless these past two weeks. I purchased a new paint/draw package to replace my aging copies of MacPaint and MacDraw. I purchased Deneba's new package "Canvas" and I am VERY pleased with it as a replacement for MacDraw, and content as a replacement for MacPaint. Canvas' features are almost endless in their complexity. Bezier curves, magnification up to 32 times and down to 1/32nd, bitmapped images down to 2,740 dots per inch (yes, two thousand, seven hundred forty dots per inch), gray scale palates, variable horizontal and vertical line widths up from 0 to 10/72ths of an inch each, a user definable palate, and a really neat feature called Macros, which is nothing more then a user-defined quick-draw, paint, or any other type of "object" that can be created with Canvas, available under a special menu. But what REALLY sets Canvas apart from the pack is, uh, well, Canvas. You see, Canvas is not only a Mac Application, its also a Desk Accessory. From the Canvas DA, you can readily access 80% of the features of the Canvas application! (Eat your heart out Artisto, Scribbler, etc...) Needless to say, this makes the importing of images into MS Word, Helix, or other non-graphics application VERY easy.

There are two down sides to Canvas though. However wonderful the draw features are, the paint features are, uh. Painting in Canvas is slower than MacPaint or FullPaint, and while Canvas can read MacPaint and FullPaint docs, it can't WRITE a MacPaint or FullPaint document. And I felt that painting in Canvas was not as easy or intuitive as it is in MacPaint and FullPaint. On the whole though, Canvas does a lot of things you've always wanted a Mac application to do. (Want to rotate a text block 27 degrees? No problem. Stretch, Distort, Perspective? Piece of cake. Objects or Paint!) But it could use a bit of improvement. Nine and a half brush strokes out of ten.

Hard Disks

COLIN POVEY ON 12/03

I am in the market to purchase my first hard drive. I decided the factors most important to me:

1. Warranty - a one year is the minimum acceptable.
2. Cost per megabyte, in the 30 to 50 MB range.
3. Auto parking and/or Auto parking and landing.
4. Access time.

I located three drives that meet my requirements and guess which came out on top? It was just about a tie between Micah and CMS vs. Jasmine. My question is this. I have heard many good things about Jasmine, but not much about the CMS and Micah drives. Can anybody out there help?

DAVID GURSKY ON 12/04

All three of the manufactures you list have fine reputations. I personally have a Micah AT 20 and it has served me very well for the past year and a half. The ORIGINAL Micah Corp. went bankrupt. There is now a new Micah Corp. in Delaware selling the line.

ERIC RALL ON 12/04

I have a CMS SD-80 that I got through WAP group purchase for $1199 + tax. The Pi is also selling a CMS SD-40 for $999. I am very pleased with the SD-80 and even broke down to write an article for the Journal describing it. Call the group purchase number on page 3 of the Journal and check out what WAP has to offer.

contd.

Hypercard

BILL QUALLS ON 11/29

The December issue of MacWorld has a column by Danny Goodman called "Business Clinic." In this column, Goodman explains how to create a Reminders stack that automatically creates a To Do List based on action items entered in individual reminder cards. The article does a good job of describing some fairly advanced HyperTalk programming concepts (e.g. creating hidden link fields in stacks). I learned some new tricks from the article and recommend you check it out if you're just getting started with HyperTalk. The application itself is useful and can be applied in other contexts. I used the information in the article to modify my Phone Log stack (for keeping track of phone calls) to automatically produce a To Do List from an "action required" field in the stack. If you follow Goodman's example, be forewarned that two of the button scripts listed on page 206 don't do what the article says they do: The "Tomorrow" button is supposed to get the current date and add one to it. As written in the article, the "Tomorrow" button looks in the "Date" field and adds one to it. As a result, it increments the "Date" field by one day every time you click on it. To make the button work as described in the article, change the script to the following:

```
on mouseUp
  convert the date to seconds
  add 24*60*60 to it
  convert it to long date
  update it
end mouseUp
```

Also, the "Carry Over" button on the Reminder Card is supposed to add one day to the date found in the "FollowUpDate" field. As written in the article, it adds one to the current date and puts THAT date in the "FollowUpDate" field. To make the "Carry Over" button work properly, change the script to the following:

```
on mouseUp
  — adds one day to FollowUpDate if there is one
  if field "FollowUpDate is not empty then
    get field "FollowUpDate"
    convert it to seconds
    add (24*60*60) to it
    convert it to long date
    put it into field "FollowUpDate"
  else
    exit mouseUp
  end if
end mouseUp
```

DAVID HARRIS ON 11/30

The way I read the button scripts in Goodman's MacWorld article, his button scripts are OK; they just produce slightly different results than yours as rewritten. For instance, the "Carry Over" button is used only to carry over an item from today, when it presumably didn't get done, to tomorrow. Of course, that would be done anyway. It wasn't intended to add one day to any followup date. The "Tomorrow" button as written would enable one to look more than one day in advance by clicking it again; one would return to today by pressing that button. The item that I don't fully understand in Goodman's script is the use of the command "update". Since I could not find it in the Help stack, I assume it is one which is defined by Goodman. It is first introduced after an "if" with "else update the long date" in the "To Do" card's background script. Then there is an "on update theDate" which I assume also defines the variable theDate. There is a similar construction in the Hypercard Datebook stack, using "goWeekly the seconds", etc. Can someone enlighten me on the usage of a time after the command, which changes (e.g. from the long date to theDate)? If this is explained in Goodman's book, I haven't gotten there yet...

FROM KEN HANCOCK

What I'm trying to do: I have a stack with about 100 cards. Each has 2 radio buttons yes and no. I want to be able to have the user go through the stack, while HC keeps track of the number answered, # yes, # no. The problem: I want a nice, clean way of zeroing everything. The way I have it set up, is with Hypercard, or the FSSD resource used by Soundcap files. Does anyone have any information on this? Now after the radio button is selected, it puts the selection into a field "answer" (background defined). This way, if a button is already selected, it will not add anything to # answered if the option is changed. The way I have it zeroing the stack right now is:

```
repeat until cardNumber = 100
put empty into field answer
go to next card
end repeat
```

Two questions:

1. Is there a neater way to do the repeat? Say something like "repeat for all cards"?
2. Is there a way to delete the field from the stack and then insert a new one and name it "answer"?

Any help/insights would be appreciated. Post or call me (460-4012).

JESSICA WEISSMAN ON 12/26

No, what I have in mind is a SINGLE FIELD on a SINGLE CARD which contains 100 lines. So all you'd have to zero is that one field. You can refer to and use fields from any card at any time. Just use the 1st line for the 1st question, the second line for the second question, etc. To zero the statistics, all you have to do is put "empty" into the SINGLE field.

Other Hardware

WILLIAM KINGSLEY ON 12/20

A note of appreciation to Bill Baldridge, who's magic has broadened my horizons from 512K to 2 Megs. Seems to me that I now have more of the world's resources than is my fair share, but am enjoying it immensely! No longer use the floppy drives hardly at all. Just load everything into RAM and run like the devil. Bill's Max-a-Million transplant works perfectly—except my clock is four seconds slow. Thanks, Bill.

Miscellaneous Programming

KAREN RALL ON 11/29

This week I picked up a new book, *Programming With Macintosh Programmerss Workshop*, by Joel West. It looks like the best introduction to MPW I've seen so far—I've been trying to get introduced to MPW for a while now. I've gotten through the first 50 or so pages and am still interested. So far it has given a basic overview of MPW, the Macintosh Managers and a little tutorial on how to get the system up and running.

LOUIS M. PECORA ON 12/21

Just picked up a book by Scott Knaster on MPW and Assembly Language programming. It also include MPW Pascal and MPW

contd.

C examples. Basically it's intended for the uninitiated MPW user (like me). It looks pretty good for us beginners. Although I'm not really interested in assembly language, there is a lot of useful stuff on other MPW features. After looking it over I concluded that getting up and running with MPW isn't that hard (I'm ignoring doing the fancier MPW things here), especially if one has a little background with other operating systems like VMS or (better) UNIX. I think the article in MacUser on MPW by Becker(?) was misleading. It focused too much on the complex features of MPW and made it appear that the user would have to dive into the mess immediately just to get going. That doesn't appear to be true. Well, I'll find out for sure when my MPW copy comes in. Anyway thanks for the tip on Joel West's book (I think I read it before, but forgot it).

Mac "System"

ROBERT DOHERTY ON 12/03

I have recently been thoroughly chastened by an experience updating a 4.1 system to 4.2/6.0. One of the many tricks which one acquires while using Macs, is switch launching the finder of another system. This is done by holding down the command and option keys while double clicking on the finder icon on the disk which you wish to have as the system disk. This seems to work flawlessly if both systems and finders, the one you're running under and the ones you wish to run under, are the same version. If the finder you're trying to switch to is a lower version, a dialog is displayed that you cannot perform this operation (at least when switching between system 4.2 back to 4.1).

Now comes the interesting part. *** WARNING — Don't attempt this on anything but a copy *** In the process of updating, I tried switch launching the System Tools 1 disk in the new sw distribution, from my running 4.1 system on my HD. My thinking was that this would probably not work, but that it wouldn't hurt anything. WRONG!!! What happens is that the original finder you're trying to switch FROM comes back, and the finder and/or system you're trying to switch to is trashed, i.e., the disk will no longer boot, the folder containing the system and finder are no longer "blessed", and in fact, the system file is no longer recognized as a system. The only recovery I could find was to ashcan the system and finder from the damaged disk, and drag a new system and finder from a good disk into the system folder. The moral: don't depend on some of these command option thingies to act correctly and never, NEVER, work on the original distributions of products (absent copy protection of course). In my case I trashed the originals of the System Tools 1 and 2 before I figured out what was going on. Thank God, there was a system on Utilities 1 or I'd be SOOL.

Pascal Programming

THOMAS INSKIP ON 12/17

I am new in the WAP, and I just finished learning Pascal using an IBM XT. My problem is: Now that I purchased a Mac (I am very satisfied with it), which compiler should I get? I would like a fast (compiling and editing), efficient and neat compiler, a compiler that can handle graphics, sound, files, text, calculations and the modem and printer ports without too many difficulties. (Maybe I am asking for too much.) Please, I would like the members of this board to tell me about their favorite compiler, why they recommend it, its limitations, and where can I get it.

RICHARD BROSNAHAN ON 12/18

I use LightSpeed Pascal. I consider it a GREAT compiler. It is fast, and has a wonderful debugger. It supports all toolbox calls. I have never used Turbo, but I understand it is good also. If you used that on your XT, then you may want to continue with a similar compiler. Text handling is a little different in LightSpeed, but it does all the standard functions. It may take you a little thinking to get it to do what you want (compared to Turbo). One not so good thing about LightSpeed is that it is not Mac II compatible yet. I have been waiting for an update since I got the compiler. I don't have a Mac II yet, so big deal. Some other features. Separately compilable units. Very nice, because if you have a big program, you don't need to compile the whole thing every time; just the units you changed. The debugger includes an Observe window, which allows you to view variable values while you are running your program (at a pause). You can put "stop signs" anywhere in your program and it will pause there and the observe will give you values that you selected. The Instant window allows you to do anything "instantly" while the program is in a pause. I have used that to change values of variables, or print out a line, etc. The LightsBug window gives you variable addresses, and other hard core information that I don't yet understand. I am still a novice at this.

STEVE SCHNEIDER ON 12/18

Thomas, I use LightSpeed C and Turbo Pascal. I just learned both these languages. My recent experience is that it is MUCH easier learning on Turbo anything. However, LightSpeed seems to offer more bells and whistles. Also, because I think LSP was designed for "pro's" it is faster only for big projects. Turbo, gives faster feedback for small programs. The result—if you're real good, I'd pick LightSpeed. If you're still learning—pick Turbo.

Printers

DAVID GURSKY ON 12/30

1) Kinko's in Georgetown will soon have a set of Macs and a LaserWriter available for use on a walk-in basis. I've used the Kinko's on the Hill and the price isn't too bad.

2) Check out the Laser Printing BBS (989-0980, 6 am to 5 pm or so). You can upload your file to be printed on Samir's LaserWriter, and he will mail it back to you. His prices are competitive with other services.

Rumor Manager

JOHN VANBEEKUM ON 11/29

It's time to start the rumor mill rolling for the new Apple releases in January. What will the new MacYear bring??? Here are some starters which everyone probably knows about...

—New Laserwriters-a non-Appletalk, non-Postscript LW for $2000; a heavy duty cycle LW with more brains (i.e., 68020, 4 megs RAM)?

—An Apple flatbed scanner (if Apple can get the government to allow Toshiba to import this and the Imagewriter LQ)?

—A IIGS board featuring the 68000 and a Mac ROM to allow Mac programs to run on the IIGS (both Woz and Bill have alluded to such a beauty)?

—An SE without a monitor?

DAVE LAVERY ON 12/29

How's this for a good rumor: Word is being passed to several of the more stable Mac II application developers that they should prepare for a new color environment for the Mac. Seems that Apple is planning a new product announcement two weeks after the first-quarter stockholders meeting in '88, in which they will

contd.

announce a new low-end color platform to developers, to be placed and priced somewhere between the SE and the Mac II. This info is supposed to have been found in a private series of messages on AppleLink, and seems to be more definitive than several of the "color SE" rumors that I have seen before. I wonder if Sculley and Atkinson are hiding something after all.

Telecommunications

HOLGER SOMMER ON 12/02

The best way to ship templates, spreadsheets or any program for that matter is to compress it with one of the compression routines like StuffIT or PackIT and send/transfer the file via XMODEM or any other protocol (not ASCII). If you only can use ASCII file transfer you have to HEX the file for transfer using a program called BINHEX. This program transfers any file of binary code into HEXADECIMAL-ASCII characters which then can be understood by any computer (which understands the ASCII standard). It requires, of course, that the receiver of such a StuffIT/PackIT or HEX file has the programs to unstuff/unpack or unhex the information again. So much for a brief file transfer tutorial.

WILLIAM KINGSLEY ON 12/25

Have just begun using the newly available downloads. Question regarding the file types: What's the difference between ".PIT", ".P3T", and ".SIT"? I DL'd PCKIT312, also UNPIT w/o problem. Do I need to use UNPIT on .PIT files, and PCKIT312 on .P3T files? Suspect .SIT may require STUFFIT or something like that. Is it available here? Thanks for suggestions.

DAVID GURSKY ON 12/25

That's a good question, and I'm going to put up a file Paul Heller put together listing the various extensions. But to answer your immediate question, .PIT, .P2T, and .P3T are extensions for files that have been compressed by Packit, Packit 2 and Packit 3, although .PIT is also used now to designate files packed by another of the three. UNPIT will unpack any of those files. Packit 3 is only needed if you wish to pack files, which leads us in to Stuffit. SIT (as you surmised) is the extension for archives created with Stuffit, a new package from Ray Lau (Packit incidentally, is written by Harry Chesley). Stuffit uses a better set of algorithms for data compression and is coming in to wide use now. It can also unpack Packit archives. I would recommend you download Stuffit 1.20 from the TCS and use it. And don't forget to send in your shareware fee.

Word Processors

JOHN VANBEEKUM ON 12/02

Someone mentioned (Jerry Oppenheimer, I think) that there are third party add ons for the Word Processing part of Microsoft Works which allow footnotes, indexes, etc. Does anyone know the names, availability, etc, of same?

COLIN POVEY ON 12/30

THE Program you want is WORKSPLUS COMMAND 1.1. It is from Lundeen Associates, and costs $99. You can obtain it from Heizer Software, part number 20155. They can be reached at 1-800-225-6755 or 1-415-93-7667. Here is a partial list of features:

Table of Contents generation.
Index Generation.
Print multi column labels.
Print multi column DB reports.
Perform global search and replace of DB and SS modules.
Macro programming language.

Sounds pretty good to me.

Mac II/SE

K. W. HANNAH ON 12/26

I just became a new Mac II user. I've already encountered a few programs that cause system crashes. It sure would be nice to use the Programmer's Switch to recover. Problem is, I don't know where or how to install it. I can't locate instructions anywhere in the manuals that came with the Mac II System. If anyone out there knows how to do the job, I would really appreciate some advice.

DAVE LAVERY ON 12/26

The programmers Switch on the Mac II is installed at the back of the right side, in the last of the open air vents. If you look inside the vents, you will see the two microswitches that the tangs on the programmers switch rest against. Just insert the programmers switch there, with the button with the small triangle toward the front of the Mac. By the way, you are right—the Mac II documentation does not include any instructions on the placement of the programmers switch. I stumbled across the proper location for the switch while poking around inside.

Bits and Bytes contd. from pg 64

menu bar. A small distinctive icon appears for the current active application and by clicking on it you can cycle through all the applications currently open under MultiFinder. It is necessary to get used to which menu bar is being displayed because you may see a menu bar for one program and another application open on the desk top. This can occur if you do not have an open document for the menu bar being displayed.

Dan Cochran (MacUser, January 1988) also points out that both Excel and WriteNow currently require that they be loaded and executed in the first megabyte of available memory. Since MultiFinder loads applications from the top of memory down, it is necessary to load these two applications first or they may not function properly as I can attest. I kept getting "out of memory" message when loading Excel even though there was available RAM left.

I would recommend that any serious user of MultiFinder get more than 2 megabytes of RAM. There is no way to run both Excel and Word together very well with only 1 MB of RAM. I would consider 2 megabytes to be the minimum and not the recommended RAM size needed. I have already concluded that I will need 5 MB some time in 1988. What ever happened to the 128K Mac? I have also not tried to run applications in the background such as the Red Ryder telecommunication package.

One of the reasons for delaying the release of Full Write Professional has been to make it compatible with MultiFinder. Although I am upset with Ann Arbor Software for charging my credit card months before shipping, I am glad they decided to get as many bugs out as possible before shipment rather than pull a Microsoft Word 3.0 routine.

Lynn R. Trusal may be reached at 301-845-2651 to answer questions about material that appears in the Bits and Byte Column.

WINTER WAP TUTORIALS

by Robert C. Platt

A sure cure for the "cabin fever" which we all experience as the government shuts down due to excessive snow is to take a WAP Tutorial in order to improve your Apple skills.

WAP Tutorials offer beginner and intermediate instruction. We charge a nominal fee to assure your interest and to defray club expenses. Please call the office to reserve your space and use the registration form in the back of the Journal.

Hardware Help. A few years ago, WAP organized a team of "hardware helpers" to assist members experiencing minor hardware problems not worth the $60+ trip to the Apple dealer. We are reviving that service. The staff of the WAP Telecommunications System (who are experienced at troubleshooting hardware problems) have agreed to hold an open house on the first Saturday of each month (1-3 p.m.) in the Office for members who bring in their Apple II systems. (No fee is charged, but then again, no results are guaranteed.)

Apple II Tutorials. Introductory Apple II tutorials are held on the first three Tuesdays of the month. In February and April, the tutorials will focus on IIgs topics. In March and May, the tutorials feature topics of interest to II+, //e and //c owners. See the December **WAP Journal** for the course outline. The fee is $10.

Mac Tutorials. Introductory Mac tutorials are held on the second through fourth Mondays of each month. See the October **WAP Journal** for the course outline. Remember, each session is geared toward specific skill levels, and you can jump in for the later sessions without signing up for the entire series. The fee is $15.

We are also offering several special tutorials. The fee is $15 ($20 for non-members.)

"Introduction to Word 3.01"—***Arthur B. Spitzer***

Wednesday, March 16, 7:30-9:30 p.m.

Microsoft Word for the absolute beginner. Learn about long menus, paragraph formatting, spell checking, style sheets and footnotes. Please bring your Mac, your copy of Word and a blank disk. Art Spitzer is Legal Director of the ACLU/NCA and has taught Word classes for PICA.

"Introduction to HyperCard"—***David Michelson or Bob Platt***

Saturday, Feb 27, 1 p.m-4 p.m.

This introduction to Apple's hypertext application for the Macintosh will include: browsing through existing stacks, creating new stacks by editing backgrounds, adding fields, adding buttons, basic linking, and painting. We conclude with suggested sources for stackware. Hypertalk and scripting are not covered by this course, but are covered by the following two classes.

"Introduction to HyperTalk"—***Holger Sommer***

Saturday, March 5, 9 a.m.-noon.

Prerequisite: Familiarity with Browsing, Painting and Cutting and Pasting Buttons. Bring your Mac (including external or hard disk), copy of HyperCard and a blank disk. The course will cover: basic HyperTalk commands, stack structure and elements, linking of cards and stacks, and external commands and functions. Holger Sommer has a PhD in mechanical engineering and taught robotics and artifical intelligence at Carnegie-Mellon University.

"HyperTalk: Advanced Problem Solving"— ***Rick Chapman***

Saturday, March 12, 9 a.m.-noon.

Prerequisite: Introduction to HyperTalk. Bring your Mac, copy of HyperCard and a blank disk. (Leave your printer at home.) This course will consist of examples commonly encountered in HyperTalk applications. Example problems will include: selection of items from scrollable lists, creating customer reports within HyperTalk; selection and extraction of data from HyperCard stacks; reading and writing text files from HyperCard; interfacing HyperCard to word processors. This course is not for the faint of heart and assumes that your are already familiar with HyperTalk.

"Excel: Charting and Database Fundamentals"—***David Morganstein***

Saturday, March 19, 9 a.m.-noon.

Convert the results of your Microsoft Excel spreadsheets into presentation graphics. Also, you can use Excel to fulfill many of your data base applications. Prerequisite: this course assumes that you know how to set up Excel spreadsheets. It is not for beginning Excel users. Please bring your Mac, your copy of Excel and a blank disk. David Morganstein,the author of the Excelling on your Mac column in the WAP Journal, repeats this popular course.

"Introduction to ReadySetGo 4.0"—***Marty Milrod***

Saturday, April 9, 9 a.m.- noon.

RSG is a popular desktop publishing package from Letraset. Some people find it easier to use than PageMaker. This tutorial covers the major features of *RSG*, including importing text and graphics and flowing text. Please bring your Mac (including your external or hard drive), your copy of *RSG* and a blank disk. Marty Milrod has taught this popular course before and uses *RSG* regularly to produce newsletters.

ANSWERS TO LAST MONTH'S WAP ACROSTIC

I cannot guarantee that these will hit the market any time soon, or at all, despite vendor promises. But all are supposed to be real. And their sheer quantity and variety shows the Apple II is very much alive and well.

Author: Walt Mossberg
Work: (Apple II) News and Notes
Source: WAP Journal—Nov 87—p14

Words

A. Warpath	G. Saliently	M. Nanosecond	S. Dapperly
B. Appetite	H. Shirttail	N. Enquire	T. Navicular
C. Loverly	I. Behaved	O. Weave	U. Outs
D. Tithe	J. Emulate	P. Skimmed	V. Thorns
E. Mouthed	K. Reptile	Q. Aboard	W. Enwreathe
F. Ohio	L. Gratis	R. Nastiness	X. Stealthily

IIGS DISKETERIA NEWS
by David Todd

We have fonts. Over 2.3 meg of fonts. Three font disks are being placed in the disketeria this month.

Errata for /WAP2004: If the slide show does not work properly with your ROMS try adding the line

105 Poke 49205,0

to the basic file Start.Show.

Errata for /WAP2008 ODD BITS 1 (Released last month without proper introduction.) This disk contains custom Finder icons. You will see custom folders by examining this disk with Finder. For even more fun, allow Finder to read this disk and then examine the ProSel disk if you have it. Read the documentation in the /ICONS folder to find out what is happening.

Bounce - A demo of different animation techniques using the SHR screen. With documentation.

Automa - An interactive graphic demonstration of cellular automata. Originally appeared in May '87 Call-A.P.P.L.E along with informative article. Source code in TML folder.

Multicolor - A simultaneous display of 256 colors and 1891 shades.

In the /DESK.ACCS folder:

Ascii.chart - Presents a chart giving all of the codes for characters.

STS - A SHR screen saver with a five second time delay.

Toolshed - Gives status and memory location of system tools.

Pic.Saver - The current SHR screen is saved in a $C1 format.

Sdumpbin - This saves the current SHR screen to a 65 block BIN file.

Puzzle - The name says it.

MemoryNDA - Presents a window with updated memory usage.

FranticNDA - What is it? Where did it go? How do I get out of here.

ControlNDA - Allows slot assignment without entering the control panel.

Systoolsversions - Reports the version of the tools in memory.

Ruler - Places a ruler on the screen.

In the /GRAPH folder:

MoonLighting - SHR screen of Mattie and David.

Astronaut - Digitized SHR screen of man on the moon.

Santa - Digitized SHR screen.

ShowDir.GS - A slide show that works with Rom version 1.0. All $C1 SHR screens on the current prefix are show once. Docs.

ShowOff.GS - Same as above except the show recycles.

In the /GAMES folder:

TowerHanoi - Classic game using SHR screen and mouse control. Seems to work better if it is run from Basic.Launcher rather than from Finder. Docs.

Othello - Another classic board game with mouse control. Docs.

In the /ICONS folder:

New.Icon.Doc

Thexder.Icon - Icon for Thexder arcade game.

Binary.Icon - Allows you to launch a binary file by double-clicking on its Finder icon, just as you would for an Applesoft program.

Aplic.icons -Icons for different P16 applications.

File.Icons - Icons for different file types

Finder.icons - This replaces the file by the same name in /ICONS subdirectory of your FINDER disk.

P8.Util.icons - Icons for various 8 bit utilities.

Comm.icons - Icons for communication programs.

Comm2.icons - Additional communication program icons.

Folder.icons - Personalized folder icons.

In the /UTIL folder:

DeARCv1.2 - Lets you decode and unsqueeze files saved in the ARC format. ARC is used on the Amiga, IBM PC, Atari ST, and 8-bit Atari. Docs.

SHRconvert - This version (1.2B2) does not allow you to save the converted screens, however it does allow you to convert and view the GIF format. As a workaround you might use this with one of the SHR screen save DA's on this disk. With docs.

Sreset - Allows you to toggle between a Slinky type ramcard and a slot's built in function without destroying the information on the ramcard. Docs.

ClipLib - Lets you create a library of SHR clip art. Clips are 196 pixels by 165 pixels. A little buggy, but fun. Docs.

In the /Music folder:

Tass - Just BRUN from Applesoft to hear the theme from Tass Tones.

Gilligan - Just sit right back and BRUN this file from Applesoft.

JukeBox - Plays sound files sampled with the Applied Vision card (and others?). Version 2.2.

Flintstones.snd - Sample sampled sound file.

Addams.snd - Another sample file.

MSTUDIO.SOUNDS - Tunes to Stairway to Heaven, Every Breath You Take, the theme from Top Gun. These can only be used within The Music Studio.

The folders /TML.STUFF and /STS.CODE are for programmers only.

In the /TML.STUFF folder:

Versn.APW - Instructions on how to make a version call to APW shell from TML Pascal v1.0.

Dispose.TML - Instruction on how to correctly pre-define Dispose as a procedure.

Parms.APW -Demonstrates passing APW parameters into a TML program.

Automa.PAS - TML source code for the Automa program.

Puzzle.PAS - TML source code for the Puzzle CDA.

/CDA.CODE - this subdirectory contains an example of code used to create a CDA using the APW version of TML Pascal.

contd.

The /STS.CODE folder contains the 816 source code for the Super Hires Timed Delay Screen Saving CDA .

Many of these GS Fonts appear to have been converted from Mac fonts. Now if we could only get a copy of Font Munger for the Disketeria. In order to see these fonts you should copy different file types into the SYSTEM/FONTS subdirectory of your bootup disk. You should limit yourself to 16 font NAMES in the subdirectory. Until programmers start writing code for scrolling menus, this is the limit. You may copy as many point sizes of a particular font into this subdirectory as you wish without worrying about the 16 font limit. Early versions of some programs may limit you even more.

//e and //c users can use these fonts with Time Out Superfonts from Beagle Bros and the 64k & 128k versions of 816 Paint from Baudville.

In these listings the font names are followed by the point sizes:

/WAP 2009 GS FONTS I

Abbydeco 14,28
Aberdeen 12,24
Alice 9,12,18,24
Arabic 24
Art Deco 9,12,18,24,36,48
Avant Garde 10,12,14,18,24
Book 36
Bookman 10,12,14,18,24
Cairo 9,18,36
Camelot 12,18,24
Cartoon 12
Circus 36
Courier 9,14,18,20,24
Florence 12,24
Geneva 9,14,18,20,24
Helvetica 9,14,18,24
Hollywood 12,18,24
Jersey 12
Jersey Bold 14
Klingon 24,48
London 18,36
Los Angeles 12,24
Microboston 18,24
Miniboston 12,24
Mobile 18
Monaco 9,12
N Helvetnar 10,12,14,18,24
New York 9,10,12,14,18,20,24,36
Nordic 12,18,24
Old English 36
Sanfrancisco 18
Script 12,18,36
Star Trek 12,18,24,36,48
Stuttgart 9,12,18,24
Swift 8,16,24,36
Symbol 9,12,18,24
Times 9,14,18,24
Venice 12,24,28
Zapfdingbats 12,24

/WAP2010 GS FONTS II

Akashi 12
Amslan18
Andover 12
Apple.I 18
Ascii.12
Asl.fingers 14,18,24,36,48
Austin.econ 9,10,12,18,20,24
Babylon 18
Basel 48
Berkley 18
Black Shadow 48
Blockbusters 36
Boise 18
Bouton 24
Brennero 12,24
Broadway 24
Bubbles 14
Calligraphy 24,36,72
Candy 24
Celtic 72
Centura 12
Chicagonight 12
Chicmath 9,12,18,24
Chugach 12
Ciao 12
Cirth 24
Colville 9
Copenh.gen 9,12,24
Coventry 12
Creamy 10,12,20,24
Cross 24
Cupertino 12,24
Cursive 12,24
Cyril 12
Cyrillic 12
Dali 24
Dallas 12,18,24
Deep Box 36
Demographics 36
Detroit 24
Dots 24
East Orange 18
Egypt Alpha 18
Elvish 12
Equations 12
Fancy Caps 72
Floor Plan 9,24
Future 9,12,18,24
Greenbay
Ham 14
Hebrew 18
Hombre 18
Hood River 12
Hunt 18
Infocom 36
Internationl.24
Internationl.12
Isengard.18
Juneau 9,10,12,18,20
Kappa Bold 12,18,24
Larr 12
Las Vegas 12,24
Led 24
Lineal 18
Little Box 18
Miscpix 24
Music 9,10,14,18,24
Paint 18
States 24
Taliesin 18
Toyland1 36
Toyland2 36

/WAP 2011 GS FONTS III

Athens 18
Carmel 24
Eon 12
Exeter 12
Liverpool 18
Long Island 12,18
Lothl Rien 12
Lyon 12
Manhattan 12,24
Marie 12
Medici 9,10,12,18,24
Minano 12,24
Millennia 12
Montreal 9,12,18,24
Mos Eisley 12,24
Moscow 12
Newcentschbk 10,12,14,24
Ottawa 9,10,12,18,20,24
Palatino 10,12,14,18,24
Palo Alto 12,24
Paris 9,12,18,24
Phoenix 12
Pica 12
Premiere 24
Rangers 18
Ravenna 12,24
Rehovot 10,12,20,24
Rome 18,36
Runes 12,24
Saigon 12,18,24
San Quentin 24
Santa Monica 24
Santiago 12
Scan 48
Scan.72 72
Script Math 12
Seattle 12
Seattle 24
Seattle Rice 12,24
Shadow Box.2 36
Shoppe 24
Sierra 12,24
Silicon Vall 12
Square Serif 24
Star Fleet 9,12,18,24
Stencil 12,24
Stiletto 14,28
Sunnyvale 24
Swan Song 12
Sydney 12,24
Tiffany 12,24
Tiny.2 12
Tiny Font 9
Tombstone 24
Toronto 9,12,14,18,24
Trekfont 12
Tucson 10
Uncial 18
Vancouver 9,10,12,14,18,20,24
Vectors 9,12
Walla Walla 12
Wartburg 12,24
Washingtondc 9,12,24
White Shadow 48
Williamsburg 12
Willowdale 9,12,14,18,24
Woodstock 12

MAC DISKETERIA NEWS

by Martin Milrod & David Weikert

New Series (Partially) Defined

We are currently reorganizing the WAP Mac Disketeria along functional lines. Functional categories assigned to date include the following:

2.XX	Desk Accessories*
3.XX	Education
4.XX	FKeys*
5.XX	LaserWriter Fonts
6.XX	ImageWriter Fonts
7.XX	Fun and Games
8.XX	Graphics
9.XX	INITs
10.XX	Miscellaneous
11.XX	Paint
12.XX	Sounds
13.XX	Telecommunications**
14.XX	Programmer /Hacker Utilities**
15.XX	Miscellaneous Utilities**
16.XX	System Utilities*
17.XX	Word Processing Utilities**
19.XX	StackWare***
20.XX	Mac II***

Those series noted with a single asterisk have been issued; those with a double asterisk are being tested and annotated now. A triple asterisk denotes a series that is being incrementally issued. Each functional category has its own number series as noted above, disks within the series are labeled sequentially, ex. 16.01, 16.02, etc.

System Utilities Series Now Available

This month marks the issue of the System Utilities series, thanks to William Jones who tested and annotated them. Bill is the most prolific of our program annotators and deserves a heartfelt thanks from all of the membership of the Pi for the tremendous amount of effort he has expended in bringing this series and the previous DA series to us. All of the System Utilities scattered throughout the current library and many new acquisitions have been grouped into one series of nine 400K disks, labeled as disks 16.01 through 16.09. Programs are arranged alphabetically within the series. The System Utilities series of nine disks is available as a package for $31.50; that's $3.50 per disk. The System Utilities package will be accompanied by a mini-catalog which includes the program notes and catalog listing.

For those of you who already have many of the programs included in the System Utilities disks but are interested in acquiring some of the updated or previously missing programs, see the five new disks that are being issued this month as volumes 138 through 142. All of the updated and new utilities included in the System Utilities series have been issued as separate update disks available at the normal price of $5.00 each or $4.00 each when purchasing five or more disks. These new disks will be available until the end of April as a convenience to those members who do not want to update their collection with the new System Utilities series. In addition, disks 36, 38, 39, 49, 52.1, 53, 68, 69, 70, 71, 72, 73, 81, 82, 86, 87, 90, 103, 112, 117, 119, 121, 130, 132 and 133 will no longer be available for sale after April. We are currently working on producing the three remaining Utilities series: Programmers/Hackers Utilities, Miscellaneous Utilities and Word Processing Utilities which, along with the System Utilities, replace the aforementioned disks.

More StackWare Added to Library

Brook Grayson, librarian of the HyperCard Sig, has released two more disks of StackWare to the Disketeria. These disks are the result of the efforts of Brook and John Love who tested, assembled and annotated the material. We are making StackWare a series of its own and the first two disks, Volumes 136 and 137 will be renumbered as 19.01 and 19.02. All StackWare is being issued in the 800K disk format.

Help Requested, Help Received

Dave Condit and Charles Redmond have volunteered to assist in annotating library disk series and William Jones is all rested up and ready to start on his next series. As noted above, the remaining utilities will be tackled over the next few months. Look for the remaining Utilities series to be issued in the next few months. Thanks Dave, Charles and Bill.

Help Still Needed

We still need volunteer help in testing, assembling and annotating the ImageWriter Fonts and LaserWriter Fonts series. If you can write, have a fair knowledge of the Mac and can spare 10 to 30 hours a month, contact Dave Weikert at (301) 948-9646 (metro area) or the telephone number in the mast head (suburban Maryland). Any volunteer for the LaserWriter Fonts series will need access to a LaserWriter or equivalent PostScript printer. After we get these two series started, the rest of the programs in the Disketeria will be examined for reorganization.

Still Wanted - Mac II Programmer/Hacker

We still need help from a Macintosh Developer with knowledge of the Mac and Mac II boot process. We have been using an invisible INIT on all of our Disketeria disks. If a Disketeria disk is used to boot a regular Macintosh, the INIT displays a dialog box with the address and telephone number of the Washington Apple Pi and a statement that you should boot from a system disk; it then ejects the disk. This INIT does not work on the Mac II and we need help in disassembling and modifying the code to make it work. A copy of the INIT has been placed in a folder on the first Mac II disk along with this message. If you can help, please contact Rick Chapman at (301) 989-9708.

New Disks

Other than the System Utilities Series, there are seven new disks being issued this month. These include five system utilities disks not previously issued or which are more current than the ones on disks previously published (these will allow members to

contd.

update their collection without purchasing the new series), and two new stackware disks (Series #19.) This month's submissions are brought to you by Brook Grayson, John Love, Marty Milrod, William Jones and Dave Weikert and the efforts of all the duplicators listed under the masthead.

As usual, folders on the desktop are indicated in parenthesized bold type followed by the *f* symbol, and have their contents indented. Program names are indicated in bold type and shareware requests are indicated in italicized boldface.

Mac Disk 19.03: Stackware 3
Applications and More

(Check Stacks *f*) Check Register, Check Writer This application was included, despite serious bugs, because it has many nice features. It is also of interest to those computer history buffs specializing in ideas that refuse to die. Yes folks, yet another attempt to have your home computer balance your checkbook. This is a valiant effort. If you have the type of checks that could be fed through the Imagewriter this may be worth the effort. Write the check on the template in Check Writer. Adjust your checks on the printer and let 'er rip. Then carry the amounts to Check Register. Easy or what? Unfortunately, the check register is not strongly attached to the writer. The register blows up. I'm not sure what it would take to fix it. It might be fun to try.

(Home Desk *f*) Home Desk A replacement for the Home Card. The metaphor is a roll top desk. It includes buttons to link to a number of popular applications. **Home Desk Docs** describes it.

Home Inventory An index, by category of goods, to formatted lists of home valuables and their worth. The organization is nice but it would have been easier to use if more use had been made of fields, so one could tab to each column. ***Shareware — $2.***

(HyperAlarm1.1 *f*) HyperAlarm 1.1 A demo of an application you could have if you send in your $10. After a somewhat daunting installation procedure, you can set alarms to remind you that there is a real life beyond your Mac. The alarm can reset at an interval you provide. **HyperAlarm Help 1.1** and **HyperAlarm 1.1dmp** are the documentation. ***Shareware — $10.***

(NoteBook2.0 *f*) NoteBook 2.0 By Art & Design Services. An organizer for random thoughts or whatever. It sorts by subject field or creation date. The title card has a cute animated graphic (click the coffee mug icon). **NB data 2.0** is the data file.

Personal Financer Each card in the stack corresponds to a calendar week. For each day, there are various expense categories in which to enter dollar amounts. When you tab out of the column or leave the card, the column amount is totalled. There is a calculate button, but it doesn't seem to work.

Recipe Box A very nicely done piece of stackware. The stack metaphor is a recipe box with 15 dividers corresponding to different food categories. On each divider are the recipes, for that category, in button form. The actual cards themselves are very nicely formatted with keyword options and a place to paste a picture if you like. The keywords can be searched by using a 'find' button. A selection of pictures is also provided. Adding new cards is very easy. Deleting cards is also simple. There is a slight mistake in the documentation; to delete a card use command-click not option-click. All in all, a nice piece of work.

Screen Blanker A manual screen saver and time piece. Paste the button in your stacks. When pressed, the screen turns black. A box showing the time floats around the screen.

Shareware Accountant Designed to keep track of units of software sold, to whom and general expenses. It will do an income less expenses calculation, for net income. The buttons on the cards are both imaginative and functional. The ability to link expenses to a product would be useful. The search abilities are primitive. ***Shareware — $24.***

(SideKick-Hyper *f*) SideKick Phone Book Allows you to convert a Borland's Side Kick phonebook to a HyperCard stack. You must first export the file from Side kick. The MacWrite document, **Side Kick Doc**, includes the instructions. I have no idea if it will work - I don't have Side Kick. ***Shareware—$10.***

Talk To Me A demo of a talk command for HyperCard using the MacinTalk driver. The stack will not work on a Mac II. In the resource fork of the stack you will find a XCMD resource that can be copied into your own stacks. ***Shareware—$1.***

Text Importer This version, 1.2, is another way to manipulate text files in HyperCard.

Text Writer Yet another way to manipulate text files in HyperCard.

(Tom's SlideShow1.3s *f*) Tom's Slide Show View the MacPaint slides one at a time, or have them slide by (the author claims it will continue for 135 hours — then what?) You can add your own pictures using the 'Import Paint' facility of HyperCard. **Slide Info 1.3s** tells all about it. ***Shareware—$5.***

VideoDisc This stack includes the disk controller, a three button mini-controller along with documentation on how to install it for your configuration. It is set up to run a Pioneer LVP4200. If you have another player you will have to use ResEdit to install a driver for your machine. Cable wiring diagrams are included for Pioneer LD-V6000 and LD-V4200, Philips VP 935, Hitachi players, Panasonic TQ-2024F, Sony 1000A, 1500 and 2000. The video XCMDs are modeled after Dan Winklers original.

Mac Disk 19.04: StackWare 4 - Monster Hunt

Monster Hunt*Shareware—$10.* Sorry folks but there is no room on the monster hunt disk for either the program notes or the usual hidden INIT file that identifies this as a disk from the Washington Apple Pi and asks you to boot from a system disk.

Mac Disk 138: Utilities XXV

(ApFont 2.0 *f*) ApFont 2.0 This "cdev" permits you to change the default font used by applications. Place ApFont 2.0 in the system folder with System 4.0 or newer, and then access it from the Control Panel Desk Accessory under the Apple menu. **ApFont ∂** is the documentation. ***Shareware—$5 or whatever you think it is worth.***

(CLIM *f*) CLIM 1.52 CLIM (a Command Line Interpreter for the Mac, similar in appearance to CP/M or MS DOS) is a more technical method of working with a Macintosh. Its combination of commands allow access to and manipulation of files, disks, volumes, the serial ports and some important parameters of the Mac. **LaunchCLIM da** is the desk accessory which launches CLIM. **CLIM Manual** contains the more than adequate documentation for CLIM. There are two example programs, **SORT3** and **MODEM**, that are also included.

contd.

SORT3 is a simple control program that will ask for three numbers and return them in increasing order. **MODEM** is a program that will give full control of CLIM to someone calling in over the modem. ***CAUTION — Reset your computer clock to the CLIM 1.52 file creation date before you run this program. If you use the current date, the program will permanently disable itself and you will never be able to try it. Shareware — $20.***

(Comment Editor 1.01 *f*) Comment Editor 1.01 Allows you to permanently modify the comment in the Finder's Get Info dialog box for Finder version 6.0 (or later). **Comment Editor Docs** (MW) is the documentation. ***Shareware—$10 for registration, $15 for the latest version on disk.***

Convert Text v. 55 Converts between Macintosh and other computer file formats. [Note Works only under MFS.] ***Shareware—$35.***

DA Tester 1.51 Installs one or two desk accessories temporarily to test them. After loading a DA some text characters were replaced with the unprintable character (the rectangular box) which quitting DA Tester restored to normal characters. ***Shareware—$4.***

(DivJoin 1.0d9 *f*) DivJoin 1.0d9 Allows large files to be transported via floppy by dividing big files into multiple floppy sized pieces, later rejoining those pieces into a single file. Despite the title, **09—DivJoin doc** is the documentation for version 1.09d8 of DivJoin.

(Fast Formatter™ v2.2 *f*) Fast Formatter™ 2.2 Formats disks rapidly because the disk name is set only once before multiple disks are inserted. Fast Formatter sounds an alert if a disk is inserted that is already initialized, locked or has problems. **Release Notes (Fast Formatter)** is the documentation.

(Feed Me! *f*) Feed Me! Installs the cry of Audrey II (from "Little Shop of Horrors") into the Mac's high memory so that when the message "Please insert the disk" comes up, the Mac shouts "Feed Me!" **About "Feed Me!"** is the documentation and **Feed Me Sound** is the sound file for Feed Me!.

File Stripper 2.1 Strips line feeds, etc., from text files. (Doesn't work with Finder 5.5 and System 4.1 and later.)

(FileZero *f*) FileZero Overwrites a file completely with zeros before deleting the file from the disk directory. This ensures that no information is left recorded on disk to be reconstructed. **File Zero Docs** and **ReadMe-File Zero** are the documentation. ***Shareware—$15.***

Font/DA Mover+ An earlier version of Apple's font and desk accessory program modified to defeat the limit of 15 desk accessories which it imposes.

Mac Disk 139: Utilities XXVI

(FontDisplay Ltd. *f*) FontDisplay Ltd.5.3 Displays the entire character set of any Mac font using a 16 x 16 character grid as they are in Inside Macintosh or in a keyboard layout. In addition, a window is available to display any text you wish in the selected font in any style. FontDisplay is being distributed on a demo basis without printing or setting change capabilities. **Font Display 5.3 Doc** is the documentation. ***Demoware—$20 ($25 non-US) for a fully configured copy.***

HDBackup Backs up all files, changed files, or individual specified files, and restores all files or specified files.

hfs find Searches HFS disks for files. [Note Doesn't work under system 4.1 and its use under earlier system versions is less than intuitive.]

HSF Global Search Another HFS disk searching program. [Note Similarly doesn't work under system 4.1.] ***Shareware—$10 for a DA version.***

(HFSDir v.1.61 *f*) HFSDir v1.61 Supports the creation of hard copy and soft copy directory listings of HFS volumes. This version operates with system 4.1 and supports the Macintosh SE™ and Macintosh II™. It has no limit on the number of Folders/Files processed and produces complete directory listings for all mounted volumes. **HFSDir v1.61 doc** is the full documentation of the above. ***Shareware—$15.75.***

(Info+ 2.0.1 *f*) Info+ Puts a new item in the menu bar which displays the time and date, lets the Mac's volume be controlled, has an event timer, and views disk space and free memory. The **Info+ Stuff** installs and configures Info+ and the **Info+ Doc** is a MacPaint file of documentation. ***Shareware—$10.***

IWPrint Prints typed in text or text files on an ImageWriter II using the printer's built-in fonts.

(Journal Maker *f*) Journal Maker Modifies the program that runs the guided tour disk to make it a desk accessory. Once modified, it can be installed into any System file with the Font/DA Mover. **Journal** can be used to create individual guided tour disks or simple macros. **Journal Maker Documentation** explains how to do it.

Keeper][Keeps an image of the desktop in memory so that the screen is refreshed after return from an application without out needing to read the desktop file on the disk. Set your cache to any non zero value prior to running.

(Key Mouse to Go *f*) Keymouse to Go Once installed on the startup disk, allows use of keyboard commands to move the cursor instead of the mouse. This is a prototype. To install, copy the INIT resource from the file into the System resource file using ResEdit. **Keymouse Manual** is the brief documentation. **Keymouse Bug Report Form** is a MacPaint bug report form.

lazymenu Once installed, causes menus to drop down whenever the cursor is in the menu bar, eliminating the need to click and drag within a menu.

(MacPSDemo *f*) MacPSDemo A demo version of a macro/procedural/batch processor utility for the Macintosh. MacPS will perform a series of desktop functions automatically without direct intervention. For the sophisticated user, MacPS is a programmable desktop language for the Macintosh. MacPS desktop functions are contained in text 'playscript' documents created and edited with any text editor. **MacPSStartup** is a startup script for MacPSDemo. **MacPS read this first** is a brief introduction to the demo while **MacPS Documentation** includes more details. ***Shareware—$21 for a fully functional version.***

Mac Disk 140: Utilities XXVII

Layout 1.3 Allows customization of the layout of icons on the desktop, adjustment of label fonts and font sizes, and changes the information seen when viewed by name, size, or date. **Make Minifinder** Creates a variation of Apple's Minifinder in which applications may be added from more than one folder using the standard file selection box. **Make Screen** For customized startup screens, run Make Screen on any MacPaint file selecting the part

contd.

of the painting to be used for the start up screen. Save the file with the name exactly as StartUpScreen. Quit Make Screen and place the StartUpScreen file in the system folder. The new picture will appear on the next boot. **Mass Formatter** Allows you to format and verify disks in a batch mode. ***Shareware—$25.*** **MASS INIT** Allows the mass initiation of double-sided (800 K) disks.

(MFMenu *f*) MFMenu Attaches a copy of the MultiFinder Application Switching menu to the MultiFinder icon in the menu bar so you don't have to go to the bottom of the DA menu to switch between applications. **MFMenu Doc.wrt** is the brief documentation. **PwrStation Patch for MF** contains the instructions on patching Power Station to work with MFMenu.

(My Back Up *f*) My Back Up A backup utility which allows full or incremental backups from a hard disk. Also allows the creation of a journal of backup activities. **My Back Up.doc** is the full documentation. ***Shareware—$10.***

New copier Another single-sided (400 K) disk copier.

NewSortMenus Causes font and DA menus to be sorted alphabetically. [Shouldn't be needed with the 4.1 and 5.5 and newer versions of the System and Finder.]

(Oasis 2.01*f*) Oasis 2.01 An involved replacement for the finder; primarily a hard disk user utility, offers an interesting alternative to the standard desktop configuration. It allows buttons to be "installed" which can be designated to an application or its documents. Requires some thought to lay out, determining how many buttons to install. In this version, the documentation is in a help file within the application. **Launch Oasis** allows Oasis (which must be in the system folder) to be launched manually from the desktop. **READ ME FIRST!!** is the brief documentation. ***Shareware—$15.***

Pad-Lock™ Installer The installer creates an FKey which can be used to lock-up the Mac screen until a password is entered. ***Shareware—$8.***

(Page Setup Customizer *f*) Page Setup Customizer Allows customization of ImageWriter page sizes, and their incorporation into individual applications or the ImageWriter driver. The remaining files in the folder (**PSC Kernel, PSC Menu,** and **MLOAD.BIN**) are required for PSC to work.

Mac Disk 141: Utilities XXVIII

Paint Thinner Two programs (**Crusher** and **UnCrusher**) compress and decompress **MacPaint** documents to save disk space. **UnCrusher** automatically calls **MacPaint** when a document is decompressed if (under HFS) **MacPaint** is in the same folder or on the Desktop. **Paint Thinner Documentation** is the documentation. ***Shareware—$10.***

Print PICT Does what it says — prints PICT documents on any printer.

Print1.0 Prints text files. ***Shareware—$10 or ¥1500.***

PROTECT Encrypts and password protects applications. [Run only on backups.] ***Shareware—$10. Australian.***

(PUP Decriptor v2.000 *f*) PUP Decriptor v2.000 The decriptor is used to update software using documents issued by software publishers to update their programs. By running the update document through the decriptor, an earlier version of the program is updated. Use of this program depends on software publishers issuing compatible update documents; in their absence, all this will do is to update the sample program included here. **PUP Read Me** is the documentation in Teach-Text format. **Pup Demo** is an application that Pub Dif. Doc. will update. **Pup Dif. Doc** is the script which performs the update. We don't currently know of any software publishers using this technique and the program didn't appear to recognize the sample program it was supposed to update.

(QuickKeys Demo *f*) DemoQuickKeys™ QuickKeys allows various Mac functions to be assigned to single keystrokes, and allows the full use of extended keyboards. See David Morganstein's enthusiastic review in the December '87 *WAP Journal*. This demo programs only 12 keys and doesn't allow key assignments to be saved between boots. **About QuickKeys** is the brief documentation and a sales pitch. ***Demoware — $99.95 for the full version.***

(RamDisk+ 1.4 *f*) RamDisk+ 1.4 A very good RAM disk program for the Mac+. **RamDisk+.doc** is the brief documentation of it's features.

RamStart2.0+ Another RAM disk. For a complete set of instructions, run the program, then click on HELP as soon as it appears, before the disks stop whirring.

Remove JClock The first version of **JClock** (which places a clock in the menu bar) made permanent changes in the system file and couldn't be easily removed. This application removes that version.

Scribe™ Sets any installed font as the default font for an application instead of Geneva. ***Shareware—$8.***

Set BackPat Changes the background pattern of any application to one of the patterns set out here. (Patterns can't be edited.) Use only on copies of the applications.

Set Clock 1.6 Automatically set the Mac to within one second of a clock synchronized to the Canadian National Research Council atomic clock. An offset feature is included for different time zones and daylight time. 1-800 information numbers are included as well as Canadian and Chesapeake, VA, numbers (toll calls) for the actual time synchronization. Requires a modem that recognizes Hayes commands.

ShowSizes Displays HFS volumes as folders, identifying what percentage of the disk their contents occupy. ***Shareware—feel free to send money.***

(Shutdown II *f*) Shutdown II Designed for use with Finder substitutes, this program will shut down the Mac if the shift key is held down when quitting an application. (Otherwise, the specified Finder is launched.) A Mac II will actually turn itself off. Other Macs display the "Its safe to turn off" dialog. Note that the Shutdown application is named MiniFinder, and that the Finder must be renamed in one of the ways specified in the documentation. **Shutdown II doc** is the documentation on how to use it.**SizeApp©** Allows you to set the preferred size and minimum size that an application needs under MultiFinder and whether the application is enabled to run in the background. SizeApp© double beeps if the application does not have the proper resource to store the size information.

Mac Disk 142: Utilities XXIX

Sizer 1.0 Displays a window on the Mac drawn with the coordinates entered by the user.

SmallFinder 1.1 A minifinder that allows simple filing functions.

(Start Mac1.1 *f*) StartMac1.1 Allows the development of a custom startup routine with a startup screen that talks (using

contd.

MacinTalk) and automatically loads an application, a ram disk or whatever. **StartMac Documentation** tells how to use it and **StartMac.Commands** is a dummy file to list commands. ***Shareware—$13 for upgraded version.***

(SuperFinder 4.2.1 *f*) SuperFinder 4.2.1 A document- and application–launching minifinder that has the ability to manage an unlimited number of documents and applications. Since the application must go in the System folder, **Run SuperFinder** can be kept on the desktop to provide easy launching from the Finder. **SuperFinder Documentation** provides instructions in Word 3.0 format. ***Shareware—$15.***

System Version Shows the version number of the system file in use. Takes only 2K of disk space.

Text Compactor 1.0 Removes extra lines and spaces from text files. ***Shareware—$10.***

(Timed Launch2.0 *f*) Timed Launch2.0 Lets any application be launched at a predetermined time. **Timed Launch Doc** is very brief documentation of the upgrade only and does not describe Timed Launch. ***Shareware—$15.***

Verify 1.1 Performs nondestructive verifications of single-sided and double-sided disks. ***Shareware—$5.***

Version Data Reads applications' internal data to obtain their names, versions, and release dates (if the programmers provided it in the first place).

(Version *f*) Version With the assistance of the other files (**MacinTalk, Makefile, sysver.c** and **sysver.rcsc**) in the folder, this speaks the version numbers of the Mac's system and finder. ***Shareware—$5.***

(Welcome2 *f*) Welcome2 When run, as, for example, a startup application, causes the Macintosh to speak a welcome, the day, date, and time. **Welcome2.hdc** is the documentation for Welcome2. **Welcome2 Loud** is the same thing in a version which overrides the Control Panel volume control setting.

Wizard Copy A fast copier of 400K and 800K disks. This version has expired but you may reset your Mac's clock to any 1986 date to see how it works. ***Shareware—$14.95.***

Xerisk A disk duplicator which, in addition to allowing copying in the usual fashion, allows two 400K disks to be combined on an 800K disk.

New Functional Series

Note: In compiling these disks, most of the applications were tried using System 4.1 and Finder 5.5. Those that work only under earlier systems have, for the most part, been so indicated in the program notes. The applications have not been tested under MultiFinder, so caution in such use is advised. Only the program or folder titles are listed below. As stated above, the series will be accompanied by a mini-catalog containing program notes.

Mac Disk 16.01: SU 1 - System Utilities

(ApFont 2.0 *f*)	(Big Window *f*)
(ChooseCDEV™ *f*)	(CLIM *f*)
(Comment Editor 1.01 *f*)	Complete Delete
Convert Text v. 55	DA Tester 1.51
(DA Utility *f*)	(DES *f*) DES
Describe	Deskimation™
Directory 0.9	(DivJoin 1.0d9 *f*)

Mac Disk 16.02: SU 2 - System Utilities

(Enigma 1.1 *f*)	Eraser
(Fast Formatter™ v2.2 *f*)	(FastLaunch 1.1*f*)
I'd Read This If I Were You	FastLaunch1.1
FatDisk Init	(Feed Me! *f*)
(File Splitter App *f*)	File Stripper 2.1
(FileZero *f*)	(FolderShare™ *f*)
(Font Squeezer™ *f*)	Font/DA Mover+
Font/DA Mover3.6	

Mac Disk 16.03: SU 3 - System Utilities

(FontDisplay Ltd. *f*)	(Hardsave *f*)
HDBackup	hfs find
HSF Global Search	(HFSDir v.1.61 *f*)

Mac Disk 16.04: SU 4 - System Utilities

(Info+ 2.0.1 *f*)	InstallMemoryBar
IWPrint	(Journal Maker *f*)
Keeper][	(Key Mouse to Go *f*)
Layout 1.3	lazymenu
(Lock 'em up *f*)	(MacDump *f*)
MacID	(MacPSDemo *f*)
Make Minifinder	Make Screen
Mass Formatter	MASS INIT
MassCopier™ 1.2	MassCopier
(MFMenu *f*)	

Mac Disk 16.05: SU 5 - System Utilities

(My Back Up *f*)	New copier
NewSortMenus	(Oasis 2.01*f*)
Pad-Lock™	(Page Setup Customizer *f*)
(Paint Thinner *f*)	

Mac Disk 16.06: SU 6 - System Utilities

(Pict-All 1.0a *f*)	(PowerStation™/E *f*)
(Preview *f*)	Print PICT
Print1.0	PROTECT
(PUP Decriptor v2.000 *f*)	PurgeIcons
(QuickKeys Demo *f*)	(RamDisk+ 1.4 *f*)
RamStart2.0+	

Mac Disk 16.07: SU 7 - System Utilities

REdit1.2	Remove JClock
Rescue	(Reverse Screen 1.0b1 *f*)
Screen Maker	Scribe™
Scrolling Menu Installer	(Sequencer *f*) Sequencer
Servant .952	Set BackPat
Set Clock 1.6	ShowSizes
(Shutdown II *f*)	

Mac Disk 16.08: SU 8 - System Utilities

SizeApp©	Sizer 1.0
SmallFinder 1.1	(Start Mac1.1 *f*)
(StartUpDesk *f*)	Start Up
(SuperFinder 4.2.1 *f*)	SuperStation3.1
(Switcher 5.1 *f*)	System Version
(The Front Man *f*)	(Timed Launch2.0 *f*)
TinyFinder	Ultra Disk Split/Merge 1.1

Mac Disk 16.09: SU 9 - System Utilities

VerCheck	Verify 1.1
Version Data	Version Reader 1.1
(Version *f*)	WayStation2.6
(Welcome2 *f*)	(WindowShell *f*)
Wizard Copy	(XL Back *f*)
(Oops, we goofed *f*)	(Password *f*)

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 I'Hote
( ) 49 I'Hote Story
( ) 50 I'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 1
( ) 2009 GS Fonts I
( ) 2010 GS Fonts II
( ) 2011 GS Fonts III
( ) 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
( ) 36 Utilities III
( ) 38 Graphic Tools
( ) 39 XLisp and Mini-ADA
( ) 40 Mac Videos
( ) 41 Cap'n Magneto
( ) 42 Studio Session (512K)
( ) 44 Boston II Fonts

Macintosh @$5 contd.

( ) 45 Games IV
( ) 46 Games V
( ) 47 Fonts IV
( ) 48.3 Fonts V
( ) 49 Utilities IV
( ) 50 Paintings III
( ) 51.2 Telecom II (no sys)
( ) 52.1 Utilities V
( ) 53 Utilities VI
( ) 54 Games VI
( ) 55 Games VII
( ) 56 Games VIII
( ) 57.1 New Memb. Disk 86
( ) 59.1 CE Sampler II
( ) 68 Utilities VII
( ) 69 Utilities VIII
( ) 70 Utilities IX
( ) 71 Utilities X
( ) 72 Utilities XI Sys./Grph.
( ) 73 Word Processing
( ) 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
( ) 81 Utilities XII
( ) 82 Utilities XIII
( ) 83 Telecom III
( ) 84 Fun & Games XVI
( ) 85 Fun & Games XVII
( ) 86 Utilities XIV
( ) 87 Utilities XV
( ) 89 Fun & Games XVIII
( ) 90 Utilities XVI
( ) 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
( ) 103 Utilities XVII - W.P.
( ) 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
( ) 112 Utilities XVII
( ) 113 Fonts XII
( ) 115 Telecom IV
( ) 116 DAs XII
( ) 117 Utilities XIX
( ) 118 Paintings V
( ) 119 Utilities XX
( ) 120 Inits II
( ) 121 Utilities XXI
( ) 123 Graphics II
( ) 124 Paintings VI
( ) 125 Sounds IV
( ) 127 Paintings VII
( ) 128 Fun & Games XXVI
( ) 129 Telecom V
( ) 130 Utilities XXII Spying
( ) 131 Sounds V PeeWee+

*Vol. 181 required with these disks.

Note: Mac Disks are contd. on next page.

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.
Attn. Disketeria
8227 Woodmont Avenue, Suite 201
Bethesda, MD 20814

Telephone _____

WAP Membership No. _____

Macintosh Disks contd.
( ) 132 Untilites XXIII
( ) 133 Utilities XXIV
( ) 134 Fun & Games XXV
( ) 135 Paintings VII
( ) 136 HyperStack - Utilities
( ) 137 HyperStack - Clip Art
( ) 138 Utilities XXV
( ) 139 Utilities XXVI
( ) 140 Utilities XXVII
( ) 141 Utilities XXVIII
( ) 142 Utilities XXIX

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

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

( ) 19.03 HyperStack Applications
( ) 19.04 HyperStack Monster Hunt

* Series disks are regular Mac price when purchased individually.

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

New System 4.2 and Finder 6.0
( ) Set of 4 disks

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 **$10.00**. 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.

( ) February 2 (IIgs specific) - **WELCOME TO THE WORLD OF APPLE** ( ) March 1 (//e and //c specific)
( ) February 9 (IIgs specific) - **HOW TO USE YOUR APPLE SOFTWARE** ( ) March 8 (//e and //c specific)
( ) February 16 (IIgs specific) - **POPULAR APPLICATIONS: APPLEWORKS** ( ) March 15

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**: February tutorials are full.)

( ) Monday, March 14 or ( ) April 11 - Introduction to Macintosh. Prerequisite: Guided Tour to Macintosh.
( ) Monday, March 21 or ( ) April 18 - Intermediate Mac Skills. Prerequisite: Familiarity with Desktop, disk copying, etc.
( ) Monday, March 28 or ( ) April 25 - 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.

( ) **Disk and File Recovery for the Apple II - Lee Raesly - Saturday, Jan. 30, 9-12 am, Office.** Fee $15 ($20). How to bring back files from the grave. Bring your Apple II and a sample of your disk graveyard.
( ) **Music on Your Macintosh - Judy Moore - Saturday, February 13, 10-12 am, Office.** Work with Professional Composer, DeLuxe Music Construction Set, Music Type and Performer. Bring your software and Mac.
( ) **Introduction to HyperCard - David Michelson or Bob Platt - Saturday, February 27, 1-4 pm, Office.** Fee $15 ($20). Includes browsing through stacks, creating new stacks, adding fields, buttons, etc. Bring Mac, hard disk, HyperCard, blank disks.
( ) **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 12, 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.

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