

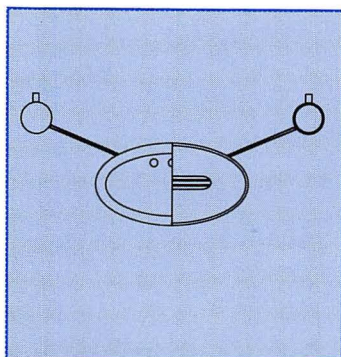
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The Journal of Washington Apple Pi, Ltd.

Volume 13, Number 5

May 1991

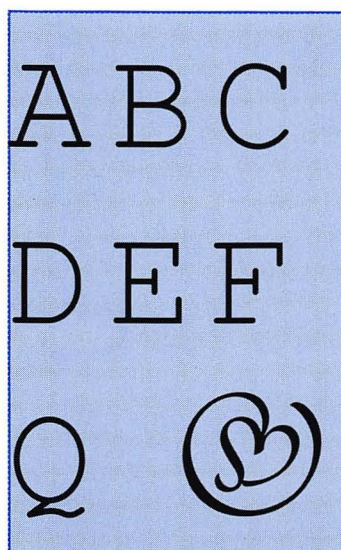


WAP Artists

14

**PictureLink for
4th Dimension**

32



Typefaces—3

19

**TrueType—The
True Story**

55

**PrintShop
Companion GS**

65

And Much, Much More:

Don't Scan... , 16 • MacDraft (review), 24 • The Good Times Roll On..., 26 • The Macintosh Bible (review), 38 • Help for Excel 2.2, 46 • Choosing a Printer, 48 • MarketMaster (review), 50 • Playroom (review), 70 • Byts and Pyces, 62 • CDA for Creating Subdirectories (program), 66 • The Apple IIGS: What the Mac LC Should Have Been, 69

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Table of Contents

Volume 13.....May 1991Number 5

Club News

Editorials...	5
by Frank Potter/ Miscellany and other eye-catching contributions	
Office News	8
by Nancy Pochecko/ WAP news	
President's Lair	9
by Eric Rall/ Thanks to Apple Evangelists	
Review Update	10
by Lou Pastura/ Software for the asking...and writing	
BoD Minutes	10
by Dave Ottalini/ What they did in March	
WAP Hotline	41, 44
WAP Calendar	42, 43
Classified ads	71
Tutorials—May	78
Index to advertisers	79
WAP membership form	80

SIGs and Slices

EdSIG	11
GameSIG	11
IIGS SIG	12

General Information

WAP Artists in Review	14
by Nancy Seferian/ Art by Brad Slobins	
Don't Scan...	16
by Lee Raesly/ Review of a device for helping handheld scanners	
Exploring Typefaces—3	19
by Frank Potter/ Some of the choices available from Adobe: Bauer Bodoni, Bodoni and Minion	

Macintosh Articles

MacDraft	24
by Blake Lange/ A review of an old favorite in new clothes: v. 2.1 of a drafting powerhouse	
The Good Times Roll On...	26
by Robb Wolov/ Things are looking up; accessing more hard disk space	
Notes on the Mac	29
by Paul Schlosser/ New Apple news and TCS files	
PictureLink for 4th Dimension	32
by Bob Pulgino/ Our resident 4th Dimension guru reviews a tool to manipulate images in database files	
The Macintosh Bible	38
by Tim Childers/ The third edition reviewed—everything you ought to be able to remember, but somehow can't quite...	
Help for Excel 2.2	46
by Tom Reynders/ A review of a DA that could just maybe save your spreadsheet bacon	
Choosing a Printer	48
by Ralph J. Begleiter/ MacNovice guides us through the thicket of printer selection	
Market Master	50
by Jim Board/ A review of a sales management analysis tool	
TrueType—The True Story	55
by Ken Knight/ Explaining some of the mysteries of Apple's latest release	
Playroom	70
by Amy Blumentsetin's dad/ Games for munchkins	

Apple III

- On the Trail of the Apple III 58**
by David Ottalini/ What's happening
in the world of the Apple III, by one
of its most devoted fans

Apple II

- Byts and Pycles 62**
by Gary Hayman/ Odds and ends on
the Apple II
- View from the Cat House 64**
by Kim Brennan/ Expanding your
memory cache
- Print Shop Companion GS 65**
by David Jernigan/ A review of a tool
to use with PrintShot GS
- CDA for Creating Subdirectories 66**
by Chester H. Page/ A program to
create subdirectories on the fly, as it
were
- New Apple II Downloads 68**
- The Apple IIGS:**
- What the Mac LC Should Have Been? 69**
by Roger Wagner/ Lots of miles left
on the GS

Disk Library

- Macintosh Disk Library 72**
by Dave Weikert
- Apple II/III disks 81, 82**
- Macintosh disks and order form 83**



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Editorial Staff

Managing Editor
Frank Potter (703) 620-8886

Graphics Editor
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Macintosh Editor
Lou Pastura (703) 560-1477

Copy Editor
Eugenia Potter (703) 620-8886

Calendar Editor
Andy Shaw (301) 595-2539

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July..... May 24

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July..... May 31

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Journal Editor	Frank Potter	(703) 620-8886

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Business Office (301) 654-8060
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What's happening...

No messages for the ages this time—just a random sampling of events and items of interest to the general Apple-oriented public.

Meetings

We've got to stop meeting like this! We are still in search of a place to meet regularly, and will continue to be interested in any appropriate places that you can come up with. A more or less key element of that place will be its accessibility to public transportation, which in this case means Metro. Having said that, we readily acknowledge that the April 27 meeting place is at the Marriott Hotel on Pooks Hill on Wisconsin Avenue just inside the Beltway. We're not what you might call real knowledgeable about the Metro system, but somehow doubt that there is a subway stop in the near vicinity. The Holiday Inn and Ramada Hotel in Bethesda were booked up solid for that day, so we did the best we could. But we need to do better.

Apple III SIG

Dave Ottalini has announced that the Apple III SIG is planning to meet on a more relaxed schedule: quarterly, instead of monthly. The next such meeting will take place in July, and Dave will be letting us and you know more precise information as and when it is available.

Adobe PostScript 2

A couple of us editorial types

went to a meeting in early April to learn more about Adobe's plans for the PostScript 2 rollout. We emerged about as confused as we were when we went in, but it appears that it will hit the streets sometime this year while the weather is still warm. It will not, repeat not, make existing PostScript printers obsolete (which is probably a very good thing).

What it will do is to enable much more precise color printing, and speed up the printing process considerably. Existing printers may or may not be upgradeable, depending on their design. If the upgrade process requires an entirely new circuit board, it may not make all that much sense to move up, particularly since much of the improvement in speed and ability to handle complex files may be incorporated in new printer drivers now under development at Adobe. Exactly which drivers they are working on is not yet known to us, but we are assuming that Apple printers will be included.

The relationship of TrueType to Adobe Type Manager surfaced right away at the meeting, and the responses were not especially illuminating. Ken Knight has an article in this issue of the Journal (page 55, if you don't feel like turning back to the Table of Contents) and from what we can see from here (through a glass, darkly) it appears as though TrueType has a technological

edge, but ATM right now has a lot more fonts to deal with. The issue is not yet resolved—in point of fact, it is scarcely joined, so the next few months will prove interesting.

WAP Elections

They are coming, and we urge you to inform yourselves about the candidacies as they become known and to vote for directors who share your vision about the future of this organization and who can make positive contributions to see that that future becomes reality. Better still, consider running yourself—an organization like this can always use new blood and new ideas. You just might be the right person to see those ideas become real.

Fonts (again)

About this time last year, we changed the typeface in which the Journal was produced. Well, it's Spring, and the blood is beginning to move just a trifle more rapidly and we have been fooling around with different typefaces and one thing and another, and...well, we changed it again.

The typeface used here is Minion (described in somewhat greater detail in a edge-of-the-chair article appearing later in this magazine (page 19, if you want to be picky)) and it is set as 10-point type on 11-point leading. A few early reviewers (they were actually peering over our shoulders and kvetching a lot, if you must know) suggested that it seemed a bit small, which is why this editorial is being done one point size greater.

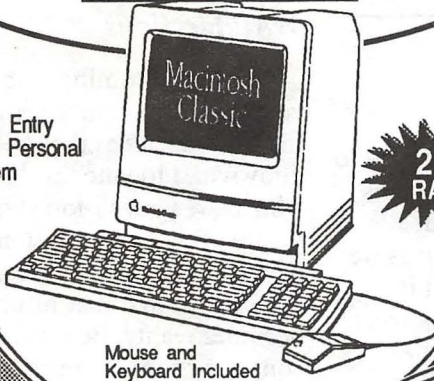
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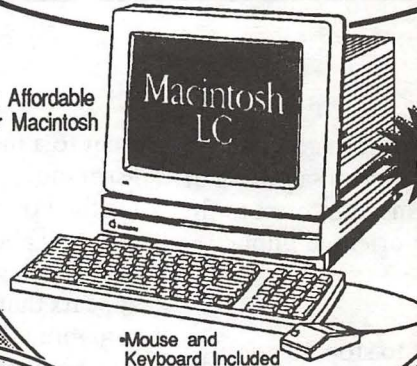
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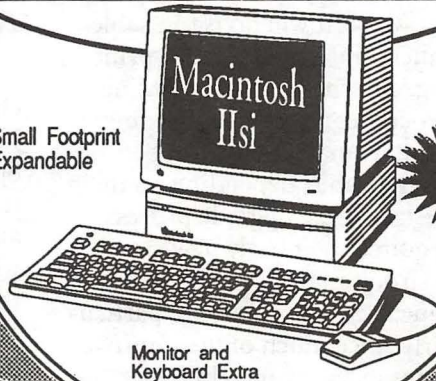
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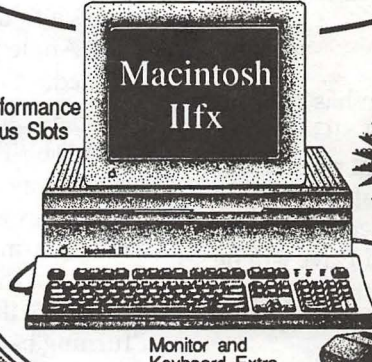
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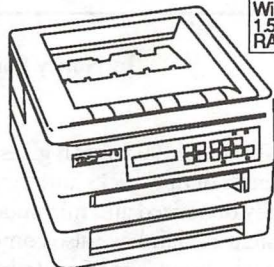
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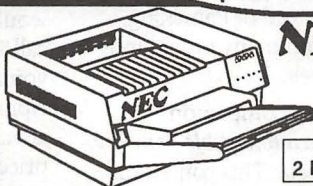
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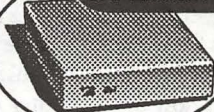
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What's new

Office News

by Nancy Pochepko

Well it's official, spring has sprung! We hope some of you are getting out from behind your computer screens to get some fresh air! We'd love you have you stop by the office to say "hi." You can rifle through the magazines, try out the new LaserWriter LS and StyleWriter printers from Apple, check out the library and compare rumors with other members.

We still have quite a collection of items in our lost and found, especially jackets and umbrellas. If you think you left something here, give us a call.

It's also the beginning of moving season, so if you are planning to relocate, please send us a change of address as soon as you know what it is! We would hate for you to miss your Journals!

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MACINTOSH BIBLE PRO-
DUCTS by Goldstein & Blair

This is a reprint from last month because the prices weren't published with the other information. The deadline has been extended to May 15, 1991.

Although many of you have heard of *The Macintosh Bible*, some of the newer members may not know that it's probably one of the best "tips and hints" books ever published for the

Mac. In over 1100 pages it gives you thousands of tips, tricks and shortcuts, logically organized and fully indexed. Goldstein & Blair have also come out with a new book *The Macintosh Bible "What Do I Do Now?"™ Book*. Authored by Charles Rubin, it covers virtually every error message the Mac can produce. First the error message is shown exactly as it appears on the screen, then there's an explanation of the problem (or problems) that can produce it, and there's a full discussion of what to do about it. Subtitled "What To Do Instead of Panicking," the book deals with many other kinds of problems as well.

There is also a companion product, *The Macintosh Bible Software Disks, Third Edition*. This consists of two 800K disks with more than 1.5 megabytes of public-domain software, shareware, templates, fonts and art.

The way this offer was made requires that we submit an order in bulk. So if you are interested in ordering any of these products, please make your checks payable to Washington Apple Pi. We will send in an order no later than March 31, so be sure to get your checks in by then.

The Macintosh Bible, 3rd Edition (List \$28) your price \$24.00

The Macintosh Bible Software Disks, 3rd Edition (List \$20) your price \$17.00

The Macintosh Bible "What Do I Do Now?" Book (List \$12) your price \$10.50

The Bible and Software Disks combo (List \$38) your price \$34.00

The Bible and "What Do I Do Now?" combo (List \$35) your price \$31.00

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calenDAR is as you may have guessed from the name, a calendar program featuring color windows with current, past and future months. You can set reminders that repeat, and they can prompt you at a preset time from within any application. Run on B&W Macs as well as color Macs.

The Regular Price is \$49.95, but members of Washington Apple Pi can get it for \$34.95. To order, call 800/866-4260 and be sure to tell the operator that you are a member of Washington Apple Pi and are entitled to the User Group Discount.

Generic CADD by Generic
Software

Sorry folks, but all I can say is that it's a CAD program. There is a demo disk at the office if you'd like to give it a try. But they are offering the program to WAP members at 25% off the retail price of \$595. (If my math is right that would make it around \$447). To order call 1-800-228-3601, ext. 461, tell them you are a member of Washington Apple Pi and that you want to take advantage of the special User Group price.

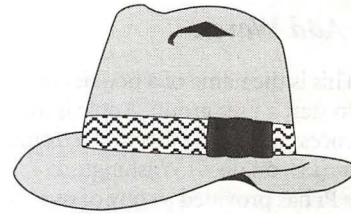
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As a Washington Apple Pi member you can get Now Utilities 2.0 for \$69 (a savings of \$60). To order call 1-800-522-5939. This offer ends April 30, 1991.

President's Lair

by Eric Rall



Apple User Group Connection.

We had the pleasure of having Rye Livingston, from Apple's User Group Connection come and visit Washington Apple Pi. Rye is responsible for community user groups. That's us! This was part of a tour Rye made to a few large user groups. We had the opportunity to talk about what we are doing and what we felt Apple should be doing. Occasionally, we even listened. Rye was kind enough to share his trip notes with me and I thought it important pass on some of the messages that Rye brought back to Apple from Washington Apple Pi, BCS and NYMUG.

We expressed our hope and desire for Apple to wave a corporate flag behind the Apple II line. The lack of dealer support for Apple II was also noted. BCS and WAP both have large Apple II membership that needs more attention and support from Apple.

User groups currently handle a large amount of training and support for Apple Computer's products. It would be helpful for Apple to recognize and help us in providing this service to their customers.

Rye also suggested the possibility of a nationwide satellite user group meeting. A forum in which the IIGS system 6.0 and HyperCard IIGS and Macintosh System 7.0 could be shown working together. Video segments from one or more of our meetings could possibly be included.

I'm excited to announce that some things have come of this meeting. Read on to hear what Apple is doing for you and us.

Apple Seeding Program.

Apple User Group Connection has

started a program with a few select user groups and we were chosen as one of the participants. Washington Apple Pi has received a new Apple LaserWriter LS and a new StyleWriter. These printers are both at our office waiting for you to come in and try them.

Apple's objective is for you, our members, to be able to inspect, experiment, and try out the new products with your favorite software package in a no-pressure, non-sales atmosphere. We have been asked to survey you who come in to test these printers. Don't worry about a salesman calling you. Your name will not be sent back to Apple. WAP is asking your names only to make certain that only one survey form is filled out per person.

The StyleWriter is a small, transportable, 360 DPI ink jet printer. At 1 ppm, it competes with the HP Deskwriter (2 ppm) and the GCC WriteMove and Cannon BJ-10e (both 1ppm). The Apple LaserWriter LS is positioned against the HP LaserJet IIP in price and performance (300 DPI and 4 ppm). Both printers are QuickDraw types and come with 13 TrueType fonts. If you are in the market for a printer, come in our office and try one out for yourself.

If you can't make it to the office, our next general meeting is Saturday morning April 27th at the Pook's Hill Marriott (Wisconsin Avenue just north of the Beltway.) We will be demonstrating both printers at that meeting.

Macintosh System 7.0 Unveiled!

On Thursday evening, May 23rd, Apple User Group Connection and the System 7.0 Product manager, Steve Goldberg will be in Washington to show all the neat new things available

with System 7.0. The meeting will be at the University of Maryland's Adult Education Center auditorium from 7 PM to 10 PM. See page 45 for details about the event. This is a don't-miss show—be sure to invite your DOS/Windows co-workers to ruin their day.

Corvus Hard Drives Donated.

When Rye toured our offices, we proudly showed Jon Thomason working hard on our 12 line, Apple II-based, bulletin board system. For those of you that have never seen the system, our storage system is built around Corvus Hard Drives, Rye Livingston has secured not one, but two Corvus Hard Drives as donations to our system.

Apple Training Development Forum.

This is produced by the Apple Training Department. The seminar is designed for third party training providers (that's us) who are in the training business (us, again). The User Group Connection feels that many user groups (like us) are developing into quality training organizations and they want to support our efforts. So, Apple UG Connection has invited some user group training directors to go to California and attend this seminar at no charge. Rob Clark, our Education Director, will be attending this seminar and we look forward to what he will bring back to WAP's members.

September Satellite Meeting - All Systems Go.

A date hasn't been set, but the Nationwide Satellite Apple UG meeting is a go! As details become available, look for them here in your Washington

Apple Pi newsletter.

Just Add Water.

This is the name of a booklet on how to start a user group. Apple is in the process of putting this in electronic format (i.e., on disk.) Washington Apple Pi has provided a copy of our Articles of Incorporation as our contribution to this project. We are honored that Apple has asked us.

Thank You - Apple User Group Connection.

This really has been an exciting few weeks. I want to express my sincere thanks to Rye Livingston and the entire Apple User Group Connection for making all of these things happen. I know how much this will mean to our club and members. This is what Washington Apple Pi is meant to be. A place where interested people can share the knowledge and experience about computers. Support like this from the

User Group Connection says keep up the good work and provides the incentive and opportunity for WAP to continue working at this goal. Remember—this is *your* club. Get involved, volunteer, come to our office and try out the printers, do something for your fellow member. It is those hard working individuals at WAP that made our club one of the few chosen by Apple for these programs. Let the User Group Connection know that you appreciate this and make the most of it.

Review Update

by Lou Pastura

First a reminder—please, please, please—no one should request review software other than the 3 editors. We're working very hard to develop and maintain credibility with developers. Individual members requesting software that we've already requested or are about to request damages our reputation seriously. If you'd like to see a package reviewed or would like to do a review yourself of a package you don't currently own, contact the appropriate editor and we'll do what we can to accommodate your needs and wishes. I've had a number of members contact me recently to tell me they had requested a piece of software. While I don't want to discourage initiative by raining on anyone's parade, please make life easier on the editors and follow the procedures we've established. Remember, we're volunteers, too!

Speaking of our reputation with developers, several members (you know who you are!) are responsible for reviews that are seriously overdue. Not publishing a review of something we've requested is not a good way to win friends and influence people in the software industry. If you've volunteered to do a review and find that you're unable to complete it, no

problem. Please return the software to the office so that we can reassign it.

We currently have one vertical application that's been very difficult to assign to an appropriate reviewer. The application is called Stat-Ref. It's a medical reference data base on CD-ROM. Another package available is Dyna Perspective, a 3-D Modeling program. A third package currently on the shelf is Learn to Speak Spanish (on CD-ROM). If you're interested in reviewing any of these packages, please call the office and volunteer.

March BOD Minutes

by Dave Ottalini

The WAP Board of Directors met on March 14, 1991.

Officers and Directors in attendance included Eric Rall, Dana Schwartz, Bob Shaffer, Bill Campbell, Bernie Urban, Mary Hockmeyer, Dale Smith, Dave Weikert, David Wood, David Harvey, Lee Raesly, Tom Vier(phone), Ed Myerson(phone).

Members and guests included Jon Tomason, Frank Potter, Nancy Seferian, Lou Pastura, and Rick Zeman.

The Board:

- * Voted to establish a policy for the WAP office that relatives shall not supervise relatives.

- * Voted against a proposal to give the EXCEL SIG \$300.00 to rent hotel space for a demonstration of EXCEL by a Microsoft representative. The board did vote \$50.00 over the \$100.00 SIG allotment to support the demonstration.

- * Voted to consolidate its bank accounts into one passive and one active account at the same bank.

- * Voted to pay Novapple for phone charges through March related to reaching national BBS conferences, but asked for new figures to support a request for an increase in the subsidy funding.

- * Offered suggestions for possible members to serve on the Election Committee.

- * Voted to appoint Paul Schlosser as the new TCSO.

- * Put off action on a proposed Trial Membership program.

- * Discussed Apple's program to "seed" user groups with new equipment and how it should apply to WAP.

- * Voted to approve Rob Clark as WAP representative at an Apple Training seminar in California in April.

- * Voted to give donated Giant and Safeway receipts to the Kennedy Institute.

- * Moved closer to hiring a part-time bookkeeper.

by Phil Shapiro

The March 28th EdSIG meeting started off with a demonstration of how to transfer Apple II text files to the Macintosh, so as to make use of the two new printers Apple has graciously donated to the club (a Personal LaserWriter, and a StyleWriter). The transfer technique makes use of the Apple File Exchange utility. This utility is easy and quick to use.

Once we transferred the file, we launched Microsoft Word word processor, and loaded up the file we wanted to print. After massaging the text back into its original shape, we printed it out. The printer works slowly, but the output is worth the wait.

After playing with the new printers, we took a look at a fun public domain program titled Estimation Soccer. Created by John G. Thomsas of Trenton, New Jersey, this game is really quite appealing for younger children. The object of the game is to move the soccer ball down the field by estimating the distance between each of four players. If your estimate is not close enough, the ball is turned over to the other side. If you do score a goal, the program displays a nice graphics reward screen.

We followed this demonstration with a demo of how to download files from various bulletin boards around town. Several EdSIG members are plunging into telecommunications, and want to learn all the different tricks of the trade.

Copies of the new Z-Link shareware disk were handed out.

Knud Ross asked about how to transfer files from his

Apple IIc at home to the MS-DOS computer he uses at work.

We discussed how he might avail himself of the modem he just bought, or use the CrossWorks hardware option.

Liz Hemming, who teaches computers at Greenacres School, talked about the successful science programs she's been using with her students. Her

students have also been doing quite a lot of word processing, and are keen about trying some good paint programs.

Jim Deligianis asked about the differences between the versions of the Publish It! program. Computer guru Bill Wydro explained that the differences are quite major, and that the older versions are noticeably inferior to the current version, Publish It! 3. At that point, Bill graciously volunteered to give an in-depth presentation about Publish It! at our next meeting.

The April EdSIG meeting will take place on Thursday, April 25, at our regular location, the Pi office in Bethesda. And

the May meeting will take place on May 23rd, at Ron and Karen Evry's house, in Springfield, VA. Ron and Karen's street address is: 5409 Moultrie Rd. And their home phone is: (703) 321-7939. Please let one of them know if you plan to join us then. We're hoping to see some fresh new faces at this meeting.

GameSIG

by Steven Payne

Since apparently no cub reporters aspire to the honor, I'm temporarily resuming duties as GameSIG secretary. Our regular monthly meeting on March 8, 1991 began with presentations by Andrew Crown of two new Mac games. The first was a demo of FTL's OIDS, an arcade game that "looks like a cross between Starfighter and Asteroids"; the only problem with the demo disk was that it required us to watch the same three-minute intro each time the game restarted. The other program was a nine-hole golf game (set at the Westchester Country Club) on the 1991 Buick demo disk—actually not a bad simulation, according to our golf game experts, and free from Buick!

Mike Dickman showed us a shareware version of the Macintosh Hex game that he is developing with Andrew McDaniel, and several GameSIG members took turns getting

severely thrashed by the computer opponent. Then we watched the Mac thrash itself when it played both sides of the game.

Co-chairman Dave Hakim (Dave Romerstein seems to be lost in the Persian Gulf somewhere) won the monthly "Desert Storm" Robot Tanks tournament, and led the GS portion of the meeting. He showed us a Tetris-like shareware program called Columns (in which you try to align falling groups of colored shapes to get three of the same horizontally, vertically or diagonally); an arcade game called Cosmocade (Pangea Software), with beautiful background graphics that you can customize; and John Carmack's Dark Designs I, a small but enjoyable Wizardry-like adventure available on Softdisk GS, Issue #9 (P.O. Box 30008, Shreveport, LA 71130).

"Doctor Dave" Granite brought his copy of Quest for Clues III, just released (and containing a Deja Vu II walkthrough by yours truly!). When I get my own copy, I'll let you know what other solutions it contains; in the meantime, for those who can't wait, it's available for \$24.99 from Quest Busters, P.O. Box 5845, Tucson, AZ 85703.

There was a Ron Wartow sighting not long ago, when I visited Los Angeles for a publications meeting. He is tanned, rested and ready, enjoying his lawyer-ing. He sends greetings to everyone and hopes to visit back East before long.

As always, we remind you that GameSIG meets on the first Thursday of every month, in the WAP main office, at 7:30 P.M. The only qualification for membership is figuring out how to get into the building at that time of night. After solving that puzzle, anything in Wizardry or Ultima is a snap. Meanwhile, Jeff Stetekluh thought we should leave you with the following quotation from the Fall 1990 BYTE IBM Special Edition: "the keyboard and the mouse response in an MVDM is not as smooth as under DOS. You can run VGA arcade games in an MVDM, but the mouse may be jerky and the screen might show occasional hash. (But you didn't want OS/2 for shoot-em-ups, did you?)"

Apple IIgs SIG

by Paul Tarantino

Once again, we were without our esteemed and revered maximum leader at our Monday evening meeting at NIH. Gary was out of town on business, not off in Switzerland like last month. Whispered rumors suggested that this time he had gone to someplace really exotic, like Idaho, or maybe even Newark.

We managed to make do, however, thanks to Kim Brennan and his turbocharged do-anything cards-in-all-the-slots Apple IIgs, plus selections from his extensive collection of peripherals. Kim started off the meeting with a brief demo of SynthLab, a new sound and music program which uses the new Midi tool (tool number 35), which just missed being incorporated into system 5.0.4. This tool allows IIgs programmers to develop software which takes much more advantage of the capabilities of the Ensoniq sound chip on the IIgs motherboard. SynthLab, an Apple Computer application currently available via download ONLY from America OnLine (ed—SynthLab is also available from APDA), allows recording and playback of input from a Midi device (like a keyboard), as well as much greater and more direct control of sound waveforms and the the oscillators in the Ensoniq chip. The program's use of synthesized rather

than digitized instruments/voices (like with SoundSmith) produces much better sound quality, and Kim dazzled us with some of the SynthLab music he had on disk. The Midi tool itself makes it much easier for knowledgeable users to add music to other programs; Dragonwars GS is probably the best current example of a game program enhanced with Midi sounds and music, although more will surely follow.

(Handy Hint, passed to Kim from the Dragonwars people: When you buy some new software for your IIgs, be sure to send in the warranty card! This is often the quickest indicator to the software's author that we IIgs people are still out here and still interested in new products. We all realize how much the aftermarket in IIgs-unique products has been dwindling of late; the good developers who are staying with us need your encouragement!)

The main topic of Kim's presentation was a demonstration of two different sets of third-party printer drivers which enable IIgs users to produce hard copy output on Hewlett-Packard LaserJet, DeskJet and other printers not accessible with the drivers provided in Apple's system software. The products are Independence, by Seven Hills Software (makers of Graphic Writer III and Font Factory), and Harmonie, by Vitesse (producers of the Quickie hand scanner and the Renaissance family of IIgs utilities). Both products provide IIgs drivers for Hewlett-Packard DeskJet, DeskJet Plus and DeskJet 500 ink jet printers as well as HP LaserJet IIP and III, while Harmonie also supports HP PaintJet and PaintJet XL, as well as 24-pin dot matrix printers compatible with the

Epson LQ. Harmonie also has its

own Imagewriter I/II driver, and a set of port drivers for parallel interface cards.

While Harmonie is thus the more versatile of the two driver sets, Independence appears to be easier to use, with dialog boxes that look and function much more like the familiar ones from Apple's Imagewriter drivers. Independence also includes two complete font families (Times and Helvetica, in a full range of font sizes, which are needed to get best print quality from a LaserJet). Additional font family disks are also available from Seven Hills. Two more advantages for Independence are its superior manual and more feedback on screen about the status of printing in progress.

In terms of overall output quality with a LaserJet, Kim sees the contest between Harmonie and Independence as a tossup. He ran several documents and graphics through his system to his LaserJet IIP with excellent results, although some of them sure did take a long time to print! In contrast, Kim also cycled some output to his printer via the AppleTalk port on his IIgs (burdened with an apparent excess of discretionary income, Kim also has HP's PostScript cartridge for his printer, as well as an extra 1M of memory in the printer, required to run PostScript on a IIP), which was up to ten times faster, since much more of the processing took place in the printer itself. It should be noted, however, that this speed advantage is limited only to use of the fonts built into the printer or on a PostScript cartridge, not IIgs fonts in the computer. Note also that Harmonie can access fonts in the printer without using AppleTalk and PostScript, by selecting "external rendering" in the print dialog box.

Both of these driver sets give the Apple IIgs access to the power of a number of very capable printers, much more cost-effective than Apple's own high-end printers (an HP LaserJet IIP can be bought for a street price of around \$900; a DeskJet, which uses liquid ink to produce comparable output quality, but more slowly, and without access to PostScript, can be had for about \$500). Each driver set is available by mail order for prices in the \$35 range.

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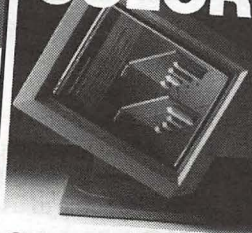
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Artists on exhibit

by Nancy Seferian

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

Artist Info: The WAP artist this month is Brad Slobins. Brad is primarily a consulting Mac-based artist, with occasional editor/writer work to boot (also done on Macintosh computers). He began drawing cartoons in college at the Manoa campus of the University of Hawaii as a hobby.

Art: *Canada* (right), *U.S.S. Christopher Columbus* (below), *Friends* (opposite left), and *Xmas Seals* (opposite right)

Tools: Mac Plus, Mac SE and IICx, Canvas, SuperPaint, FullPaint, CricketDraw and Freehand.

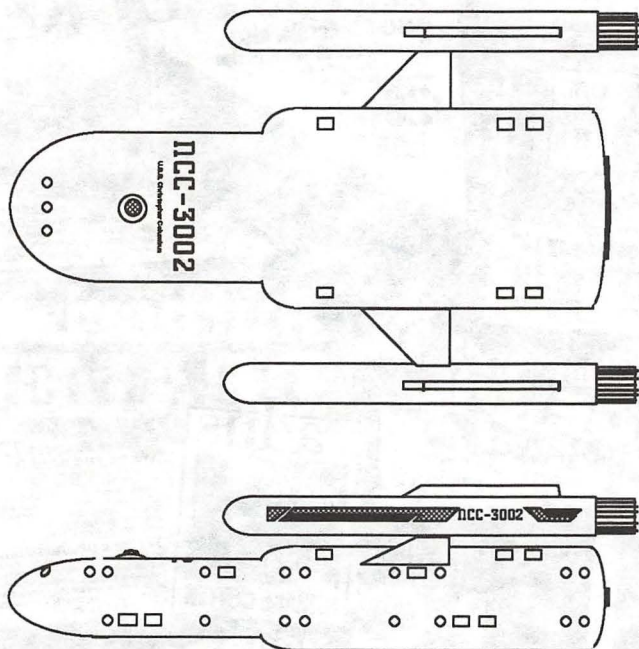
Procedures: "Canada was the most difficult to execute of these art pieces. It was originally created on a Mac Plus using a version of CricketDraw that had a bug which caused a line of PostScript instruction to appear on the drawing. When I brought the map into Canvas, I added new graphics to cover the PostScript instruction.

"This drawing was done under severe time constraints and it was necessary to get it to look great for the Canadians who would see it. The fax we were originally going to use as a reference was missing that great northernmost island of Canada. That's like drawing the continental U.S. and leaving off Texas or New England. So I had to sit down with the World



Canada

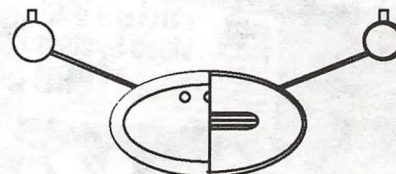
Almanac and use its map of North America to eyeball a map of Canada. There wasn't even time for me to set up a grid of proper longitude/latitude lines. Though now that I think of it, I wonder if that would have saved me



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Other Personnel: 117
Total Complement: 125

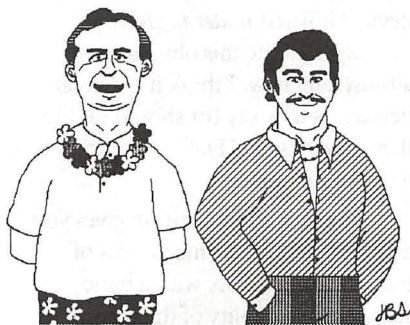


**United Federation of Planets Starship Design (External View)
U.S.S. Christopher Columbus : NCC-3002
(Marco Polo Class Interstellar Survey Ship)**

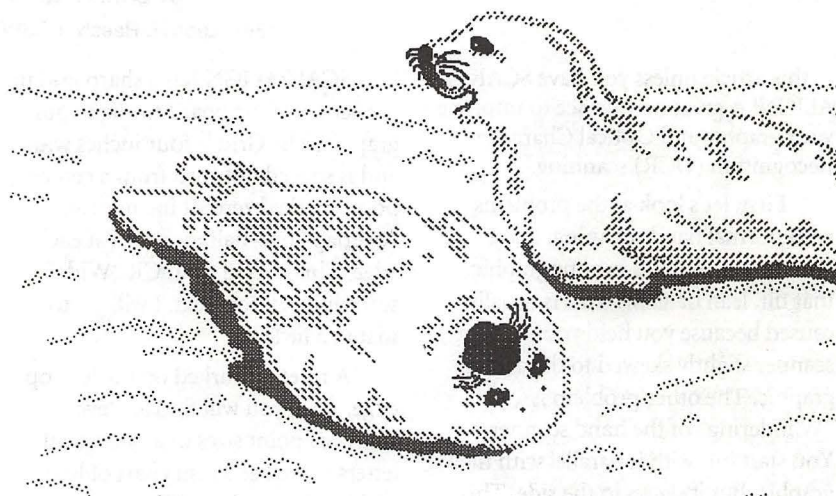
time. Probably not. I did a good, fast job of eyeballing. The various pieces of the map were all drawn by polygons, which, although not as smooth as freehand drawing curves, are much faster to shape properly (too often freehand curves reshape themselves strangely once you let go of the mouse button).

"The U.S.S. C. *Columbus* is a fictional StarTrek starship orthogonal (blueprint style) drawing. It was Originally done on my Mac SE in Canvas 2.0 (but now in 2.1). This is not a lunchtime drawing as some of the others are. It was one of the first drawings I did when I first purchased Canvas after getting my SE. It was done over enough time as to involve minimal sweat, but it was a little bit of a pain. I drew the side view first, then had to drop vertical and horizontal lines to carry over the same dimensions to the top/bottom and front/rear views. To maintain other dimensions (such as width) between the top/bottom and front/rear views, I drew lines (sometimes groups of lines) marking the appropriate dimensions and then moved them (rotating them by 90 degrees where necessary, to their proper locations on the other view.

"*Friends*, caricatures of two friends at a former job, was a painting done on



Friends



CXmasSeals

a Mac Plus using FullPaint, based on a picture of the two of them. The flower lei was, however, from my imagination, as the friend of the left was planning a trip to my old stomping grounds, Hawaii.

"*Xmas Seals* is another piece of work of which I'm rather proud, especially considering that I usually use drawing programs, and this was a painting. Then, too, I'm also proud of the fact that while I painted the baby seal on its back from a photograph, the one I did from my imagination turned out even cuter and more realistic. But I like both of them. This was originally done on a Mac IIcx in SuperPaint 2.0 during lunchtime at my office, but was later converted to Canvas 2.1 for my own use at home.

"Both *Friends* and *Xmas Seals* involved painting by eye while looking at photographs, no great problem for me, since I've done enough cartooning over the years to be used to caricaturing people, animals, and things if I have something to look at that shows them well. But *Seals* required a furry feel to the body outlines. I tried a solid paint

line with erasures at first, but found it not to work. Then I selected a diagonal-line pattern for the brush, and found that gave the feel of fur that I

To submit art by mail, send a copy on disk and a hard copy to

Nancy Seferian
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Washington, DC 20007

To submit art by modem to the TCS, dial (301) 986-8085. At the Main Menu select (F) for File Transfer Area. Then choose area 24 for Journal Submissions, and upload.

Hardware review

Don't Scan

by Leon H. Raesly

©, 1991, Leon H. Raesly, LCSW

...this article unless you have SCAN:ALIGN! A great new device to improve your graphic and Optical Character Recognition (OCR) scanning.

First, let's look at the problems with normal hand scanning. Have you seen those lines in your graphic that tilt, lean or slant? This is usually caused because you held your hand scanner slightly skewed to the actual graphic. The other problem is "Wandering" of the hand scanner. You start out with it parallel with the graphic, but it skews to the side. This causes distortion in the lower portion of the graphic. If only there were some way to be sure that the graphic and the material remained accurately aligned. Now there is: SCAN:ALIGN.

SCAN:ALIGN is a scanning platform that will keep your graphic and the scan head precisely aligned. Its bottom base forms a flat platform for the original. Next comes a sheet of clear Mylar to protect your original, followed by the top cover. Within the inner edge of the top cover, you place a template to hold your hand scanner. It looks like the figure shown in Illustration 1.

SCAN:ALIGN has a sharp grid in the center of the board to align your graphic. The Grid is four inches wide and is spaced outward from a center point marked zero. It includes an "overlap" one-half inch area at each edge. This is used for OCR "Wide" scanning of larger text. I will get to that in a little bit.

A ruler is marked on the left top edge. Also, you will find an "eye chart" of point sizes of alphabetical letters as well as a font chart of line widths. Convenient! The instructions are very simple and printed directly on the scanning board—easy to see, but after the first time there is no need to read them again.

SCAN:ALIGN comes with six plastic templates to hold your hand scanner. It works with essentially all the Apple IIGS, Mac, and IBM hand scanners on the market. For the Apple IIGS, either the Vitesse "Quickie" or the Thunderscan's "Lightning" will work great. For the Mac, the following are listed:

GENIUS ANIMAS AS-C105
COLOR
LIGHTNING SCAN

LIGHTNING SCAN GS/LC
LOGITECH 32
LOGITECH SCANMAN FOR SE/II
MARSTEK MAC-105
MARSTEK MAC 800
NISCAN GS/MAC

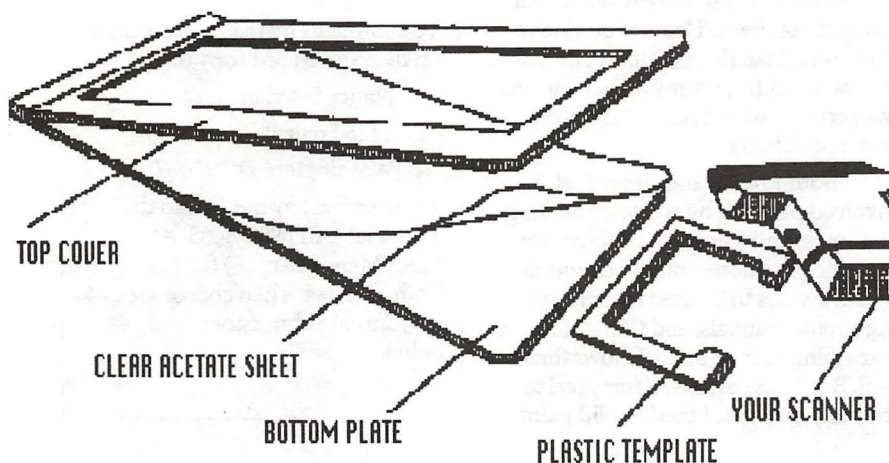
For the IBM, it has templates for the following:

ADARA 405
ADARA 405C COLOR
COMPLETE PC HALFPAGE 400
DFI HS3000 PLUS
DFI HANDY SCANNER 3000
DFI CHS4000 COLOR
GENIESCAN GS4500
GENIESCAN GS4000/GS2000
GENIESCAN GS-105 COLOR
LOGITECH SCANMAN 256
LOGITECH SCANMAN PLUS
LOGITECH SCANMAN (OLD STYLE)
MOUSE SYSTEMS PAGE BRUSH 32
MARSTEK M105
MARSTEK M800
MARSTEK M6000 CG COLOR
NISCAN (ALL MODELS)

I'll bet you didn't know that there were so many hand scanners on the market, did you? I certainly didn't. Incidentally, if a new scanner makes the market, the odds are that it will fit one of the templates already available. John Halter, president of American Business Concepts (the company that makes SCAN:ALIGN) says that if a new scanner comes out that doesn't fit any of the current templates, he will make a new template for it.

That brings me to the biggest thing I found wrong with the device: The "Quickie" (an Apple IIe and IIGS device) is listed *under the Mac heading!* Despite this obvious and almost fatal flaw, I think it is a great device. As they say (or should say) in their advertising, "Flatbed accuracy without the cost."

The second Illustration gives you a general idea of the mechanics of using SCAN:ALIGN with a hand scanner. The quality of the picture is not good (it is a reduced size Xerox copy of a half-tone picture) but I have



included it here so you get an idea of how it is used.

Now let's talk about OCR scanning. Here is where the SCAN:ALIGN really shines. I estimate a *minimum* improvement of 12% to 15% fewer errors in your scan, and that's significant!

You can easily see why this improvement occurs if you look at how OCR software works. A graphic image is scanned into the appropriate memory locations in your computer. The OCR software interprets that image by comparing each spot of dark image on this graphic with a "model" of characters in its internal table. From this the software concludes that the image fits or doesn't fit within the accuracy you have defined.

Keeping the hand scanner straight and not "waving" is so important to this process that Gary Hayman developed a technique to improve the results. Turn everything 180 degrees and push the scanner away from you. This gives a better result than pulling it towards yourself or across on an angle (without the

SCAN:ALIGN), but it is most awkward!

The SCAN:ALIGN is so good, I just place it on my lap and draw the scanner from left to right—easy.

When you teach your OCR software a new font, even a slight slant to one side or the other makes a difference in your software's ability to interpret the characters. You can compensate for this by adjusting the recognition perception to a lower

number, say 80% or 75%, but this will give you more errors. With the SCAN:ALIGN you can leave the recognition perception at 95% or even 100% (which is what I do). Since the characters are always seen at the same angle (straight), the recognition is higher and the errors are fewer. This substantially reduces your clean-up time in the Word Processor or Spelling Checker. It is important to get the material to be scanned

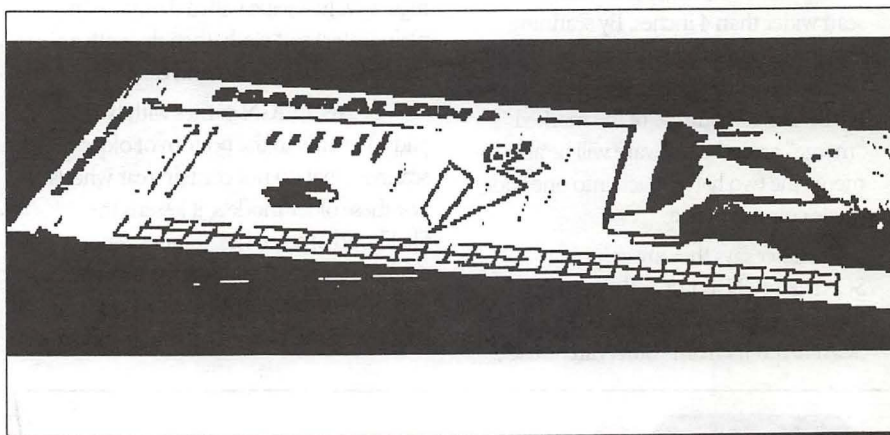


Illustration 2

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"square" (i.e. parallel) with the scanning head. The placement of the paper with the SCAN:ALIGN is greatly facilitated by a red grid silk-screened on the surface of the device. The center of the grid is identified as the "0" line, and the spacing is in 1/2 inch blocks. It is easy, using this grid, to align the graphic or text so that it is "square" with the device, hence with the hand scanner. This grid also has a "Merge" area marked on both edges. When scanning wide print, place a Non-Reproducing Blue Pencil (NRBP) mark 3 1/2 inches from each edge. This is the overlap necessary for a "merge" scan wider than 4 inches. By scanning first the left side, then the right side, the overlap is clearly shown. As long as your NRBP mark is outside of the marked "merge" area, the software will be able to merge the two halves back into one wide single column of text.

Halter says they are shipping SCAN:ALIGN as fast as they can get them in. Locally, you can get SCAN:ALIGN from "SoftWarehouse"

in Vienna, Virginia, for \$29.99 (discounted from the list price of \$39.95). He says they are negotiating a contract with DAK and expect several major wholesalers soon.

As a matter of fact, I like it so much I ordered three of them: one for home, one for work (it's a nuisance to carry it back and forth, since I use it so much), and one for Gary Hayman.

Since the clear Mylar sheet is in continual contact with the plastic frame, it collects static and thus attracts dust. So you will need to clean the Mylar fairly regularly. Just wipe with a damp (with plain water) soft cloth, then dry with a lint-free, soft cloth—fast and easy.

SCAN:ALIGN comes with two felt pads that affix to the bottom of older scanners that do not contain rear wheels. For these older models, it lessens the likelihood of scratches. It slides very easily. However, I sprayed the bottom and sides of the template with Teflon spray (and then wiped off the excess) to

make it even easier to move. Although this step is not necessary, I found it provided slightly better movement and control with this step added.

In DSW Computer Currents (August '90) they said "... it guarantees to enable hand held scanners to obtain flat bed scanner accuracy." In another section of the review they called it the greatest problem solving device since Velcro, Sticky Notes, and the Paper Clip. What? They left out sliced bread? *Computer Shopper* (June 90) had this to say "... a product to combat shaky nerves and wobbly arms".

I like SCAN:ALIGN very much and use it continually. I heartily recommend this device for those that use hand scanners. If you have hesitated to purchase a hand scanner because of doubts about the quality of the scan, this improves the quality so much you can now purchase one with confidence and save the cost of an expensive flatbed scanner.

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Exploring Typefaces—3

by Frank Potter

We have a couple of fonts for you this month—one an old standby, and one a relatively new kid on the block. As before, you can pretty well see what it is you may or may not like about these typefaces, and consider the kinds of situations that might make it appropriate to use one or both of them at home or at work.

Bodoni

Bodoni has been a favorite of typesetters and compositors for years. The father of the typeface was Giambattista Bodoni, who lived in Parma in the eighteenth century, and it has been much admired and copied in the intervening years.

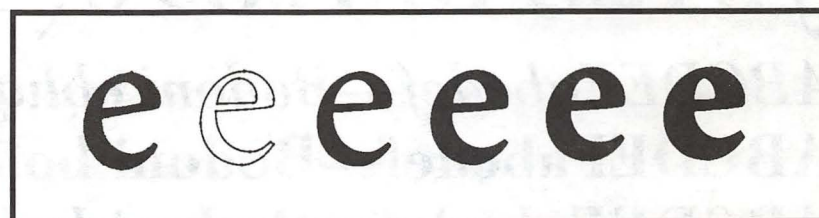
One characteristic of the Bodoni heritage is the relatively light hairlines used in the typeface; for this reason many printers are reluctant to use it when produced by low-end printers, such as laserwriters.

Adobe has compensated for this by producing two different flavors of Bodoni, as it were. Bauer Bodoni is one that they consider to be nearest to the original Italian typefaces. Bauer Bodoni (their number 98) contains the standard faces: Regular, Bold, and Italic. Bauer Bodoni 2 is the counter-part package (#111), containing typefaces generally used for display purposes: Black and Condensed.

The other Bodoni offering (Will the real Bodoni please stand up?) is titled just plain "Bodoni," and has the standard options, plus a Poster, or heavier version, suitable for use on...well, posters. That package (# 26) is supplemented by Bodoni (# 118), containing a book weight, or lighter weight, together with a condensed face and an italic and compressed version of the Poster weight.

Minion

There are two sets in the Minion collection, Minion (#143) and Minion Expert (#144). The first thing that one is likely to notice about these typefaces



Minion "e"

is that they are large (22 typefaces in the family), and the second is that they are expensive, running at \$370 and \$275, respectively. (Adobe does have a special offer, expiring at the end of May this year, to send the Expert collection for Adobe Caslon, Adobe Garamond, Utopia and Minion to anyone who purchases the corresponding font from an authorized dealer, so this may be the chance to put together your standard font package. Each of these typefaces has already appeared in the Journal by now, so you have an easy way to check them out.)

The third thing that strikes the eye is the clarity and crispness of the typefaces. We liked it so well that we have put this entire issue of the Journal into Minion, a not inconsiderable task, but one which we believe to have been worth the effort.

The typeface was designed by Robert Slimbach (who also designed Adobe Garamond and Utopia). Its primary function is as a text font, which is to say that it is designed to be read easily and not to tire the eye or the patience of the reader. Its genesis is the

Renaissance period (which probably explains why it is considered to be a Renaissance font).

Discerning readers (and we are by now confident that we have these in abundance) will note the subtle suggestions of mediaeval calligraphy in the design of this font. Translating these to digital design has to have been a long and painstaking process, requiring an eye for balance and detail, coupled with infinite patience. The inset diagram shows various stages in the development of the typeface. The left drawing is the hand-lettered original, from which the letter "e" was derived. Next to it is the digital outline of the letter, and then appear the

finished design for the regular, semibold, bold and black version of the letter.

Minion is a typeface that you are likely to see in books and scholarly journals. It may or may not be a comfortable fit for a less formal (dare we say even, from time to time, chatty?) publication such as this. We will see, and as always the views of the readers will form a major part of the decision to settle on a permanent typeface.

Adobe has also developed a companion set of typefaces for Minion: display and display italic. These are lighter in detail, and were designed for use in cases where a larger size (14 point or higher) may be desirable.

Also available are a set of swash capitals in italic, display italic and semibold italic styles. These can be used as initial capitals (dropped or raised) or in headlines and logos where their eye-catching qualities will emphasize their presence, and will not call attention away from the message designed to be conveyed in the text.

Bodoni

ABCDEFGHIJKLMNO
 PQRSTUVWXYZabcd
 efghijklmnopqrstuvwx
 yz1234567890(48/50)

ABCDEFabcdef—Bodoni oblique

ABCDEFabcdef—Bodoni bold

ABCDEFabcdef—Bodoni boldoblique

ABCDEFabcdef—Bodoni book

ABCDEFabcdef—Bodoni book italic

ABCDEFabcdef—Bodoni Poster compressed

ABCDEFabcd—Bodoni Poster italic

ABCDEFabcdef—Bodoni boldoblique

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. 10/10

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. 10/12

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. 10/14

Bauer Bodoni

ABCDEFGHIJKLMN
OPQRSTUVWXYZabc
defghijklmnopqrstuvw
xyz123456789(48/50)

ABCDEFGHIabcdef—Bauer Bodoni italic

ABCDEFGHIabcdef—Bauer Bodoni Bold

ABCDEFGHIabcdef—Bauer Bodoni Bold Italic

There was nothing so VERY remarkable in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT-POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before see a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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Minion

ABCDEFGHIJKLMNOP

QRSTUVWXYZabcdefghijklmnopqrstuvwxyz

hijklmnopqrstuvwxyz1

234567890 (48/50)

*ABCDEFGHIabcdef—Minion italic***ABCDEFGHIabcdef—Minion Bold*****ABCDEFGHIabcdef—Minion Bold italic***

ABCDEFGHIabcdef—Minion Display

*ABCDEFGHIabcdef—Minion Display italic***ABCDEFGHIabcdef—Minion semibold*****ABCDEFGHIabcdef—Minion Semibold italic***

There was nothing so VERY remarkable in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT-POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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Minion Expert

Minion Ornaments

MINION SWASH ITALIC

MINION SWASH
DISPLAY ITALIC

MINION SWASH
SEMIBOLD ITALIC

MINION EXPERT

MINION EXPERT ITALIC

MINION EXPERT SEMIBOLD

MINION EXPERT SEMIBOLD ITALIC

Minion Display

Minion display italic

123456789012345678901234567890



MacDraft



by Blake Lange

MacDraft v2 is a much better tool for mechanical drawing than the pencil, ruler, and compass. No longer does one have to perfect the drawing of little arrowheads or the uniform lettering of dimensions and legends, automatically done with this two-dimensional drawing program.

The large image-size (a 56" square) and support for an unlimited number of layers make this a functional program for everyone from the home woodworker to the aspiring, but still poor, architect. It prints in tiles on both the ImageWriter and PostScript printers. Drawings saved in the PictScript format, when placed in another document, will print with greater precision than a normal PICT image. The program will print the full image area to a plotter if one has purchased the supplementary plotter driver for \$129.00. Unfortunately, one cannot take advantage of service bureaus for plotting because the program doesn't yet provide a means for creating files that correspond to industry standards.

The program is supposed to fully support color but only color Macs and the SE/30 can print in color because the program is dependent on the presence of color commands in ROM. Too bad for the rest of us.

The latest version of the program has many little shortcuts to make life easier that have been added based on the experience of users of the first version. However, because the program is targeted at anyone with a need to do dimensioned drawings, it does not have features that would fill the need of any single group, such as the having the ability to draw walls a specified thickness—a feature attractive to architects. This does not mean that precision drawing cannot be done; it just requires more labor. Some attempt

to soften this shortcoming is made by the offering, at additional cost, of libraries of predrawn objects for one specialty or another, and by the provision of an effective way to import objects easily from these libraries.

Chances are most of you have at some time or another drawn to scale, that is, done a drawing where one inch equals some other measure such as a foot or a yard or even a mile. Some of you may even own one of those triangular prism shaped architect's rulers with a choice of a half dozen or so scales. Those of you with experience will appreciate how easy MacDraft makes drawing to scale.

When you set the scale and units you have many dozens of choices in both the English and the Metric systems, from very small to very large. This impressive feature is well integrated into the dimensional display features and is quite flexible with different scales allowed on different layers, and automatic resizing of objects copied and pasted between different scales. The first time I clicked and dragged creating a line complete with arrowheads and length I was impressed.

Augmenting the scale feature is the grid feature. For each scale there is a set of snap-to-grid options. I find myself switching these grid choices frequently when trying to draw lines of a particular length and at a particular angle. I

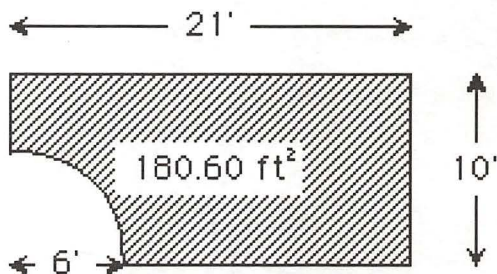
have trouble disabling the grid settings using the keyboard shortcuts. A problem with reviewing a feature laden product like this one is the time it takes to know it well enough to know whether the source of a problem lies with the program or with the operator.

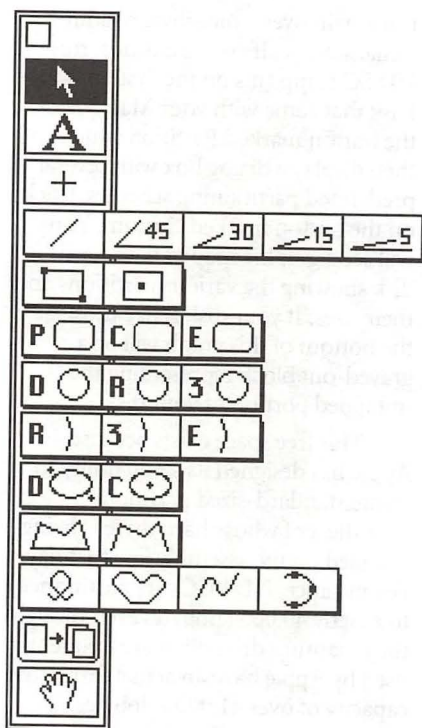
While drawing with the program I choose to have the *show size* window open which displays dimensions and angles. It reduces the need to measure or perform calculations. However, I get tired of mousing around trying to get something precisely right, zooming in, zooming out, turning off the grid, turning it back on, over and over. Too mousy for me. A little dialog box would go a long way towards making this program friendlier.

Even the cleverest Mac drafts-person will need some time to learn all about drawing arcs with this program. As there are with most of the tools, there is more than one way to draw an arc: by radius, by 3 points, and elliptical. Each takes some study.

One strength of this program is that it has many different types of objects such as straight lines, rectangles, round cornered rectangles, circles, etc. Each of these objects can be handled with great precision. The weakness is that one type of object cannot be used to assemble a different type of object except in the sense of gross grouping. So an object made up of different shapes drawn with precision must be created piecemeal then traced with one of the curve tools (Bezier, Freehand, or Spline) to create a closed path. Only then can you display the area of the object or fill it with a pattern (or color) of your choice.

The uniqueness of the MacDraft objects has another ramification. Images in the MacPaint and MacDraw format when placed in MacDraft have qualities different from any MacDraft





object and sometimes behave in unexpected ways. This is not a serious problem but it's a good idea to check objects after they have been placed to be sure the result is satisfactory.

When displaying an area or dimension, the text block is linked to the object, yet can be moved or edited without breaking the link. Font characteristics can be changed in the normal Macintosh fashion of click and drag select. Unlinked text blocks can be created by either simply clicking or by creating a click and drag bounding box. Also, as a result of selecting an object and typing, text will appear over the object. Text handles easily and well with one nice little touch—an option to capitalize the first letter of each word—useful for titles.

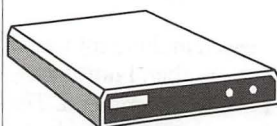
MacDraft includes many other features to make the life of a user better. Among these are interrupt of screen redraw, hiding, greying, grouping, locking, aligning, distributing, rotating, handles, datum points, and constraining.

This program will work with the full line of Macintosh computers with 1 megabyte of RAM or 2 megabytes for color. It is currently available in version 2.1 for \$279.00 from MacConnection.

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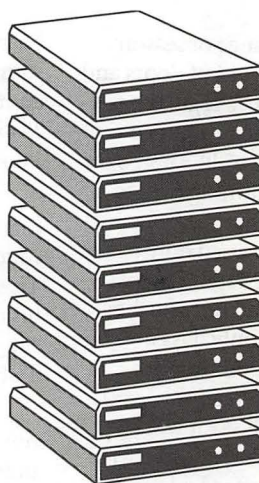


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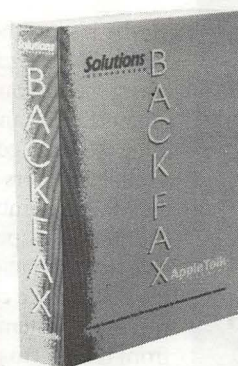
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The Good Times Roll On...

by Robb Wolov

Maybe it's just the change of seasons. Maybe it's just getting out of doors and seeing the sun on a more regular basis. But, its Spring and when things go well, things seem to go very well! Apple's on a roll. New users are coming over to the Mac in numbers that the bean counters in Cupertino used only to be able to dream about. March's across the board price cuts can only further fuel sales. System 7 is only days away from release (maybe even in your hands by the time you read this) and the beta-test people all say it works. Rumors of a summer release of a Mac portable that is both affordable and luggable are on the rise. The '040 Tower should be rolling out as soon as Motorola can make enough chips to keep Hewlett-Packard, NeXT and Apple consistently supplied for routine production.

In a nutshell, good things are happening. My lawyer friends who understand such things are telling me that Apple seems to be winning its Windows licensing case against Microsoft. Although I must confess that the case has become fragmented into so many different hearings and subarguments that I find it difficult to follow it all. I'm encouraged that the people at Apple who have been arguing for years that it was better to "charge less and sell more" seem to be gaining the upper hand. I may be able to afford some of the new stuff after all!

An "amazing" book & free storage...

As some of you already know, I love discovering new Mac power tips. For this reason I've been a devoted reader of such books as *The Encyclopedia Macintosh* and *The Macintosh Bible*,

both reviewed in these columns at some time or other. I now have another one to recommend. *The Big Book of Amazing Mac Facts* by Lon Poole (Microsoft Press).

Poole may already be familiar to many of you as the author of the *MacWorld* monthly column, Quick Tips. The author even acknowledges his readers for supplying many of the suggestions which appear in TBBOAMF.

Like the other "grab-bag collections of tricks" books, Poole's collection is just as difficult for the author to organize and is no better or worse than the others in this regard. Essentially, Poole has divided up major topics by chapter such as "Disks and Disk Drives", "Graphics", Publishing and Presentations" and so forth. Within each chapter, each power tip is written as a standalone item, coded with the icon of the particular application out in the margin. It's a bit clumsy but I haven't figured anything more elegant and it does seem to work when looking things up.

By its nature, TBBOAMF is not the sort of book you sit down and read cover to cover, but it is fun to pick it up and browse and jump about a bit. You'd think that with such established heavy hitters as *The Macintosh Bible* and *Encyclopedia Macintosh*, there wouldn't be much more to say. But, Lon amazingly does come up with not only new tips but really useful ones to boot.

And now the free storage...

For example, many hard disks have greater formatted capacity than the HD SC Setup utility which Apple supplies will utilize. You can some-

times gain over a megabyte of additional storage. If you're curious, run HD SC Setup (it's on the System Tools Disk that came with your Mac). Click the button marked Partition which will then display a dialog box with several predefined partitioning schemes. Click on the button marked Custom. You will see a graphic map of your hard disk showing the various partitions and their sizes. If your disk is like most, at the bottom of this graph will be a grayed-out block representing the untapped portion of your disk.

This free space exists because Apple has designed its setup utility to create standard-sized partitions regardless of whose hard drive is being installed on the assembly line that day. For instance, HD40SCs are partitioned to exactly 40,000 kilobytes even though the Quantum drives that are frequently used by Apple have an actual formatted capacity of over 41,000 Kilobytes.

If you wish to use this extra capacity, click on the buttons "Done" and "Quit" to get back to the Finder. (I wouldn't risk the following procedures under MultiFinder.) Now, back up your hard disk—do a file-by-file backup, not an image backup. This last point is critical. Backup applications that do an image backup won't be able to reconstruct the old image on your hard disk since the size of the partition is fixed by the backup process and we will be creating a new, larger partition. So, do a file-by-file backup. Better still, make two!

Restart your Mac from a separate System floppy disk and load HD SC Setup. Once again click on the Partition and Custom buttons. You may get a warning message that the volume is in use. If that's the case, just click the Continue button. When you see the partition map of your disk, click on the large white block which has your hard disk's name on it and then click the button marked Remove. The gray block which represented the untapped space should now expand to fill the whole diagram except for a small partition at the top of the map labeled Mac Driver.

Palms sweating yet? Hang on—we're almost done. Move your cursor to near the top of the gray rectangle and drag it all the way to the bottom of the disk map. When you release the

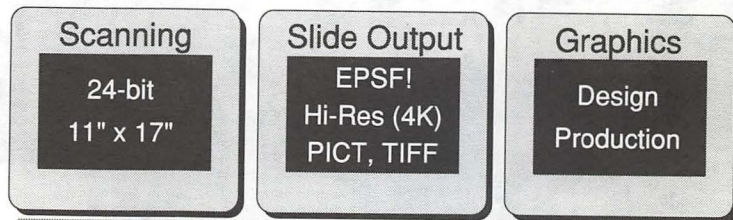


mouse button, a list of partition types will appear. Select Macintosh Volume. You can adjust the size of your new partition by typing into the dialog box just to the right of the list of partition types. The maximum size appears immediately below the box. Now click OK, Done and Quit in that sequence to get back to the Finder. Restore your backup files and enjoy your new storage.

Is it worth it? Well, that depends on your particular system. On a 40 Meg Quantum SC40 I was able to recover just under an additional megabyte and on a Seagate ST225N based 20 Meg HD SC, 1.33 megabytes. That's like getting to store my printer fonts and Rolodex files for free.

Until next time...

Robert B. Wolov, M.D. is a pathology resident at the Georgetown University School of Medicine. His areas of interest, besides molecular and orthopaedic pathology, are digital microscopic image analysis and writing medical education software. He can be reached via InterNet at WOLOVR@GUV.M.BITNET or RWOLOV01@GUMEDLIBGEORGETOWNEDU



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What's new...

Notes on the Mac

by Paul Schlosser

Apple Cuts Prices...

Apple has announced price reductions on several current models — the IIfx, IICI and SE/30. The retail prices for the Mac Classic, LC and IISI remain the same, however the IISI will now come with three megabytes of RAM, instead of two. Randy Battat, Apple vice president of worldwide product marketing, said the cuts were part of the company's new strategy of cutting prices to capture market share. The Mac IIfx price was reduced 20 percent, from \$10,969 to \$8,669. The IICI was reduced 10 percent, and now comes with 5 megabytes of RAM instead of 4. The price of an SE/30 with 4 megabytes of RAM and an 80 megabyte hard drive was reduced 31 percent, to \$3,869. Apple also reduced retail prices for several PostScript laser printers. The Personal LaserWriter NT was reduced 21 percent (\$3,300 to \$2,600), the LaserWriter IINT was cut 11 percent (\$4,500 to \$4,000) and the LaserWriter IINTX was reduced 16 percent (\$6,000 to \$5,000).

Two New Printers From Apple!

In early March Apple unveiled two new low cost printers, the StyleWriter and the Personal LaserWriter LS. The StyleWriter is an ink-jet printer producing 360 dot per inch (dpi) output, and rated at 1/2 page per minute (ppm). The first thing that strikes you when you see the StyleWriter is its small size—it's about the size of a shoe box. The ink cartridge is rated at 500 pages of text (or 200 pages with graphics), has 64 ink nozzles and will sell for about \$23. The StyleWriter weighs 5 pounds, comes

with a 50 page sheet—feeder, and will retail for \$599. (The street price is expected to be around \$450.) Although it's not a speed demon, the early reviews on the StyleWriter are enthusiastic. The Personal LaserWriter LS is a 300 dpi, 4 ppm laser printer. The standard model has a 50 sheet paper tray, and a 250 sheet tray is available for \$195. This printer uses a new compression system that allows its 512K of RAM to perform like other laser printers that have 2MB of memory. The LaserWriter LS will retail for \$1,299, (street price will be close to \$900). Both of these new printers require System Software 6.0.7, and utilize Apple's new TrueType outline font technology. Briefly, TrueType replaces your bit-mapped screen font and laser font with one outline font file. This outline font is used for screen display and printing, generating high quality type. TrueType will be an integral part of System 7.0, and will also be available through user groups and online services to Macintosh owners for use with System 6.0.7. Both of these new printers, as well as Apple's other laser printers, are manufactured by Canon.

Apple Pulls Ad...

The announcement of these new low-cost printers angered many Apple dealers and resellers. In ads that ran in several major newspapers, Apple ended the announcement with "Prices shown are suggested retail. But who pays retail anymore?". Most Apple dealers expected these new printers to be very popular, and be in short supply for several months which would combine to keep the street price near the suggested retail price. One dealer said

"This is the blackest thing Apple's ever done. Apple is asking customers to take a chunk out of the dealer's hide." Apple pulled the ads after receiving many complaints from its dealers.

Symantec Releases SAM v3.0

Symantec Corporation has announced version 3.0 of its popular utility, Symantec Anti-Virus for Macintosh (SAM). The biggest change is that version 3.0 can be updated by downloading a virus detection file directly from Symantec. Version 3.0 will also automatically fix an infected Desktop file, and can be used from the Control Panel to scan disks. Also new is "Sam Intercept, Jr.", a disk-scanning version of SAM for systems with limited memory and disk space. SAM 3.0 is \$99; registered users can purchase the update for \$29.

System 7.0 To Be Released in May!

Apple shipped the beta-4 version of System 7.0 to developers this month, describing it as "near final". System 7.0 is scheduled to be released to the public on May 13th, 1991 at the developers conference in San Jose, California. This new version of the Macintosh operating system contains many enhancements to the Finder, uses Apple's new TrueType font technology, allows disk space to be used as system memory ("virtual memory"), and simplifies networking and file sharing. Early reviews from users who have obtained this beta version are favorable. In a surprise move Apple announced that System 7.0 will not be made available through online services. The current plans are for dealers to sell System 7.0 to users, on 800K disks, with the price to be between \$50 and \$100. Users purchasing System 7.0 will be entitled to 90 days of free, unlimited tech support direct from Apple. (Apple recently ran an ad in the school newspaper of the University of California, to hire students to staff the System 7.0 tech support lines.) You'll also receive a HyperCard stack that introduces the new System 7.0 features and will examine the applications, inits and cdevs on your drive checking for compatibility with the new system software. The stack can be used to



remove inits and cdevs that could cause System 7.0 to crash, and will print a report of questionable applications.

MACINTOSH

Apple Moves Into Colorado...

On March 20th Apple announced plans to purchase and renovate an old Data General building, turning it into their fourth manufacturing facility. The three current manufacturing plants are in Fremont, Ca., Cork, Ireland and Singapore. The new plant is in Fountain, Colorado, about 12 miles south of Colorado Springs. The 340,000 square-foot building will open in the fall of 1991 and employ 800 to 1,000 workers. Jim Bilodeau, from Apple Worldwide Manufacturing, will manage the facility.

New Files on the TCS

The following files were uploaded to the Macintosh File Transfer areas on the TCS during the last thirty days. This listing represents only a small portion of the files available for

downloading. Call the Pi Office at 301-654-8060 for information on signing on to the TCS.

File area 14 - Mac Games

BLACKJACK.CPT Blackjack trainer, demo version
EMPIREBU.CPT Strategy game, take over the world!
POLAR10A.CPT DA Strategy Game

File area 16 - Mac Hypercard

STEALTH.CPT Stealth Bomber
PHONE.LOG.CPT Dial & time phone calls, and more

File area 17 - Mac Technotes

TIDBITS4.SIT Tech TidBITS for 11 Mar 1991

File area 18 - Mac Utilities

PHONEBOOK.CPT PhoneBook DA, version 2.4.1
DIGSIM28.CPT Digital Circuit Analysis tool
TYPEBOOK.CPT The TypeBook v2.0
LAYOUT.CPT Customize desktop icon layout
PYRO.UPDATE.CPT Update Pyro 4.0 to 4.0.1, w/bug fixes
POPCHAR.1.3.CPT Finds any character in a font by menu
LAUNCHIT.CPT Set startup to a non-boot volume
SUITCASE.CPT Update Suitcase to version 1.2.9
LOODLE.CPT Create and print disk labels
INDEX.MAKER.CPT Create directories of

disk volumes
GETSMART.SIT The classic TV theme song
TOGSNDVOL.CPT Toggle sound volume FKEY
BULLWINKLE.SIT Sound clips from Bullwinkle & friends
NETCHAT.CPT "Talk" to others over AppleTalk network
HEAPTOOL.1.4.CP HeapTool v1.4. Adjust system heap size
MCS.CPT Utility for transferring files
FLASHWRITE.CPT DA to store/retrieve info quickly
ICON.COLOR.CPT Icon Colorizer version 1.6
EPS.PICT.SIT EPS to PICT Converter
PUBLICFO.SIT version 1.0.1, share files across a net
SPINITIN.SIT Spins open your folders, etc.
VOLUMEMA.1FK Change volume on the fly.
MYPAGESETUP.CPT Customize print preference dialog box
COLORKEY205.SEA Keyboard toggle of colors/depths - Mac II
AURORA211.SEA Alter colors, menus, windows and buttons
BIPLANE2.SEA Shareware version 2.0 of Biplane
EXTRACTOR.CPT Extractor, for CPT format files
SPEEDBEEP.CPT Continue using Mac while sounds play
STYLER.SIT Print sample sheets of your fonts

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6. EXPENDITURES (If more than one, list separately, show to what purpose, when to what, by the number of individual parts or units, and the amount)					
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PictureLink for 4th Dimension

by Bob Pulgino

Introduction

4th Dimension, the leading-edge database management package for the Macintosh published by ACIUS, Inc., provides several features that enable you to easily make use of full-color graphic images as part of your database management applications. In addition to the ability to use graphic embellishments for your data-entry screens and reports, 4D allows you to define specially typed fields in your database which can be used to store full-color pictures, and there are lots of tricks provided by the 4D layout editor and procedural language for combining, displaying and printing these images.

The types of applications which can make use of this feature include real estate databases which include scanned photos and floor plans of the properties listed, and office personnel or security files with pictures of each employee, able to print updated I.D. badges as they are needed.

If you try to tackle one of these applications with 4D, however, you are likely to run into some problems. Not to imply that there is anything wrong with what 4D delivers—there aren't any bugs that I'm aware of in any of the "native" 4D image-management capabilities. There are however, some features and capabilities missing that really are required for producing a complete, "turnkey" application of this type:

- There is no ability to import and export images directly between the database and external files. The only provision for entering images into a 4D database is to copy the image into the system Clipboard from the originating application or Scrapbook and paste them into

the 4D picture field manually.

- There is no way to interface directly with a scanner or video-capture board, so that the user of your 4D application can capture the picture and store it directly into the database from its source. In order to use images from these sources, a separate application must be used to operate the hardware and create the image file.
- There is no way to allow the user to edit or touch-up the image in any way. Here again, a separate application must be used to perform any scaling, cropping or color correction necessary before the image is copied & pasted into the database.

Enter: PictureLink

With these experiences indubitably in mind, the folks at MediaLab Technologies have released a package called PictureLink that gives 4th Dimension an extended set of image manipulation capabilities. PictureLink is a package of *external procedures* for 4D that gives the 4D developer additional procedural language commands and layout editor objects, in exactly the same way that XCMDs extend the HyperTalk programming language.

With PictureLink, you can overcome the limitations listed above, providing the users of your application with the following capabilities:

- Preview and import images directly from files stored in EPSF, MacPaint, PICT and TIFF format, and to export entire images or selected portions directly to PICT files.

- Preview and capture images directly from live, full-motion video input.
- Preview and capture images from color or gray-scale scanners.

In addition, PictureLink will provide your users with a complete image-editing environment that is totally contained within and accessible from your 4D database. This environment provides tools for cropping, positioning, rotating and rescaling pictures for display in the database. Complete color painting tools are provided sufficient for creating original artwork, and additional tools are available for photo retouching, such as contrast control and gamma correction.

A special set of commands is available that allows you to access the Macintosh Communications Toolbox software (provided with the PictureLink package) to transmit picture images to other computers using the standard XModem protocol.

Requirements

According to the documentation, using PictureLink requires the following:

- A Mac Plus or better with at least 2M of RAM or at least 4M of RAM if you plan to work in color or MultiFinder.
- Lots of extra disk space beyond what you'd need for a "regular" database, especially if you are working with color images.
- Version 2.0.11 or better of 4th Dimension (to design the database), or 4D Runtime (to use it).
- Apple's System 6.0.5 or better.
- Apple's 32-bit Quickdraw software INIT (available on the system software disks distributed with all Macs).
- Enough expertise with 4D to be able to design and implement your application, i.e. create whatever files, fields, layouts, menus and procedures it may need. PictureLink does not require any sophisticated program development to be useful, but the particular application you have in mind may.

You do not need any color hardware to design and implement the

databases that will be used with PictureLink, but in order to test them and eventually make use of PictureLink's full-color capabilities, a color display card and monitor will be needed.

If you wish to be able to use PictureLink's direct video-capture capability, you will need one of the following video capture boards:

- Orange Micro Personal Vision Frame Grabber
- TrueVision NuVista Video Graphics Board
- Data Translation QuickCapture FrameGrabber Board

If you wish to be able to use PictureLink's direct scanning capability, you will need one of the following scanners:

- Apple Scanner
- Sharp JX-300 Color Scanner
- Sharp JX-450 Color Scanner

Installation & Use

To begin using PictureLink, you must first use 4th Dimension to create the 4D database structure file within which you want to build your application. The PictureLink software will be added to your structure file by means of a special installer application. (Like most complex external-routine packages for 4D, you cannot use 4D Mover or 4D External Mover to install PictureLink). The Installer copies all the special resources needed by the PictureLink software into your 4D structure file. When you run the PictureLink Installer, the dialog box shown in Figure 1 will be displayed.

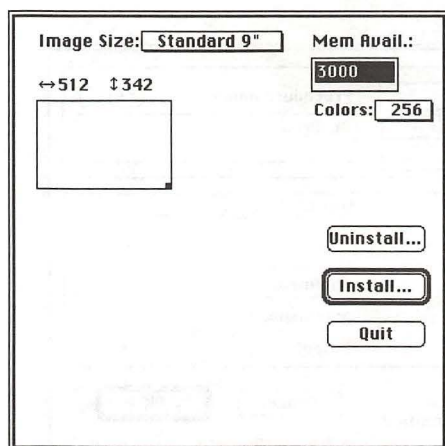


Figure 1: PictureLink Installer Options

Dialog

This dialog allows you to define the runtime parameters to be used by PictureLink regarding the maximum image size, the color setting and the resulting amount of RAM needed by PictureLink (and thereby the 4D application itself). As far as I can tell, this installer application is the product's biggest flaw. The documentation is very obscure regarding exactly what effect the combination of each of these settings will have on your database, but it can be figured out with a little trial and error. Clicking the Install... button will display a standard file dialog in which you select your structure file, and the software will then be copied in.

Besides the skimpy documentation, the installer program has some other, more severe problems: the installer puts some stuff in your structure file that it shouldn't put there and couldn't possibly make use of, such as "SIZE" and "vers" resources that should only be found in true application files. No big deal, unless you plan to compile your database and combine it with a 4D Runtime module, thus producing a true application file that will be affected by these resources. Worse yet, the "Uninstall..." option doesn't remove all the resources from your structure file, leaving behind all kinds of things that could get in your way if you are working with lots of other externals. The details of these problems are a bit technical and will only be noticed by users advanced

enough to figure out how to solve them with ResEdit, but they do need to be mentioned.

Once you are past the hurdle of installing PictureLink, you can make use of it with very little extra work. By way of example, the package includes a simple address file database that enables you to store a photo of each of the people in your address file. The database structure is shown in Figure 2.

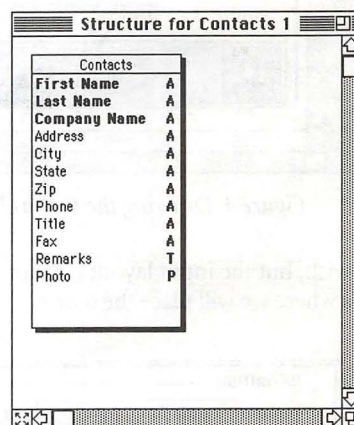


Figure 2: Example Address File Structure Diagram

Note the last field in the file, a picture typed field called Photo. This is the field that we will use to store the images captured by PictureLink. After designing the file structure for the database, we then use 4D's Layout Editor to create a standard output layout for browsing the list of records, and an input layout for editing the values of individual records. The output layout is created in any manner

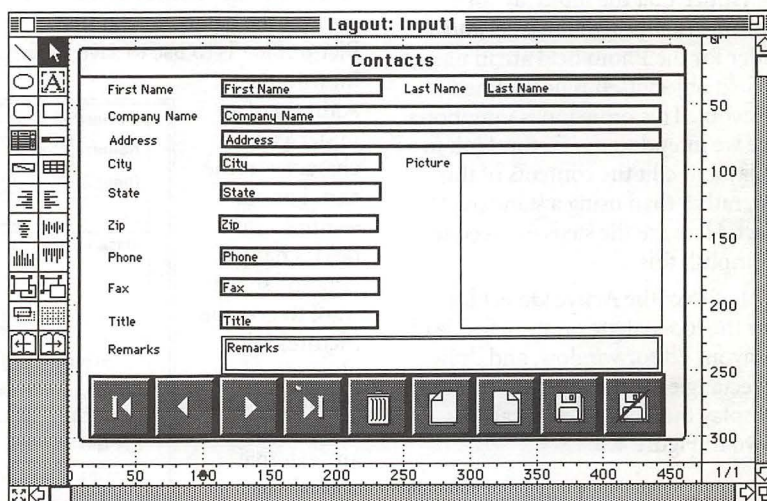


Figure 3: Input layout for example Contacts file

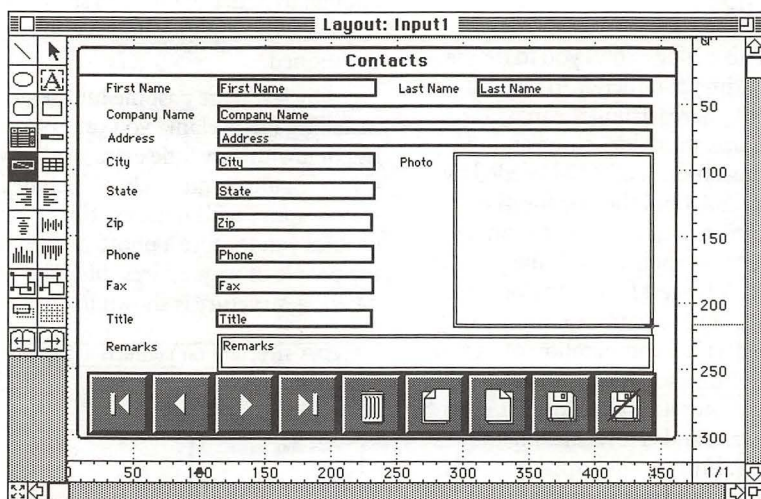


Figure 4: Drawing the PictureLink Active Object area

we wish, but the input layout (Figure 3) is where we will place the user's

button, the standard 4D Active Object Definition dialog will be displayed.

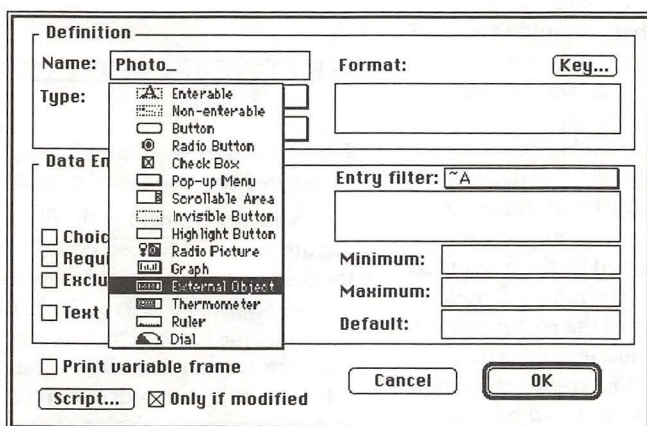


Figure 5: Defining the External Object

interface to PictureLink.

Notice that the input layout is incomplete; although the label and border for the Photo field are in place, the field object itself is not defined on the layout. This omission is intentional, since we intend to use PictureLink to display and edit the contents of this field, rather than using a standard 4D object. Here are the steps we need to accomplish this:

1. Select the Active Object tool from the tool palette on the left side of the layout Editor window, and draw the rectangle for the object to be used to display the Photo field image, as shown in Figure 4.

2. When you release the mouse

First, we need to give the object a name, and this name should be the same as the database field that PictureLink is to use to save the image in, with the addition of an underscore character at the end. For our example, this field is named "Photo" so we want to give the PictureLink object the name "Photo_". Since PictureLink is an "external object" (is behavior is

defined by an external procedure instead of the native 4D language), we want to select the External Object option from the Object Type popup menu. These two settings are depicted in Figure 5.

3. The last step in completing the object definition is to identify the external routine that 4D is to use to define the behavior of the external object. The name of this routine is "PL_Area" and should be typed into the upper-right field of the dialog as shown in Figure 6.

4. Assuming everything has been done properly, when the dialog is accepted the layout will appear as shown in Figure 7, with the PictureLink logo displayed in the active object we just created.

That's all that is really needed to begin using PictureLink; if we switch over to 4D's User Mode and begin entering information in our example database, the input layout will appear as shown in Figure 8.

You can tab through all the fields and enter the proper information in each, just like a regular 4D database. When you come to the Photo field area it will highlight and you can paste a picture in just as if it were a standard picture-field area. If, however, you pass the mouse pointer over this area, the cursor will change shape, looking like a tiny video-camera cartoon. Clicking the mouse over the area when this happens will enable you to see the real difference that PictureLink brings to your applications. The 4D window containing the input layout will be replaced by the PictureLink image editing window, as shown in Figure 9.

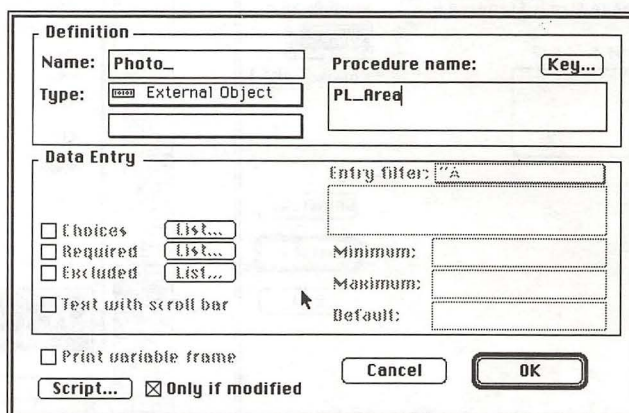


Figure 6: Identifying the External Area Routine

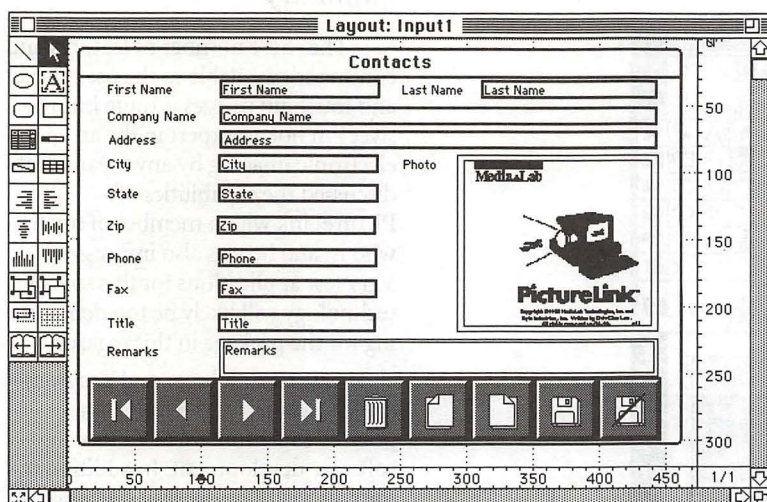


Figure 7: The Completed Input Layout

In this mode, the user has complete access to all of PictureLink's image capture and editing capabilities. You can import a picture from an external file or create it directly from a scanner or video-capture board, edit or touch up the image in virtually any way you may wish, and when you close the window, the 4D input layout will be displayed and the final picture will be shown in the Photo area created for it. When the record is saved, the picture will automatically be saved with it in the Photo field defined by the database structure.

Advanced Uses

The PictureLink package has a few features intended for the more advanced 4D developer as well, enabling a limited number of features to be invoked procedurally. A total of six external procedures are provided that perform the following functions:

- **PL_Paint:** enables you to put the user into the PictureLink editing environment without having a layout displaying a PictureLink active object open. You can open image documents, operate the scanner/video board, edit images and save them to PICT files, but cannot save the images to any field in the database.
- **PL_LinkField:** Used to override the "fieldname_" naming convention for the PictureLink layout area.
- **PL_Scale2Fit:** Used to cause PictureLink to scale pictures

proportionally when displaying them in the layout area, thereby producing a better visual appearance.

- **PL_ImportPic:** Allows you to provide a button or menu item for the user that will enable them to import a picture directly from an external document, without having to go into the PictureLink editing environment first. The command will display a modified standard file dialog that will display a "thumbnail" preview of any image file before you opens it. There is not a parameter provided for this routine to allow you to pass the name of a file, however, so the standard file dialog cannot be bypassed.

- **PL_ScanPic:** Allows you to provide a button or menu item for the user that will enable them to capture a picture directly from a scanner, without having to go into the PictureLink editing environment first.
- **PL_SlideShow:** Enables you to display a sequence of pictures stored in the database as a full-screen slide-show, with individually-assigned durations and a wide variety of visual transition effects.

In the PictureLink editing mode, there are a set of menu commands that enable you to configure a modem or serial connection to another computer, and to transmit and receive images via the Apple Communications Toolbox

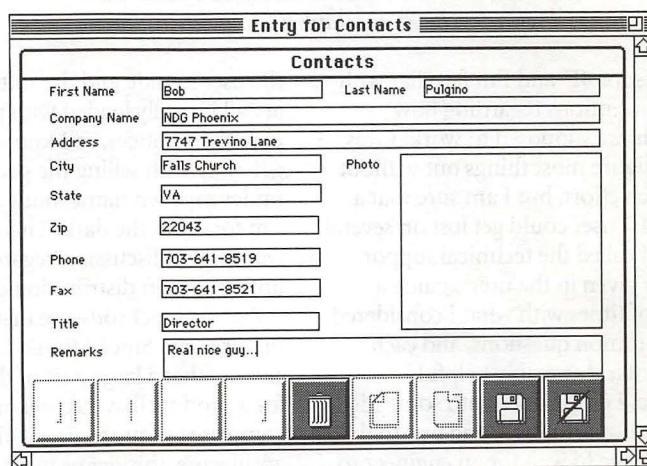


Figure 8: Example Database in Action...

(CTB) software. I'm kind of hard-pressed to understand why this feature was included and exactly how its supposed to be used. Since there is no access to any of the terminal-emulation capabilities of the CTB, the only type of system you could connect to would be another Mac using a PictureLink-equipped 4D database in the same room as you, so that you could yell over & tell him or her that the transmission was underway. Under these circumstances, though, I must say that it works quite well.

Other Details

As I've alluded earlier, I was not impressed with the documentation provided with the package. Because I've worked with other external

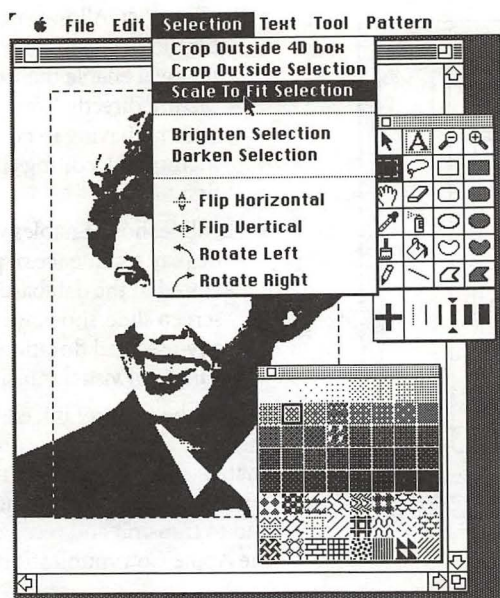


Figure 9: The PictureLink Editing Environment

packages for 4D and I'm familiar with 4D's conventions regarding how externals are supposed to work, I was able to figure most things out without too much effort, but I am sure that a novice 4D user could get lost on several details. I called the technical support number given in the user's guide a couple of times with what I considered to be common questions, and each time I got a reasonably helpful response. I called once with some high-end questions, though, and was told that I'd have to wait for an engineer to call back with the answers. This call never came.

One very curious piece of information was missing from the PictureLink box I received: the software license agreement. The disk,

the user's guide and the software itself are all liberally loaded with proper copyright notices, so I know I couldn't get away with selling the package itself under my own name, but beyond that I'm totally in the dark. There is no warning or discussion regarding the limitations on distribution of commercial or contract software that uses PictureLink. Since I think it's safe to assume that a large part of the market for a product like PictureLink will be comprised of professional 4D developers like me, this seems to be a glaring oversight on the publisher's part. If you plan to make use of PictureLink for any sort of multi-user application, I would strongly recommend giving the MediaLab folks a call at (415) 345-4620 to see how much it will cost you.

Summary

The sheer number of features and commands available to the user to edit and touch up images is quite impressive; I'm not an expert in the art of electronic imaging by any means, but I discussed the capabilities of PictureLink with a member of my firm who is, and he was also impressed. Very few applications for this sort of technology will likely be too demanding for the package in this regard.

As a 4D developer and programmer, however, I was a little disappointed in PictureLink as a tool for software development. In addition to the concerns I've expressed regarding the installer application, I can not understand why the programming interface to PictureLink is so limited. For example, there is no way to procedurally automate the process of importing a large number of image files in a batch mode. The CTB communications routines are so limited as to be practically useless. If they had simply implemented access to the CTB Terminal Manager and given the programmer procedures for invoking each of the communications menu commands, they could have spun these features off into a separate package well worth selling.

These complaints aside, I have to close by saying that PictureLink does indeed open up a whole new range of opportunities for developing sophisticated, yet easy-to-use image database applications. As soon as I can find out what the licensing options are, I have a lot of ideas for putting its capabilities to good use.

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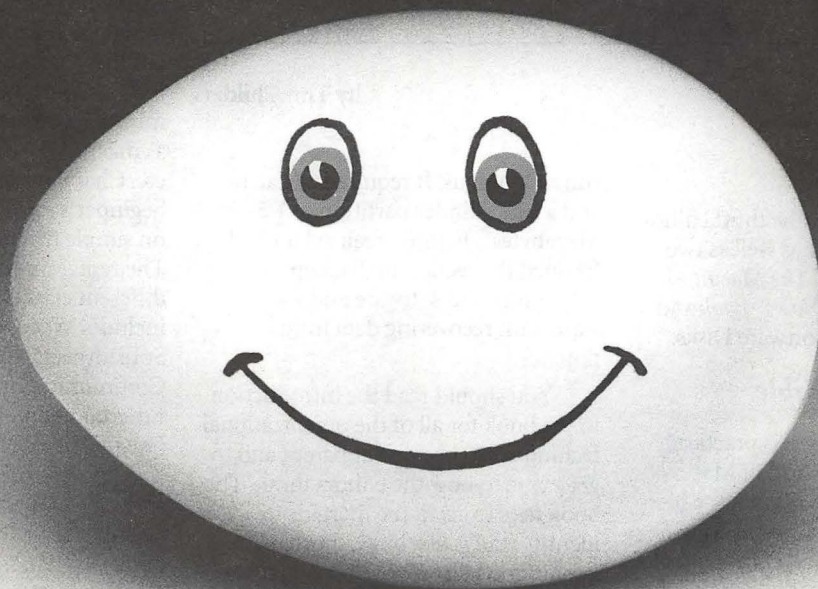
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The Macintosh Bible

by Tim Childers

This article will review the third edition of *The Macintosh Bible* as well as two companion products, *The Macintosh Bible "What Do I Do Now?" Book* and *The Macintosh Bible Software Disks*.

The Macintosh Bible

The Macintosh Bible is practically an institution in the world of Mac books. It is, with good reason, the best-selling general book about the Macintosh. It has several features which make it unique. The first is that it won't be obsolete the day after you buy it. The publishers sends you free quarterly updates as the Mac world changes. The second unique feature is its unbelievable scope. Other Mac books may be large but the 1,100+ pages of the Bible cover every aspect of the Mac, product reviews and opinions for an incredible variety of both hardware and software, and thousands of tips, tricks, hints, and shortcuts. The back includes a comprehensive index of nearly a hundred pages and an excellent 80-page glossary as well as 30 pages listing every company and product mentioned in the book. Its sheer volume makes it intimidating at first but the clear organization and the friendly personal writing style quickly lead you into the book even if you are a beginner. That, however, proved to be something of a drawback. In the course of researching the book for this review I often discovered I had wandered far afield from my original question because the following paragraphs contained some interesting nugget of information. For instance, I used the book to research what bomb ID -15 meant and how to fix it. (It means that the Mac was unable to load a segment of a multi-segment program. Once I did get the program loaded I discovered why my sample copy of Solarian II wouldn't

run on my Plus. It required a Mac II and a MultiFinder partition of 1.5 Megabytes!) Before I realized it I had finished the section on backup techniques and software and was started on recovering data from floppies.

You should read the introduction to the book for all of the organizational techniques to become apparent and to get a clue to how the editors think. The book uses icons in the margins to identify things like bugs, shortcuts, good or bad features of a product, etc. The table of contents gives a general topic for each chapter and each chapter has its own table of contents listing the topics covered in it. Generally individual topics can be read separately; the book is designed as a reference, not a novel. However, some sections flow so well that you just can't help but follow along.

The first chapter on general principles starts with their version of The Ten Commandments, the first of which is "This is the Mac. It's supposed to be fun." It includes a reasonable, if somewhat rambling, first guide for beginners. To get a proper coverage of every topic that a beginner will need to start with, he or she will have to hit most every other chapter in the book. (I recommend "What Do I Do Now?" as quicker and more to the point for beginners.)

Chapter 2 gives you an introduction to basic Mac hardware concepts. Chapter 3 teaches you about Memory and Storage and the difference between them. Chapter 4 will teach you more than you ever thought possible about printing and that doesn't even include Fonts (which rate their own chapter, Chapter 7)! Chapter 6 on Basic Mac Software contains gems of information which are worth wading through its many pages of dense information. We

finally have a book that explains what is going on inside your System and Finder and what all those other files do and how to use them. Although the information may tend to overload beginners, it is worth coming back to again and again after trying out each thing you learn. Chapter 8 covers Utilities, including Desk Accessories, INITs, Control Panel Devices, and miscellaneous other related items such as macros, file managers, screen savers, etc. Chapter 9 rounds out the beginner's section with a short section on simple troubleshooting techniques. The remaining chapters each cover a different class of programs. The list includes Word Processors, Databases, Spreadsheets, Graphics, Page Layout, Communications, Education and Entertainment, Programming and Other. The last chapter is "Where to find good information and inexpensive software." Of course it covers User Groups, as well as magazines and books. (Online services and Bulletin Boards were covered in Communications). In summary *The Macintosh Bible* is the essential reference work for anyone who needs the information of a guru readily available or wants to become one.

The Macintosh Bible "What Do I Do Now?" Book

Now, despite my praise of *The Macintosh Bible*, I want to go on record as saying there is one book beginners should buy before springing for *The Macintosh Bible*. That book is *The Macintosh Bible "What Do I Do Now?" Book*. This relatively slim (191 page) volume packs three chapters with a focused and to the point summary of the essentials any Mac user needs to know to effectively use the Mac. It assumes you know the basics of clicking and dragging and launches into what plugs in where, what to do with each system file, how to use the chooser, printing, DAs and basic precautions for keeping your Mac out of trouble (such as backups). This introduction, while shorter and less comprehensive than the information spread throughout *The Macintosh Bible*, contains the essentials that will keep you out of trouble and it's short enough that it can be absorbed at one sitting.



The remaining 11 chapters each cover a particular operation, during which something could go wrong: hard disk setup; installer problems; startup problems; inserting or ejecting disks; opening or printing files from the Finder; moving or copying disks, files, folders; renaming or erasing disks, files, folders; Finder commands; running programs and DAs; printing problems; and using AppleTalk and AppleShare. At the front of each chapter is a list of potential things that could go wrong during that operation. Each of these topics is treated by showing the most likely error message or dialog box and exactly the sequence of steps you should take to recover (if it's possible). No explanations of why or how, just an easy-to-find, direct, solution to most of the errors you are likely to see. It is far better than the troubleshooting guide that comes with the Mac and should be on every user's desk.

Many users don't want to become gurus and just care about getting a job done. Being responsible for the support of 9 Macs at work, I estimate I could eliminate three quarters of my service calls if every user had (and read) a copy of this little book. I highly recommend getting this book first if you are only going to buy one book. Best would be to get both books and keep the smaller one near the Mac.

The Macintosh Bible Software Disks

This package includes two disks packed with 11 or 12 useful pieces of software mentioned in *The Macintosh Bible*. The first disk, labeled "Left Brain," contains programs that are slanted towards the analytical. The second disk, labeled "Right Brain", contains software that is slanted towards the creative. They came with a small booklet which describes what each piece of software does and how to use it.

The "Left Brain" disk contains an Address Book, Calendar, and ToDo desk accessories. RamDisk+ creates a fast, virtual disk drive out of part of your RAM. FreeTerm is a simple yet capable terminal program. Dictionary Helper is a list of over a thousand words commonly left out of most dictionaries. SetClock uses your

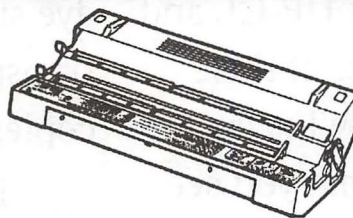
modem to make a 10 second call to an atomic clock in Virginia and accurately sets your clock. SuperClock puts a small clock in your menu bar. SmartKeys enhances your keyboard by automatically substituting curly quotes for straight quotes and prevents you from typing more than one space between words. DiskKeeper is for managing your hard disk. It can do things such as list duplicate files, list empty folders, and list invisible files among other things. Lastly, it contains the program Viewer which allows you to view documents saved to disk so that the recipient does not need the original program used to create the document in order to view it.

The "Right Brain" disk includes the Artisto DA, which lets you open paint files and cut or copy part of or all of them. Layout and Tidy It Up! will organize your folders for you. SoundMover lets you move sounds out of and into files while StartupSndInit

allows you to set what sound will be played when you start your Mac. Blackout is a screen saver. Clarity is a DA which will create a 300 dot-per-inch resolution image from a 72 dot-per-inch paint file by shrinking it to quarter size. Glider is a game which lets you fly a paper airplane through the rooms of a house. Klondike is a computer version of the popular solitaire card game. Chinese Menu and Santa Monica are bitmapped fonts.

All in all this is a nice sampler of high quality shareware. It would make a great intro for someone who had not tried any shareware from a user group yet or would like the confidence that someone has already tested each program and provided the most reliable example of each category. If you have access to a high quality source of shareware such as the WAP disketeria though, this is probably not enough reason to pay the list price for the two-disk assortment.

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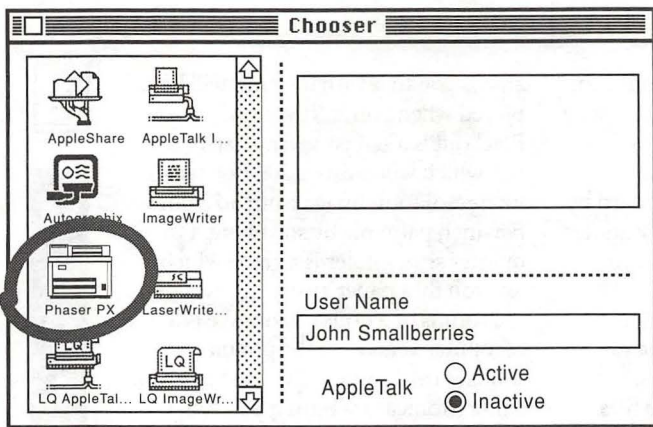
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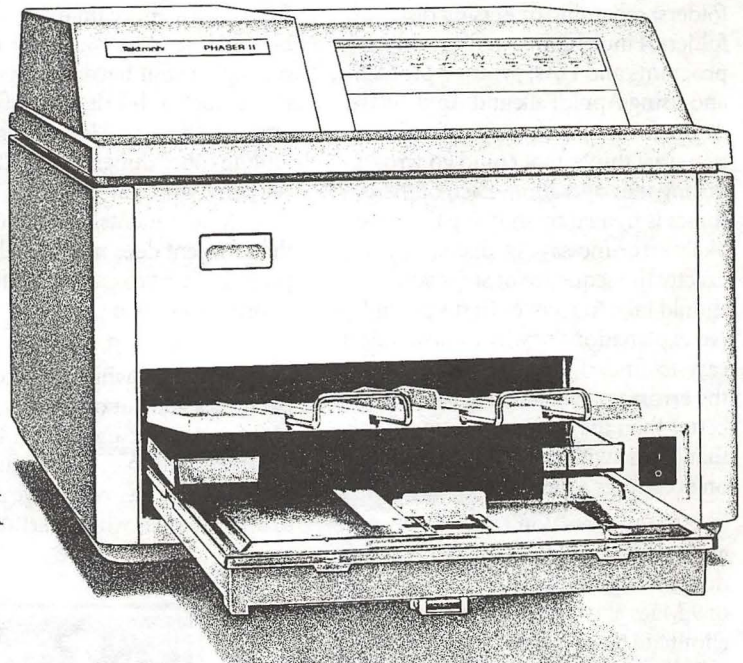
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MAY

- 1 Wednesday
7:30 PM dPub SIG PEPCO
7:30 PM Mac Programmers office
• Editorial Deadline—June Issue
• Ad Copy Deadline—June Issue
- 2 Thursday
7:00 PM Columbia Slice Columbia
7:30 PM GameSIG office
- 6 Monday
7:00 PM Tutorial (Macintosh: Intro.—I) office
7:00 PM PI-SIG call
- 7 Tuesday
7:00 PM Tutorial (Apple IIGS: Intro.—I) office
- 8 Wednesday
7:00 PM Tutorial (Microsoft Word: Intro.) office
7:30 PM Database SIG/4D Computer Factory
- 9 Thursday
7:30 PM Board of Dir.'s Mtng. call office
8:00 PM StockSIG office
- 11 Saturday
9:00 AM Tutorial (Excel: Intro.) office
9:00 AM Annapolis Slice Severna Park
9:30 AM Frederick Slice Frederick
- 13 Monday
7:00 PM Tutorial (Macintosh: Intro.—II) office
- 14 Tuesday
7:00 PM Tutorial (Apple IIGS: Intro.—II) office
- 15 Wednesday
7:00 PM WorksSIG office
7:30 PM Excel SIG office
7:30 PM Fed SIG call
7:30 PM HyperTALK SIG call
- 16 Thursday
7:30 PM AV SIG office
- 18 Saturday
9:00 AM Tutorial (All About Fonts) office
- 20 Monday
7:00 PM Tutorial (Macintosh: Intro.—III) office
- 21 Tuesday
7:00 PM Tutorial (Apple IIGS: Intro.—III) office
- 22 Wednesday
7:30 PM Apple III SIG office
- 23 Thursday
7:30 PM Ed SIG call office
- 24 Friday
• Writers' Deadline—July Issue
• Ad Space Deadline—July Issue
- 25 Saturday
8:00 AM AppleWorks SIG before WAP Mtng.
9:00 AM WAP General Mtng. call office
noon HyperCard SIG after WAP Mtng.
noon New SIG after WAP Mtng.
- 27 Monday
7:00 PM Apple IIGS SIG McLean (call)
- 31 Friday
• Editorial Deadline—July Issue
• Ad Copy Deadline—July Issue

WAP General Meetings

Monthly General Meetings are generally held on the 4th Saturday. We are still looking for a semi-permanent "home" for the General Meetings. Requirements are: two meeting rooms, one holding approx. 50 people and the other approx. 250 people. Anyone with suggestions please contact Nancy Pochepko at the WAP office (301-654-8060 in Bethesda).

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

Meeting Notices

Annapolis Slice—2nd Saturday; Severna Park Library on McKinsey Rd(off Rt. 2) Severna Park, MD, 9:00am.

Apple IIGS SIG—normally the Monday after the regular WAP meeting; alternates between Dolley Madison Library in McLean and (NEW) NIH (building 31, C Wing, 6th Floor, Conference Room 9) in Bethesda at 7:00 PM. Call Gary Hayman 345-3230 for information.

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

AppleWorks SIG—just prior to the regular WAP meeting at 8:00 AM.

AV SIG (arts and video)—3rd Thursday; WAP office, 7:30 PM. May be subject to change; call Nancy Seferian (202) 333-0126 to confirm.

Columbia Slice—1st Thursday; Jan. meeting at Mt. Hebron High School. Usually at the Howard County Board of Education Bldg., Route 108, Columbia, MD.

Database SIG/4D—Second Wednesday, 7:15 pm start (until about 9:30 or 10:15 pm); Mac-In-Office Training Room, 4th Floor, Brick Triad; 101 West Broad Street, Falls Church, Virginia; (Along Route 7 at the intersection with US 29/211—Free office parking lot abundantly behind the office buildings) (Via Metrorail, use *East* East Falls Church Metrostation. Call Eric Gutsche to confirm, (703) 379-1265.

May

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

Meeting Notices

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

Ed SIG (Educational programs)—4th Thursday; WAP office, 7:30 PM.

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

Fed SIG (Federal)—3rd Wednesday; alternates between Falcon Training Center, 1745 Jefferson Davis Hwy. Suite 502, Crystal City, and Apple Fed. Sys. Office, 1892 Preston White Dr., Reston, 7:30 PM. Call Jim Manley (703) 490-1034 to confirm location.

Frederick Slice—2nd Saturday; at the library at 110 East Patrick St., Frederick, 10:00 AM.

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

HyperCard SIG—currently dormant.

HyperTALK SIG—not dormant at all (contrary to what we told you last month); they continue to meet (as always) on the 3rd Wednesday of the month at the Fairlington Community Center, 3300 South Stafford Street, Arlington, VA at 7:30 pm.

Mac Programmers—1st Wednesday; WAP office, 7:30 PM. No January meeting; next meeting will be Feb. 6.

PI-SIG—(Programmer's Interface) 1st Monday, 7:00 PM (except for Monday holidays). Call Ted Meyer (703) 893-6845 for date, time and location.

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

Telecomm SIG—currently unscheduled.

Notice: Anyone having information on changes to the WAP calendar is requested to call the Calendar Editor at home (301-595-2539, in Beltsville) or Nancy Pochevko at the WAP office (301-654-8060 in Bethesda). E-mail can be left at: Andy Shaw, Twilight Clone BBS.

JUNE

3 Monday 7:00 PM	PI-SIG call
5 Wednesday 7:30 PM 7:30 PM	dPub SIG PEPCO Mac Programmers office
6 Thursday 7:00 PM 7:30 PM	Columbia Slice Columbia GameSIG office
8 Saturday 9:00 AM 9:30 AM	Annapolis Slice Severna Park Frederick Slice Frederick
12 Wednesday 7:30 PM	Database SIG/4D Computer Factory
13 Thursday 7:30 PM 8:00 PM	Board of Dir.'s Mtng. call office StockSIG office
19 Wednesday 7:00 PM 7:30 PM 7:30 PM 7:30 PM	WorksSIG office Excel SIG office Fed SIG call HyperTALK SIG call
20 Thursday 7:30 PM	AV SIG office
22 Saturday 8:00 AM 9:00 AM noon noon	AppleWorks SIG before WAP Mtng. WAP General Mtng. call office HyperCard SIG after WAP Mtng. New SIG after WAP Mtng.
24 Monday 7:00 PM . .	Apple IIGS SIG McLean (call) Writers' Deadline—August Issue Ad Space Deadline—August Issue
26 Wednesday 7:30 PM	Apple III SIG office
27 Thursday 7:30 PM	Ed SIG call office

June

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30						

Excel 3.0!

A pre-release demo by Tina Chen,
Microsoft Mac Excel Product
Manager

Thursday, April 25, 1991
7:30 PM

National Institutes of Health
Lipsett Auditorium (Building 10)
9000 Rockville Pike (Wisconsin
Avenue)

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Backfax

Mort Greene

(703) 522-8743

HyperCard Scripting

Jamie Kirschenbaum (eves)

(703) 437-3921

General

Games-Apple II

Charles Don Hall

(703) 356-4229

John Wiegley after 2:15

(703) 437-1808

IBM

Leon Raesly

(301) 220-0717

Math-OR Applins

Mark Pankin

(703) 524-0937

Modems-General

Allan Levy

(301) 340-7839

Hayes Smartmodem

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(703) 627-8889

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(202) 362-3887

Frederick Apple Core Help Line

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

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Dick Grosbier
Harold Polk
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(Frederick)
(Frederick)
(Frederick)
(Frederick)
(Frederick)
(Monrovia)

694-9237 Apple II, GS
898-5461 Apple II, GS, & Mac
662-6399 Apple II
694-6209 Apple II
663-3268 Mac
865-3035 Apple II & GS

SYSTEM 7.0

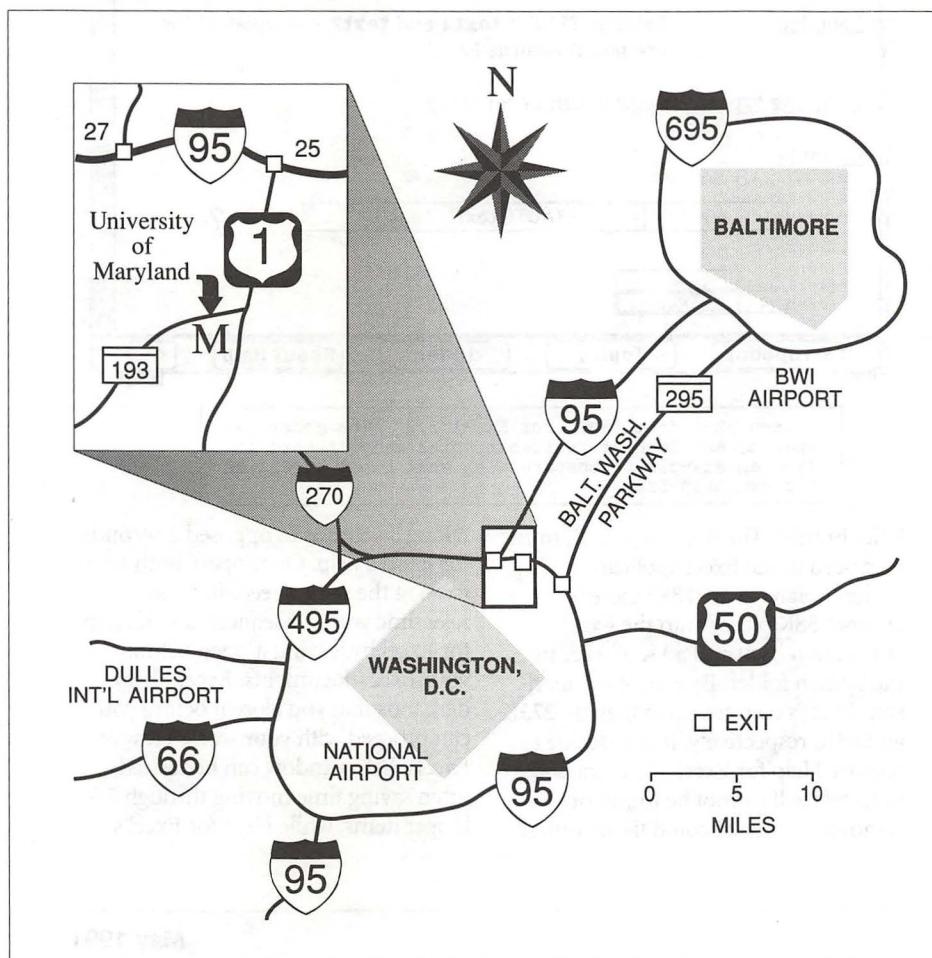
for the MACINTOSH

Washington Apple Pi is pleased to announce that **Apple Computer** will conduct a special demonstration of System 7.0 for the Macintosh.

The 3 hour time period will leave lots of time for questions and answers and there's plenty of free parking. This is one you **definitely** won't want to miss!

WHEN: Thursday, May 23 7-10 PM

WHERE: The auditorium of the University of Maryland
Adult Education Center



Directions to the Adult Education Center

The University of Maryland Adult Education Center is located on the western edge of the University of Maryland College Park Campus at the intersection of University Boulevard (MD Route 193), Adelphi Road and Campus Drive.

Take Exit 25-B from the Capital Beltway (Interstate 95) to U.S. Route 1 South, then turn west on (MD Route 193).

The Adult Education Center will be visible on your left at the third traffic light on University Boulevard.



Help for Excel 2.2

by Tom Reynders

It's late, you're tired, and you're putting the finishing touches on a budget projection you have been massaging in an Excel spreadsheet. The spreadsheet is linked to several other spreadsheets and for some reason the numbers don't come out right — you have forgotten something about linked documents. So you hit the Command-? keys to summon Excel's help file and under Defined Terms learn: "When a formula in a worksheet or chart contains a reference to cells on another worksheet, the two documents are linked." Thanks a lot! Under Procedures, it says you should read the Excel manual. OK, it's off to the dreaded manual, which will tell you a whole lot more than you ever wanted to know about links. But what if you have Help for Excel 2.2, from Help Software, Inc.? In that case, you pull down the Apple menu, select the DA "Help", and choose the topic Linked Documents, which has sub-topics on: What Are They?; External References; Locating; Calculation; Using Names; and Removing Links. Each sub-topic is over one panel long and will probably give you the solution to your problem.

Details

Help for Excel lists for \$79.95, with a street price of about \$50. The box says that it is for both Excel 1.5 and 2.2, but when you read the fine print it turns out that you have to register and mail in a separate card to get the 1.5 version. If you are desperate for assistance and have only Excel 1.5, that could be a major disappointment.

Installing Help for Excel is a bit complicated. It is a DA and it also builds something into the application itself. It comes with an installer on the master disk, some confusing installation instructions in its manual (which, incidentally, is very short, perhaps

appropriately so for an on-line help system), and an even more confusing one page flyer amending the manual's instructions. I finally gave up on the installer and used Font/DA Mover and some common sense. A Macintosh novice might have trouble getting Help for Excel to work following the directions. Since many Help for Excel purchasers will be a novices, this could be a big drawback.

Once installed, Help for Excel is a

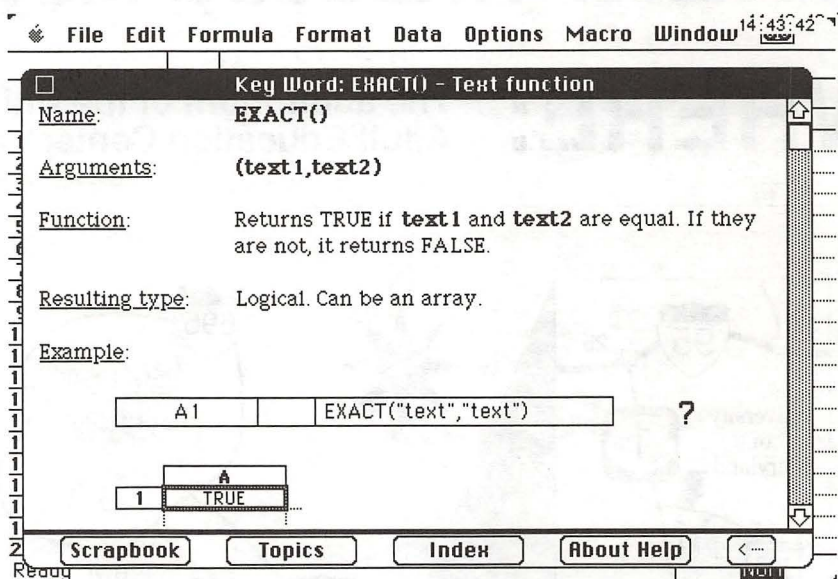
you might want to trash the application and then reinstall it from your master or backup disk.

Running on my Mac SE using System 6.0.4 with 2.5 MB RAM and a 20 MB hard disk, Help for Excel seemed stable. I cannot say that my one bomb while using it was caused by Help for Excel, nor could I reproduce it.

Using Help for Excel

On the theory that you would not buy this (or any other similar) product unless you need and want an on-line help system for Excel, you find what comes with Excel (free) unsatisfactory, and Help for Excel fills the bill well enough to be worth \$50 to you, I tried to compare Help for Excel with Excel's own help.

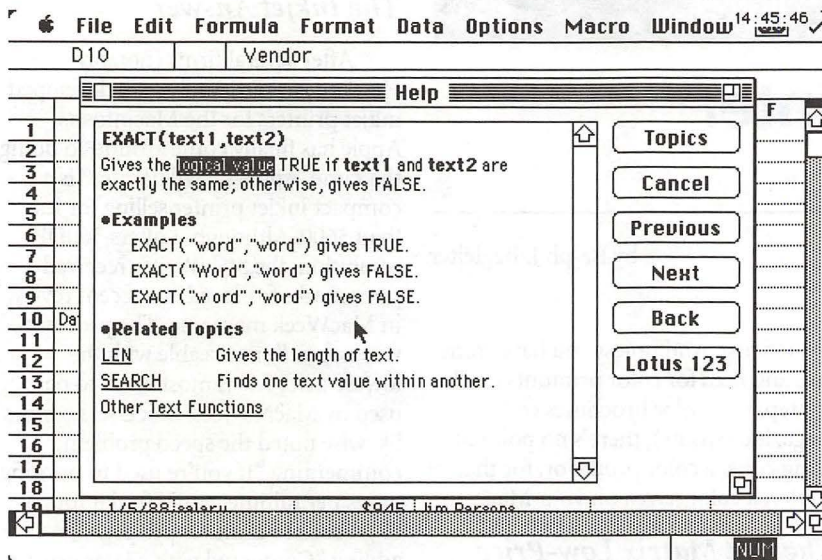
As indicated, Help for Excel is a DA. It felt slow coming up on my SE,



Screen shot from "Help for Excel 2.2". The generous spacing and lack of resizable boxes made it hard to find an example to compare with what Excel offers in its own help file.

hefty bundle. The data file, which must be placed in the Excel application folder, weighs in at 778K; there is another 58K placed into the Excel application itself and a 1K marker in the System folder. By way of comparison, Excel's own two help files are 273K and 83K, respectively. If you decide to remove Help for Excel, the extra bulk in Excel itself cannot be found or removed as far as I could figure out, so

taking 8 seconds as opposed 2 seconds for Excel's help. Once open, both seem to go at the same speed, but you can save time with subsequent use of Help for Excel by leaving it open behind your Excel documents. Excel's help demands that you close it before you can proceed with your work. However, Excel's help window can be resized, often saving time moving through longer items, while Help for Excel's



Help for the same subject from Excel itself. Excel uses less white space and has a resizable window, often resulting in longer, if not always better, explanations.

cannot. Help for Excel's interface feels pokey, in most cases forcing you to go back to its Topics section with its pop up menus to navigate from one point to the next. Excel's help has Next, Previous and Back buttons which often save time. (See figures 1 and 2). Overall, I would say Excel's help feels faster and more responsive.

Excel's help relies on rather cryptic, technical text for its explanations. Help for Excel tends toward fuller, more basic text and often uses graphics as examples of the definition or point under consideration. Unfortunately, the graphics, which usually are supposed to portray a part of the Excel layout (worksheet, chart, macro) do not always look much like the real thing and you cannot manipulate them.

Excel's help is context sensitive. Help for Excel's package and manual cover both claim that it is too, but this is not really the case. Help for Excel has on-line context help for Excel's menus, but for anything else you are expected to write your own. To do this, you will need to get Help Software's Help Editor, a development engine which will set you back \$395, plus \$30 for a "context external" called "Get Help for Excel 2.2". Evidently Help Software has dual purposes for its product, first as a crutch for the general Excel user, and second as a developer's tool.

Is twice as big twice as good?

I am not a big user of on-line help systems. When learning a new application, manuals are faster, more complete and follow a logical learning path. Once learned, it's easy to forget that on-line help exists. Then too, on-line help is often too superficial for someone already familiar with the application. And if not used regularly, there may be a relearning process to go through whenever you do summon the genie. Excel could be the exception, with so many features that even a spreadsheet junkie might forget some fine points, and who could possibly remember the definitions of all those functions and commands? Few would

willingly give up all on-line help for Excel.

After all the quibbling about size, speed and the like, the real question is, Which is better, Help for Excel or Excel's help? Well, that depends on the topic. Obviously I did not try to check every topic against both products, but in browsing through a variety of topics I concluded that each has its relative strengths and weaknesses. Clearly, Help for Excel is better for links. It is also better on macros. I found Excel's help marginally more useful on commands, functions, and alert messages and perhaps better organized on procedures. Otherwise, the two systems' pluses and minuses within topics tend to balance out.

Both products do a pretty good job overall of de-mystifying Exce. Help for Excel is probably better suited to someone just learning Excel than is Excel's own help. It is more basic, assumes less knowledge on the part of the user, and often gives a more complete explanation. Help for Excel also has an extensive introduction to using Excel. However, using this (or any other) on-line help system as a training method has definite limits and drawbacks. Beyond the introduction, there is no logical way to proceed through Excel's features. Using it to systematically explore Excel would be hard work and not really good training. A basic tutorial is a better training vehicle.

Help for Excel 2.2
Help Software, Inc.
10659 A Maplewood Rd.
Cupertino, CA 95014
Tel: (408) 257-3815



Choosing a Printer

by Ralph J. Begleiter

It used to be so simple. A MacNovice bought a new Macintosh from Apple. To complete the system, you bought a printer. Since the only printers compatible with the Mac were made by Apple, you had two choices: An Apple ImageWriter (dot-matrix printing) or the Apple LaserWriter (laser printing). [Ed.—*of course in the really early days, the choice was even simpler: the ImageWriter or nothing at all.*] For most novices, the choice was easy: since the LaserWriter's price was more than three or four thousand dollars, you bought the ImageWriter.

It's not so simple any more.

- Dozens of printers are now compatible with the Mac
- Prices have fallen dramatically in the past year
- Printing formats have multiplied

You should keep several key points in mind as you make your choice:

- Will you print mostly *text* or will you want to print *graphics*?
- Will you use your printer exclusively on a Macintosh?
- Must you use "PostScript" fonts and graphics (or will "QuickDraw" graphics suffice)? (More about this later.)
- Consider the level of printing "resolution" (the fine-tuning *appearance* of printouts) you need. Resolution is measured in "dots-per-inch" (or "DPI"). Your Mac's screen resolution is 72DPI. Some printers can improve on that, reaching 144DPI or more. Inkjets and laser printers most often offer 300DPI output. Some can go higher.

The following deals exclusively with black-and-white printing. Color is an option these days, but at much

greater cost. And unless you have some pressing *need* for color printouts (such as preparing color brochures or magazine layouts), there's no point in using *either* a color *printer* or, for that matter, a color *screen* on your Mac.

The Dot Matrix Low-Price Choice

The least expensive printers are *still* the dot-matrix machines. All are priced under about \$500. Some are priced below \$200. Best quality printing still comes from machines with more "pins" (the tiny wires which print tiny dots on the page forming letters and images). Nine-pin machines are the most basic. Twenty-four pin printers produce the best available output. (Dot matrix printers can produce high-resolution printouts by using multiple pins to produce single images on a page. Ask about each printer's resolution in DPI to check this out.) Apple's ImageWriter II is still the "safe" choice, but the most expensive. IBM-compatible printers now come with software or hardware "fixes" to make them work with the Mac. But be careful: some of these "fixes" work well on *text* but not on *graphics*. Ask for a demonstration *on a Macintosh* before you buy. Some printers (the General Computer Corporation [GCC] 24-pin, for instance) are manufactured to be fully compatible with the Mac. Unless speed is especially important to you, forget about the measure of speed which many dot matrix printer manufacturers tout ("characters per second" or some such measure). Obviously, using *any* printer on its *high*-resolution mode will take it more time than when it's being used on a *lower*-resolution mode.

The Inkjet Answer

After several firms (notably Hewlett-Packard and GCC) developed inkjet printers for the Macintosh, Apple has finally come around to doing the same. Apple's "StyleWriter" is a compact inkjet printer selling for less than \$600. Although it offers 360DPI resolution, the StyleWriter received poor marks for *speed* in a recent review in MacWeek magazine. The problem was *especially* noticeable with the lowest-price Macs most likely to be used by MacNovices. MacUsers editors likewise noted the speed problem, commenting "If you're used to printing pages per minute, you'll find it tough to go back to minutes per page," adding "Compared with a laser printer, the StyleWriter crawls." MacUser also found the StyleWriter suffers from the same water-soluble ink problem which only recently was solved by Hewlett-Packard in its DeskWriter line of printers (also inkjets). The DeskWriter is a solid choice for an inkjet model. So is the GCC WriteMove, a portable inkjet.

Laser Printing

Laser printing for MacNovices used to be pretty much out of the question. Too costly. Apple's LaserWriters pioneered the field for Macintosh and was so pricey that only companies with high Macintosh budgets could afford to laser print. That's all changed now.

Laser printers usually offer 300DPI resolution, considered excellent for office correspondence and graphics, though not high enough for truly professional publications.

The least expensive laser printer at this writing appears to be GCC's PLPII (Personal Laser Printer), selling for less than \$1,000. The PLPII is a very capable machine, 100% compatible with the Mac for text and ordinary graphics. It's somewhat slower than more costly laser printers, partly because it relies completely on your *computer* to do all the data-processing necessary for laser printing. (Most laser printers contain some memory banks in which to store printing information. The more memory a *printer* has installed, the less demand it places on your Mac's memory.)



GCC has an upgraded version of the PLPII, called the PLPIIS, which contains a faster printing engine and additional memory chips... all of which makes printing faster.

Apple's new Personal LaserWriter LS, priced at about \$1,300, is said by MacUser to be an excellent product. But MacUser's testers found that the GCC PLP outperforms the new Apple by 20 to 100 per cent (and the GCC model is priced \$300 lower). Furthermore, MacUser notes the GCC printer allows for a future upgrade to PostScript (the Apple LS does not), should you ever wish to do that.

Hewlett-Packard's line of personal laser printers (HPIIP and HPIIIP) are intended to capture some of the Macintosh market. They're more expensive to begin with, but their unusual "fix" to make them Mac-compatible generally increases the price still more. (There's a hardware add-on necessary to adapt the HP's to your Mac, and there's a software cartridge necessary, too... all sold separately.) That's because these printers are primarily intended for IBM-compatibles. Perhaps eventually, HP will decide to manufacture a machine that's fully compatible with the Mac.

The next option you can consider is "PostScript" compatibility. Without going into the details of PostScript, suffice it to say that it's a "page-description language" which tells laser printers how to print, including fonts and graphics. There are *other* page description languages around now, including one just being developed by Apple (called "True Image"). Because PostScript was available *first*, it has become something of a standard. Printers which are *not* "PostScript compatible" cannot deliver PostScript fonts or graphics. If you must print PostScript files, then you should consider only printers which are "PostScript compatible." If PostScript is *not* necessary to you, you have other options. Incidentally, Apple has promised that all of its "True Image" printers will *also* be compatible with PostScript. The jury, however, is still out, since "True Image" printers have just begun to appear on the market.

Here's an important point: PostScript compatibility is *only* important if you must exchange files

with other who *use* PostScript or if you wish to create or print *graphics* in PostScript. PostScript *graphics* definitely print much more beautifully than ordinary Macintosh "bit-map" graphics created in a program which does *not* produce PostScript output (such as MacPaint or many of the other "paint" programs). And *clip-art* graphics created in PostScript will *definitely* look much better than non-PostScript clip-art. "True Image" graphics will likely print just as well as PostScript, but because "True Image" is not yet widely available, the vast majority of artwork for the Mac is available only in PostScript or "bit-map" ("paint") formats.

There is a software "fix" which will print PostScript-quality output on non-PostScript printers. It's called "Freedom of Press" (available in a "light" version for around \$60). But it can only produce PostScript output if the original artwork was created in a program which *produces* PostScript files.

If you can settle for graphics created in a *draw* program such as MacDraw, Canvas, or SuperPaint, a *non-PostScript* printer is fine. PostScript *does* offer some enhancements to "draw" graphics, but these enhancements are available through software "fixes" rather than exclusively through the PostScript printers.

Handling of *text* is virtually unaffected by PostScript compatibility. While there *are* many PostScript fonts, these are all duplicable on non-PostScript printers using an inexpensive software "fix" called Adobe Type Manager (less than \$50). ATM runs on all Macintoshes and converts PostScript fonts into a format printable by non-PostScript printers. It works well. [Ed.—Ken Knight's article on TrueType, appearing at page 52, gives you yet another bewildering option to keep in mind as you thread through the maze.]

Largely because the firm which developed PostScript (Adobe) was forced by Apple's "True Image" competition to publicly reveal the secrets of PostScript, a new lower-price array of Macintosh printers has appeared in recent months. Many of these models are now priced at around \$3,000. Apple's LaserWriter NT is

available at discount for about \$2300. The GCC offers its Business Laser Printer (BLPII) for about \$2,100. Its BLPIIS (faster) still costs almost \$2900. NEC offers its SilentWriter 2 for about \$1,500 (MacUser Magazine gives it a high-value rating). Two more highly-rated PostScript laser printers come from QMS (\$1950) and Texas Instruments (\$1,790).

If you're in the market to spend *that* kind of money for a laser printer, check out the MacUser review in the March, 1991 issue, and the preview of the new Apple printers in MacUser's May, 1991 issue.

Summarizing

You've got to decide among dot matrix, inkjet and laser printing technologies. If you can afford it, go for the lasers.

And you've got to decide whether PostScript is important to you. If not, you can get a terrific printer for around \$1,000 - \$1,500. If PostScript is important, some of the best-rated units are among the least expensive, at around \$1,800.

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Market Master

A Sales Tool For The Macintosh

Last year, Washington Apple Pi published the results of its annual membership survey in which I learned that a high percentage of Pi members are, like myself, in sales. I'll avoid the temptation of speculating on why this is so. But this revelation on the employment of fellow Pi members encouraged me to review Market Master For The Macintosh (version II+) from Breakthrough Productions (210 Park Avenue, Nevada City, CA 95959, phone 916/265-0911). Many salespeople will find this software useful and some will find it outright necessary. Sales management could find Market Master to be an inexpensive way to stretch its existing sales force and monitor sales activity and trends.

Market Master, which is based on the outstanding Macintosh relational database, Double Helix, serves the function of many other commonly used, computer-based tools that can support sales such as word processors, mail merge programs and databases while adding its own unique features. It's these unique features that make Market Master a real standout. Market Master automates the repetitive tasks in selling such as lead tracking, follow-up and letter printing. Plus it ensures that no leads "fall through the cracks." All of this is worthwhile in itself, but the most important function is that Market Master structures your sales approach in such a way that each lead is pursued with the same proven sales approach—not a generic, canned sales approach, but your approach. Someone lost to history once said, "plan your work, and work your plan," and that's exactly what Market Master helps you do.

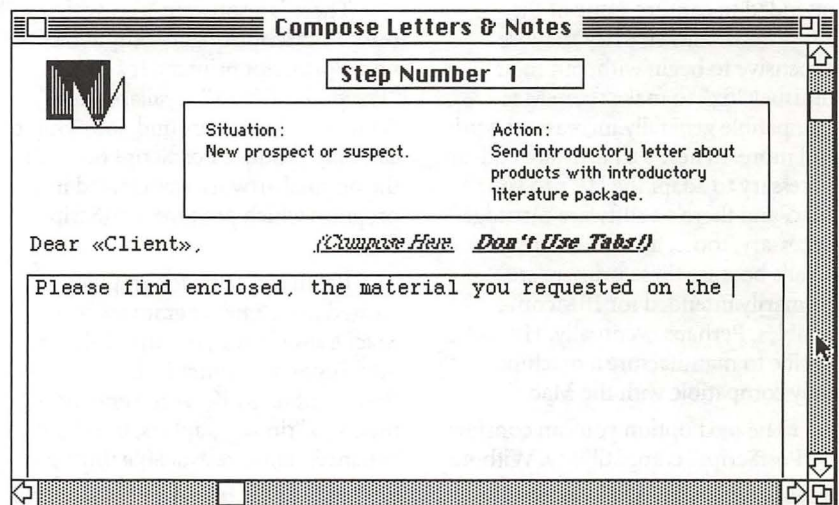
Here's how it all works. Your

selling strategy is entered in a straightforward and structured manner. The prospects' names are typed or imported from other databases and then assigned a "Step." The Steps indicate where in the selling cycle each indi-

by Jim Board

new leads as they come along and you are on your way; consistent, organized, and the key is automatically persistent.

Now let's look at Market Master more closely. To begin with, you plan your own sales strategy within a strictly predefined structure. Each Step is numbered 1 to 1000 with steps numbered over 1000 being dormant steps. For example, Step 1 may be your introductory letter or phone call. Step 2 is a follow-up to Step 1, perhaps to request a meeting, qualify, close or provide more information. Step 3 is a reminder letter or whatever your company has found to be effective, and

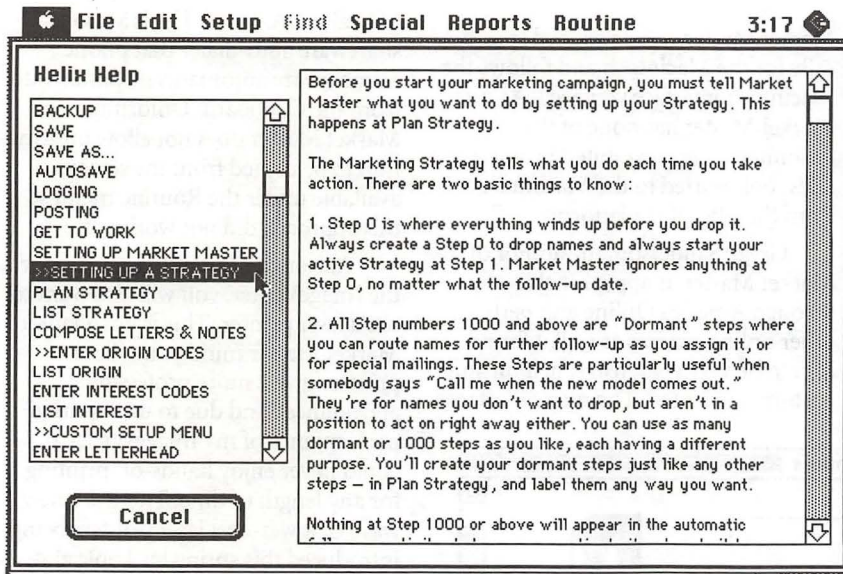


vidual is currently located; for example a new lead might be assigned "Step 1" which you've designated should receive an introductory letter or phone call. Your letters for various steps are composed and stored in Market Master for automated mail merge and printing when called for by your strategy. You define the length of time between Steps and define those Steps for literature mailings or Steps best suited to phone calls. Steps designated for phone calls allow you to describe the situation and define an action or approach to take in the call.

When this set-up work is complete, you simply ask Market Master to list the currently required phone calls and print the necessary letters or mailing labels. This can be done on a weekly or daily basis or on whatever timeframe fits your individual, corporate or market needs. Add your

so on. You define each and every Step. Step 1010 might be designated to contain the prospects put on hold for future return to the sales cycle. Step 1020 could be your existing customers receiving periodic reminder mailings. Step 1030 may become the location of (heaven forbid) dead leads. You design the strategy step by step. This strategy creation requires much thought as it forces you to outline your successful selling approach. Future changes or fine tuning of the strategy can be implemented, but you should work hard to insure your initial strategy is sound because this is the basis of Market Masters functionality. A review of the entire strategy can be accomplished through Market Masters List Strategy command.

Next, you compose and enter your letters or correspondence for each step just as you would enter them into a word processor. These may be the introduction letter for Step 1, a special



offer in Step 2, or "did you receive our special offer" letter for Step 3, and so on. Like many word processors, Market Master allows you to paste your letters text and company logo on the page from the Macintosh Clipboard and provides mail merge with your prospects name and address for the personalized touch.

To take full advantage of Market Master productivity you will want to define Origin Codes for the sources of each lead and product Interest Codes. This is a quick and simple procedure where you specify a short, easily remembered abbreviation for each product or product line your company offers (i.e., "MM" could stand for interest in Market Master software, "Gen" will be General product interest, etc.) and source of lead (i.e., "MW91" might represents leads from MacWorld 1991, "Post" could be from an advertisement in *The Washington Post*). These can be added as you go along so there's no need to spend too much time defining these codes in the early stages.

Perhaps most time consuming is the initial entering of leads (one hopes that you've collected quite a few). To prevent the additional cost and potential embarrassment of multiple calls or letters to the same individual, Market Master warns you about potential duplicates. After each name is entered, it is assigned a 1) Step number to represent its location in your selling strategy, 2) Origin Code and 3) Interest

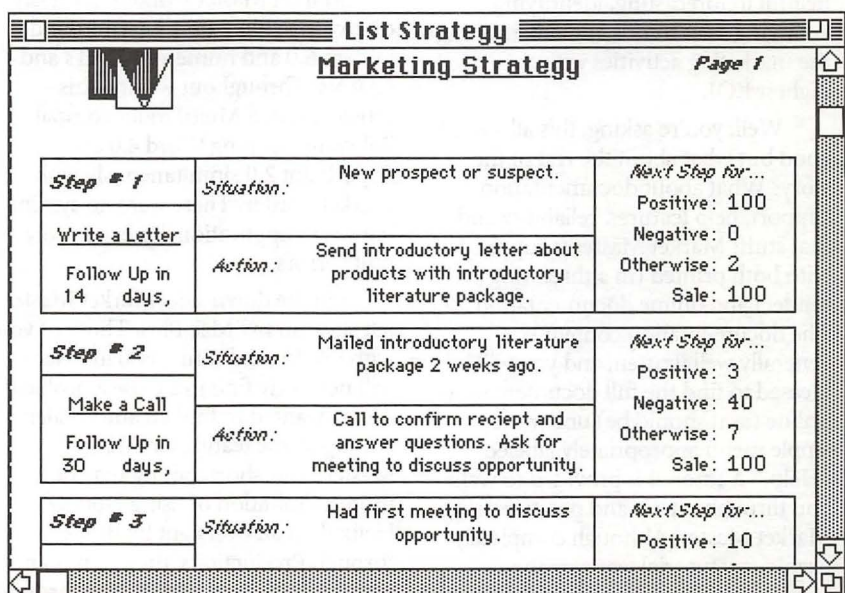
Code. Origin Codes and Interest Codes can be defined as you discover the need for additional detail.

As I did not attempt to import names and addresses from another database, I can't speak to the effectiveness of this approach. The description of importing names in the manual looks straightforward. To import names from other databases you may be using already, the manual says that the files must be text only in ASCII, SYLK, or DIF formats. As you would expect, fields must be arranged in the order used by Market Master and other specifics apply. If importing names and addresses is important to you, I suggest that you write to Breakthrough

Productions for specific information on this aspect of the program. As it should, Market Master will allow you to dump information to files for use with other Macintosh programs.

So now you've completed the set-up. Your strategy is defined, letters written, and names entered and categorized. What now? When you decide to use Market Master you need only access the Routine menu. The Routine menu allows you to do all the periodic work without losing a name or missing a Step. From the Routine menu you can list phone calls to be made today along with situation and action to be taken. These call lists can be organized by zip code to ensure calling eastern time zone numbers before central time zone, and so on. You can also enter notes for each call, and show call history. The Routine menu allows you to enter new leads as you get them. When you leave for the day or take a lunch break you can print scheduled letters, envelopes and shipping labels unattended for added productivity.

Market Master has several other useful features. Special one-of-a-kind letters can be typed and merged with an existing contact's name and address. Envelopes can be printed individually for special letters or mailings outside of the defined strategy. Password protection is available as well. Lots of keyboard equivalents are included in Market Master for you "power users."





An optional automatic save feature helps protect us "low-power users" from those unpredictable power outages or system failures. Provisions are even made so you can create custom floppy disk labels, complete with the Market Master logo, for your Market Master files and backups (You are doing backups, aren't you?).

The relational nature of the Double Helix database enables Market Master to offer several types of helpful reports. These include individual history, group history (i.e., by company

Market Master was developed specifically for the Macintosh and follows the Macintosh interface very well. As such, Market Master has none of the disjointed feeling exhibited by many sales tools ported to the Macintosh from the MS-DOS platforms.

Gregg Sanderson, the author of Market Master, is approachable through America Online and perhaps other online services as well. I found him to be very responsive, helpful and customer oriented. The manual offers a

of Dialer DA. Dialer DA is a good, shareware auto-dialer that phone numbers are automatically pasted into from the Clipboard. Unfortunately, Market Master does not allow information to be copied from the screens available under the Routine menu so this approach did not work out.

Although Market Master supports the ImageWriter, you will also want to use a laser printer. This is not a fault of Market Master mind you—laser printers give a more professional appearance. And due to the "quirky" performance of my ImageWriter II, I could never enjoy hands-off printing for any length of time. There is a new wave of lower-cost laser printers being introduced this spring by Apple and other vendors that should put laser printers within almost everyone's reach, so check them out.

The Double Helix Engine (provided on the Market Master disk) asks for 1016K of memory to run Market Master. So if you haven't already added memory to your Mac, go ahead, it's cheap now. I went all the way to 4MB memory in my Mac Plus, and I'm glad I have it. You will also want a hard disk drive to use Market Master, as a floppy-only approach is quite cumbersome.

A supervisor's version of Market Master, Market Master Manager, is also available from Breakthrough Productions for Macintosh multi-user and VAX based applications. The literature states that Market Master Manager provides automatic lead assignment, past due contact alerts, report summaries by salesperson, identification of new leads, and a variety of management level reports by salesperson, lead origin, and product interest. Contact Breakthrough Productions directly for more information on this product.

Market Master has a list price of \$295, Market Master R/A (as reviewed here with the results analysis features) is priced at \$395. Due to the specialized nature of the product, Market Master is not widely available from mail order sources, but I did find Market Master R/A for \$245 at MacWAREHOUSE. Market Master Manager is sold based on the number of salespeople being served, with prices starting at \$595.

Enter Names			
Name:	First: Patrick	Last: Fitzgerald	
Company:	EAB Enterprises, Ltd.		
Address:	654 Developers Way		
City:	Reston	State: VA	Zip: 22090
Work Phone:	703/555-9876	Alt. Phone:	703/555-5432
Origin:	WC3 Washington Conference 1991	Type:	suspect
Interest:	RA-1 Announcements-1Q 1991	Extra:	
Sex:	m Male	Dear:	Mr. Fitzgerald
Check For Duplicate?	Yes	No Duplicate. OK to enter.	Start Step: 2
Lead Status:	Last Step: 2	Next Step: 3	Next Follow Up: 2/18/91
(Automatic Entry)	Key: 1	Entry Date: 1/22/91	
Scroll Right for Profile>>>>			

or location), name lists, and various summary reports. Market Master R/A provides you with results analysis by Origin, Interest, Step, and Date Range. These R/A reports can be particularly helpful in forecasting, identifying emerging sales trends and determining the marketing activities with the highest ROI.

Well, you're asking, this all sounds good but what about the rest of the story? What about documentation, support, help features, reliability and that stuff? Market Master is supplied with both printed (in a three-ring binder) and online documentation. The documentation content is generally well written, and you will be pleased to find the full documentation online (as it should be) under the Apple menu appropriately labeled "Help." A tutorial is provided to walk you through set-up and practice using Market Master. Although completely usable, my tutorial was somehow lacking the "Mary Berry" example (Mary is the "Clone Maker" prospect).

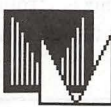
phone number for technical support that I never had need to call. You will, however, need the manual close at hand during set-up as this is no learn-it-on-the-fly program.

Market Master worked flawlessly on my Mac Plus running MultiFinder, System 6.0 and numerous INITs and CDEVs. Throughout writing this article, I tested MultiFinder compatibility, by running Word 4.0 and SuperPaint 2.0 simultaneously with Market Master. There were no system bombs or application "unexpectedly quit" errors.

On the down side, Market Master felt slow on my Mac Plus. Those of you with 68030 (and future 68040) Macs will not likely find this to be a problem. Also, I wanted to find an auto-dialer among all the features in Market Master. This shortcoming may be more a limitation of using Double Helix than an oversight by Breakthrough Productions, though it is an addition I'd love to see. A work-around I explored without success was the use

Is Market Master right for you? It might very well be. Every salesperson has different styles, and different products call for different sales approaches and varying sales cycles. Certain markets have been offered highly specialized sales tools designed specifically for their particular niche (such as real estate or retail sales). Other salespeople will find MS Works or a collection of other commonly used applications is adequate for their needs. For these reasons and more, only you can decide if Market Master is the right choice. Market Masters automated persistence should pay off for almost everybody, but I'll suggest a quick test to determine Market Master applicability for your business. Here goes; from prospect identification to close, can you outline in a flow chart diagram or step-by-step approach, using letters, mailings and phone calls, how you successfully sell your companies product or service? If you can, Market Master is the only tool for you.

Plan Strategy
Plan Strategy



Step Number: 3

Write Letter? No

Situation: Mailed introductory literature package 2 weeks ago.

Action: Call to confirm receipt and answer questions. Ask for meeting to discuss opportunity.

If the response is "YES", go to Step # 50
If the response is "NO", go to Step # 4
If it's a SALE, go to Step # 100
Or else, in 60 days go to Step # 30



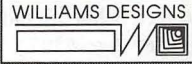
MACINTOSH

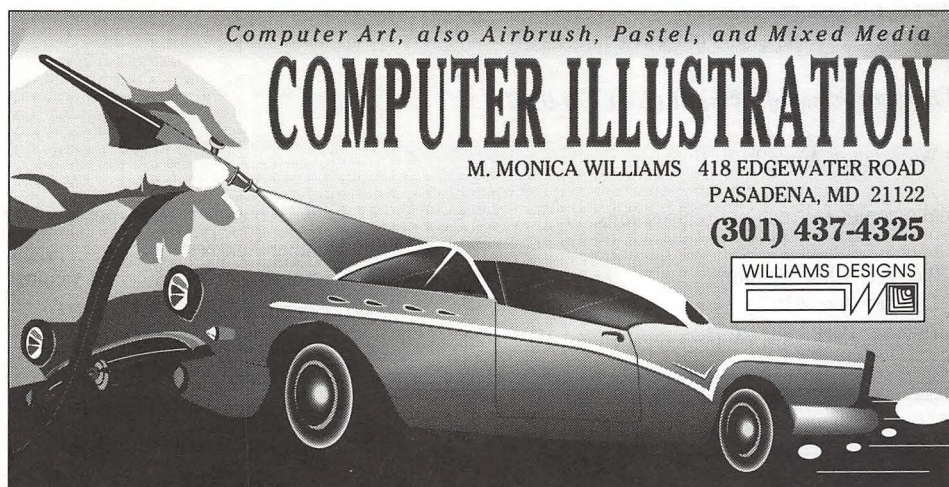
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DTP SIG Chair: Tom Piwowar

Seminars Chair: Barbara Schuell-Jenkins (301) 270-0997

Designer's Workshop

Tuesday, May 14, 6:30pm - 8:45pm
and again

Saturday, May 18, 10:00am - 1:00pm

Kristen Mosbaek of Kristen Mosbaek Design Studio will teach ways to improve your projects through basic typography and layout principles. Bring samples for review and discussion.

Cleveland Park Library
2nd floor auditorium
3310 Conn. Ave. N.W.
Washington, DC

Communicating in Color

Saturday, May 18, 1:00pm - 3:00pm
and again

Tuesday, May 21, 7:00pm - 10:00pm

Sherri Arnaiz of A to Z Communications will take you through the complete process of a color project that won't cost you a fortune—from artwork preparation to quality prints. Come armed with questions to unveil the technical mysteries!

WAP office
7910 Woodmont Ave.#910
Bethesda, MD

Color Printing

Wednesday, May 22, 6:00pm

Sandy Stephenson of Stephenson, Inc. will give us a tour through one of the hottest color printing plants in the East. Stephenson is a pioneer in using Macs for color prepress.

Stephenson Printing, Inc.
5731 Gen. Washington Dr.
Alexandria, VA

Adobe Illustrator 3.0

Thursday, May 23, 7:00pm - 10:00pm
and again

Saturday, June 1, 10:00am - 1:00pm

George Venable, Sr. Scientific Illustrator at the National Museum of Natural History, will clue you in on the new features of Adobe Illustrator 3.0. This hands-on demo will save you a lot of headaches!

WAP office
7910 Woodmont Ave.#910
Bethesda, MD

Targeted Graphics

Thursday, June 6, 6:30pm - 8:30pm

Melinda Brimmer of Brimmer & Goris Communications will uncover major sources of visual miscommunication. Subjects include: the psychology of graphics, effective communication, and logo design.

to be determined

Video Imaging & Adobe PhotoShop

Tuesday, June 11, 1991 7:00pm - 10:00pm
and again

Saturday, June 15, 10:00am - 1:00pm

Larry Ravitz, painter, sculptor, and computer artist, will demonstrate tips and tricks for importing video camera images into desktop publishing documents. The demo will make extensive use of a pressure sensitive sketch pad and Adobe PhotoShop for image manipulation.

111 Lee Ave. #409
Takoma Park, MD

Registration limited to 6 per session.

Registration Desktop Publishing Seminars—Spring '91

- The DTP SIG reserves the right to cancel any seminar. Registrants for a cancelled seminar will be notified by phone and their fee refunded.
- Registrants must cancel in writing at least 10 days prior to the seminar date. Registrant's cancellation results in a credit not a refund. Substitutes encouraged.
- Registration deadline: 10 days prior to seminar date.
- Registration limited to 15 people per seminar, unless otherwise indicated.

For further information call Barbara Schuell-Jenkins at (301) 270-0997.

- Make checks payable to the Washington Apple Pi.
- No purchase orders.
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Takoma Park, MD 20912

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Address: _____

Phone: _____

Best time to call me: _____ Total enclosed: \$ _____

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Member Number: _____

☐ Non-member, \$35.- per seminar

☐ Request info on joining WAP

Seminars to be attended:

- | | |
|--|------|
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| <input type="checkbox"/> Designer's Workshop | 5/18 |
| <input type="checkbox"/> Communicating in Color | 5/18 |
| <input type="checkbox"/> Communicating in Color | 5/21 |
| <input type="checkbox"/> Color Printing | 5/22 |
| <input type="checkbox"/> Adobe Illustrator 3.0 | 5/23 |
| <input type="checkbox"/> Adobe Illustrator 3.0 | 6/01 |
| <input type="checkbox"/> Targeting Graphics | 6/06 |
| <input type="checkbox"/> Video Imaging/Photoshop | 6/11 |
| <input type="checkbox"/> Video Imaging/Photoshop | 6/15 |



TrueType—The True Story

by Ken Knight

On March 11, 1991 Apple released two new low cost, high quality printers: the StyleWriter and LaserWriter LS. Along with these printers Apple released its long awaited TrueType™ Font technology. TrueType has been in the works for quite some time and is commonly considered a part of the forthcoming System 7.0 release. In this article we will take a brief look at what, in fact, TrueType is and who can take advantage of its abilities.

To better understand why TrueType is a major step forward for the Macintosh user it is important to understand how fonts are handled on the Mac. Fonts on the Macintosh have, in the past, come in two flavors: bitmaps and outlines. Bitmap fonts are installed in your System with Font/DA Mover, and are actual representations—pixel for pixel—of the characters in a specific font. This means that if you want a decent looking 12-point Geneva you must have a bitmap version of that specific font. If you want to use a point size for which no bitmap exists, you are at the mercy of QuickDraw scaling. Worse yet, if you are using a scaled version of a font it becomes difficult to place letters effectively. In addition, bitmap fonts are limited in their resolution to the number of dots-per-inch (dpi) that were used to create the font. On the Mac this value is 72dpi, but even on an ImageWriter II the resolution rises to 144dpi. If you want the best possible results with bitmap fonts, you have to create even more versions of the font at the higher resolution. This requires much more space to store the fonts and generally manages to confuse things.

Outline fonts, on the other hand, are represented by a sequence of curves. They are defined in a general mathematical format. Since characters in the font are defined in this manner

you can, for the most part, scale the font to any size and not lose any quality in the characters themselves. Outline fonts are also resolution-independent. You do not need special versions of an outline font for 72dpi and another for 300dpi.

Until mid-1989 those using a Postscript or Postscript compatible laser printer were faced with having to worry about both bitmap and outline fonts. The printer (or, more precisely, the software that drove the printer) knew about outline fonts, and this accounted for the lovely text output we have always been able to generate on paper. However, the Mac itself did not know about outline fonts and only displayed bitmap fonts. So, although you could print a fantastic 11-point Times, you could not, unless you had an 11-point Times bitmap, display the text very precisely on screen. This could lead to no end of trouble if you wanted precision control, since it was impossible to realistically display the 11-point Times on the Mac's screen.

Things began to change for Macintosh users with Adobe's introduction of Adobe Type Manager (ATM). ATM gave us the ability to work with outline fonts on our computer screens and with any printer. However, ATM was far from perfect. It would build a bitmap from the outline definitions of an average Adobe Type 1 font and display that bitmap on your screen (or print it to your printer). But this process was not especially fast, particularly on computers like the Mac Plus. You could easily get ahead of the display while typing a letter or report and lose track of you had been doing. This, plus the simple fact that most people only use a few "standard" sizes of a few "standard" fonts, meant that many people (including myself) decided not to buy ATM. We were

happy enough if we could get high-quality fonts on our printers.

All of which brings us to TrueType. If you think of TrueType as a sibling of ATM you will have a good sense of what Apple has just released. TrueType, unlike ATM, does not use Postscript to process its outline fonts. Instead, TrueType uses a system created by Apple, with help from others, that seems among other things (to this author at least) faster than ATM. TrueType is also part of Apple's System Software and will be an integral part of the Mac from now on. As such it will be available for no cost.

Who can use TrueType and how can they use it? Any Macintosh running System 6.0.5 or later can make use of it. In other words, anything down to a Mac Plus can use TrueType. For those who have machines like the enhanced 512K Macs, TrueType, in theory, could be run, but in practice one will need to have at least a megabyte of RAM to run System 6.0.5 and anything else comfortably. For the vast majority of Macintosh users, this will probably not be a problem.

To actually make use of TrueType, following the steps below will allow you to set up quickly.

1. Place the TrueType INIT file in your System folder.
2. Reboot your system. That is all you need to do.
3. Run the new Font/DA Mover (4.1) and copy the fonts from the TrueType Fonts file into the System file. If you are using a product like Suitcase II or MasterJuggler, you can simply treat TrueType Fonts as another Suitcase file.

TrueType fonts can be treated just like any other type of font suitcase. You can install them into your System file or add them as a suitcase. This makes their use quite transparent. The above sequence of instructions only applies to people who will be using TrueType on Systems prior to 7.0. In 7.0 you can simply plunk font files in the System folder and they will become active at once. Under previous systems you would either have to install them with Font/DA Mover or use one of the Suitcase programs I mentioned. However, in both cases, using TrueType is a painless process.



Today only a few TrueType compatible fonts are available. I have seen five: the basic 4 that are part of the TrueType files (Times, Courier, Helvetica, Symbol), and one in the public domain called "Granite Sans." But TrueType was not developed in a vacuum and several well-known font companies are creating TrueType fonts for our use. These firms include Cassidy & Green, Agfa, and MonoType.

The future for Macintosh users is bright. TrueType will make an already very useful and usable computer system even more capable. And since TrueType is an open-end technology, it has room to grow. We may, in time, see improvements that will make TrueType even better than it already promises to be.

Trouble-shooting Your TrueType Fonts

Using TrueType can lead to some unexpected results. This section is devoted to helping solve those pesky little problems and answering those nagging questions that you may still have about how to get along with TrueType fonts.

Q: I have installed my TrueType

Fonts as a separate suitcase file. I am using Suitcase II (or MasterJuggler). I have my word processor set to default to Helvetica. However, the only sizes of this font that now seem to come up well are 12, 14, and 18 point. Why are these the only sizes that are working well for me?

A: The problem you are having with your fonts is a common one that you can run into when using a suitcase-type program like MasterJuggler or Suitcase II. The System is becoming confused because you have a version of a font, in this case Helvetica, in more than one place: you have a TrueType version of Helvetica in a suitcase file and you have 12, 14, and 18 point versions of bitmap Helvetica in another suitcase file. You must remove these extraneous bitmap versions of Helvetica.

To do this, you should run Font/DA Mover and simply select and remove them. You should look in your System file first for these extra bitmaps, and then in any suitcases you may be using.

Keep in mind that you can *mix* TrueType and old-style bitmap fonts. That is, if you really want to hold on to those 12, 14, and 18 point bitmap versions of Helvetica you simply need

to place them in the same file as the TrueType Helvetica. However, the only good reason for keeping the old-style bitmap version of a font is the potential speed of font rendering. The bitmaps will draw, initially, faster than their corresponding TrueType fonts. Even on machines like the Mac Plus this should only be a short-lived problem.

You should not run into this problem if you do not use a program like Suitcase II or MasterJuggler. If you are running under System 7.0, you will not encounter this problem either.

Q: I am using Adobe Type Manager. Can I use TrueType fonts too?

A: Yes, you can. ATM and TrueType solve essentially the same problem but use different fonts and rendering engines to reach the same goal. You can freely mix ATM and TrueType fonts without any problem. You can even have the same version of a font in TrueType and ATM. That is, you can have both an ATM version and TrueType version of Helvetica on the same System. In such a case, the TrueType font will take precedence over the ATM one.

Q: My Mac is connected to a postscript printer. Can I use TrueType? Which fonts will the printer use?

A: You can use TrueType to produce good quality fonts on your screen. The printer will use its own Postscript fonts when printing, even if TrueType versions of those fonts exist.

Q: I am using a DeskWriter printer and like the fonts that HP has given me more than the TrueType ones. But I like TrueType enough to want to use it on screen. Which fonts will the printer use.

A: As with Postscript-based printers the printer's font will take precedence over the TrueType equivalents. The HP font will be used when printing. This holds true for other printers that, like the DeskWriter, use their own outline font technology, such as GCC's Personal Laser Printers.

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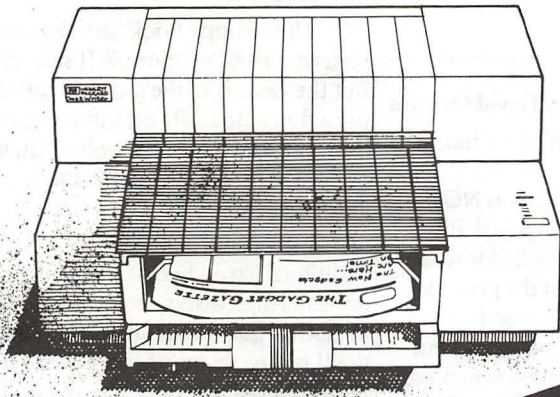
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On the Trail of the Apple III

by David Ottalini
Apple III SIG Co-Chairman

Meeting update

After discussions with some of the more active III SIG members, we've decided to discontinue monthly meetings of the SIG in favor of quarterly meetings at member's homes. These meetings (on either a Saturday or Sunday) will be informal sessions, designed to give us a chance to do a little socializing while seeing how the host uses his/her Apple III(s).

Our first quarterly meeting will be in July. Date and host are still being set as of this writing, but we should have it nailed down by the time I sit down to write my June Trail column. As a result, effective immediately, we will no longer be meeting at the WAP office.

I hope that by making this change, those III SIG members in the Washington Metro area will make a real effort to attend our meetings. We'll still have PD disks available and, if there's enough interest, will also conduct an informal mini-flea market of Apple III hardware and software.

Anyone interested in hosting a III SIG meeting please contact me directly. At this point, we'll meet in July, October, January and April. We'll take another look at this arrangement next year to see if it's worth continuing or, if necessary, alternatives.

Public domain library

Even as you read this, I hope to have completed a lengthy and time-consuming project to revamp our III SIG PD library catalog. Basically, I've gone back and done a better job of describing exactly what is on each disk, so that you, as a PD consumer, will know exactly what you are getting for your \$2.00.

It's all part of a bigger project to update the Apple II and III hardcopy

PD catalog. And while this was NOT something I particularly enjoyed, it did help me to get a better handle for what we have in our library. In the process, I've also updated these disks so that they reflect the new numbering system as well as sporting the newest version of the Menu.Maker program. Some files that no longer have relevance have been eliminated, and I've updated files where possible.

These updated disks will be making their way into the PD over time, as John Ruffatto can get to them (I will give him a few disks at a time to update along with our new offerings each month).

By the way, John could always use some help with disk copying. I can't say enough good things about John Ruffatto and the help he's provided our III SIG. Without his continuing support, our PD library would never have become what it is today - the best Apple III PD library in the nation.

New disks this month

That said, what new disks are making their way into the PD this month? First of all, a second "Best of Bloom" disk (3INF.22) full of articles and reviews. Learn how to underline in Applewriter, convert Apple II Pascal files to the Apple III, use Access III Interp version command files, deal with DIF files within 3EZ Pieces, and convert files to and from the Macintosh (OK, not all the articles are by Dr. Bloom. The Mac article is by Milt Johnson). There's also an article detailing everything you'd ever care to know about Mail List Manager. As with most of our disks, this one is self-booting and double-sided.

Disk 3MSC.17 is called "Floppy Book by Shapiro." EdSIG chair Phil Shapiro recently put the original

version of this disk into the Apple II PD. It interested me enough to also release it for the Apple III PD (which basically took some converting from AppleWorks to ASCII text files and then proper formatting).

The "Floppy Book" articles and reviews all deal with Apple II subjects. But the value is in the fact that you can use a floppy to easily get information out with little real cost involved (many of our Information disks do that already to some extent.)

And of course, for us III folks, the additional lesson here is that anything done in Appleworks or 3EZ Pieces or in ASCII (that is a standard text file) on the II is directly transferable to the III. Our Menu.Maker program allows these files (once properly converted and formatted) to be read on screen or printed. That can be done selectively if desired.

In any case, give this disk a look and see what you think. I'd welcome a III SIG member contributing his/her own "Floppy Book" to the PD in the future!

Our final offering this month is 3MSC.19, CHAOS programs in Pascal by C.M. Davidson. We've offered some Chaos programs in Basic in the past, but this is the first Pascal disk containing several programs for drawing some of the familiar icons of chaos theory: MANDELBROT graphs, FEIGENBAUM diagrams and LORENZ attractors. Documentation is provided on disk. You will have to be familiar with Pascal to use these programs. There are Fotofiles showing examples of what each program can do.

Directory damage

If you have ever gotten the dreaded "Directory Damaged" error message, don't worry. Here's what long-time III supporter Daryl Anderson said a few years back about how to deal with the problem (thanks to Charles Boos of TAU from whom we take this):

"Directory Damaged" is "more bark than bite," according to the ubiquitous Daryl Anderson who has run Catalyst with that warning for 6 months without difficulty. "It is when the bitmap in block 6 of the diskette

says, for example, 205 blocks are used by files on the disk, but the tally of actual blocks used by the files comes to <> 205...I believe it happens when either a file delete operation or a create or expand is interrupted half way"

RAM errors

We do get questions, and this is one of the latest. What happens when you boot a program and get a Ram error? This happened to IIIer David James a while ago, and it prompted him to do a little exploring. It also led him to write what he found was necessary to test the memory of a 12 volt 128K Apple III.

These were older IIIs (serial numbers less than 10,000). Newer units have 5 volt power supplies, but the information below should also prove useful. You should remove all plug-in cards before going through the following:

— When you "boot up" your III, a matrix of data dots flashes very quickly in the upper left hand corner of the screen. Your III performs a diagnostic check of its Ram chips. If any of the dots in the matrix are replaced by a "non-dot" character ("1"s), it indicates a faulty Ram chip. The position of the 1's in the matrix identifies which Ram chip is actually faulty.

DIAGNOSTIC RAM D I A G N O S T I C R A M

.....B9 B8 B7 B6 B5 B4
B3 B2

..... COMPARATIVE >
B17 B16 B15 B14 B13 B12 B11 B10

.....B9 B8 B7 B6 B5 B4
B3 B2

..... > LOCATIONS
B17 B16 B15 B14 B13 B12 B11 B10

.....C17 C16 C15 C14 C13
C12 C11 C10

.....D9 D8 D7 D6 D5 D4
D3 D2

.....D17 D16 D15 D14 D13
D12 D11 D10

.....C9 C8 C7 C6 C5 C4
C3 C2

— "But how can I identify any information when the matrix flashes so quickly"? Well, a little know fact is the built-in diagnostic tests can be initiated from the keyboard and run continu-

ously.

— First, enter the Monitor by holding down the "CONTROL" and "OPEN APPLE" keys, while pressing and releasing the "RESET" key. You should receive the Monitor prompt, a "—>", in the upper left hand corner of the screen with the underline blinking.

— Next, type "F6E6G" then RETURN. The screen will appear to be filled with "garbage" for a moment. The system should next begin continuously executing the built-in test (every 20 seconds) and alternately displaying a series of test patterns on the screen. Run this test for about 20 minutes, longer if it normally takes that long for the error to show up. If the dots keep appearing, then everything is normal.

But if an inverse 1 shows up, you probably have a bad RAM chip. By comparing the location of ones (1's) found in the display matrix against the Ram chip locator matrix below a faulty chip can be located.

— To definitely identify the faulty chip Dave re-located the suspect chip a couple of times, re-ran the diagnostic check, and tracked the re-occurring error. If replacing the chip does not solve the problem, it could be the memory board itself. Swap it. If it still persists, swap the main logic board. If ACIA, ROM & VIA error messages appear below the Diagnostic Ram display it indicates a probable problem with the AIII main logic board itself & replacing it should fix the problem. If you receive any additional error messages (or if you have a 256K III which has different memory locations) you'll need to look them up in an Apple III Service Reference Manual (available in the WAP library).

Finally

The ATUNC Newsletter has a new Editor. III SIG member Tom Linders has taken over for Lee Kung Shaw who oversaw the San Francisco Bay Area club's publication for many years.



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Byts And Pycles

by Gary Hayman

This is a regular monthly column which includes Apple II information of the hints, techniques, suggestions, helps, information, news, etc. genre. Information which may not, in itself, warrant a separate article in the Journal but might nevertheless be of interest to Apple II readers. You are asked to submit your hints, ideas and suggestions to me for monthly organization and publishing. You may do it via the TCS or direct mail to me at 8255 Canning Terrace, Greenbelt, Maryland 20770. Telephone calls to (301) 345-3230. Please note that this column is often submitted for publication 45 to 75 days prior to its appearance in print.

Save frequently

You have heard this caution before. Please take heed! I know of a writer, I think his name was Gary Hayman (or something like that) who was in the midst of writing this column and lost over four hours of 'excellent' work when a gremlin attacked his computer. Need I say more? It's time to SAVE EARLY AND SAVE OFTEN!

Last month's macro

I understand that my macro THE BETTER 'ARCHIVE' TEXT PRINTER that appeared in last April's Journal (as of this writing I have not seen it as it hasn't arrive as yet) may be in error due to the fact that some indents were inadvertently removed during the platform to platform process which takes place in preparing articles for publication. If you are interested in the macro you can download it from the TCS, or if you will send me a self-addressed and STAMPED mailer and disk, I will copy it and send it back to you. That sure saves typing. My address is at the beginning of this column. Also, you may contact me at a IIGS SIG meeting.

System fonts

PAUL TARANTINO, the secretary for the Apple IIGS SIG had some basic questions about font use. He advised that he had been stuffing every font that he acquired into the /System/Fonts subdirectory, whether there is any likelihood or not that each will be used regularly. He advised that he has no HD capacity problems, but was wondering if all of these fonts are wasting RAM space or otherwise reducing efficiency of the system as a whole. If he decided to put some fonts in other subdirectories and access them as required with the Font/DA NDA, he asks which fonts MUST remain in /System/Fonts?

KIM BRENNAN was quick to advise that, "Yes, having ALL the fonts in the */System/Fonts folder will drag down your boot time. There is no real requirement for fonts installed, but you will probably prefer to keep Monaco (for the AWGS Comm module), Shaston 16, Helvetica (or Geneva), and Times. I personally have about 35 font families in my */System/Fonts folder, but am going to trim that some and start selecting needed fonts with the Font/DA installer NDA. I tire of lengthy boot times. For you information, Geneva will be the default font chosen in most text applications of AWGS (unless it is not installed, in which case Helvetica would be chosen). Monaco and Courier are the only non-proportional fonts (of the standard font families). You will do best to keep only a few fonts, that you use most often, and choose those which have multiple sizes (in 2x form...i.e. 12 & 24, 10 & 20), so that the BEST TEXT mode on the Imagewriter will produce the best quality print possible."

"If using a Deskjet or Laserjet, choose fonts with 4x form. If using a

Laserwriter stick to Laserwriter font families (Times, Helvetica, Courier, AvantGarde, Bookman, ZapfChancery, N Century Schoolbook, N Helvetica Narrow, Symbol, Zapf Dingbats, and Palatino."

GREG COHOON added, "On page 36 of the AWGS 1.1 Update book, it lists what is optional for your system disk, (while) still being able to use AWGS. The things in the font folder they say are required are: Font.Lists, Geneva.9, Geneva.10, Monaco.9, New York.12, and New.York.24. I don't know if all of those are ABSOLUTELY required, but I'd take their word for it."

Superforms and Ramworks

PAUL BRUENING wrote: "Just for some general information: I recently purchased SuperForms 1.1 and was going through the tutorial when it would crash. A call to tech support revealed that SuperForms 1.1 won't work correctly with a Ramworks card. They have a fix underway, 1.3 which will be mailed out shortly (in software company terms, two to three weeks). Call tech support (Author: no number given but if you own Superforms it should be in the manual) and let them know you need one, free!"

Backing up your hard drive

There have been a lot of questions concerning backing up of a hard drive. I would like to share the technique that I use. Although I personally use ProSel 16's Backup/Restore, the method is independent of the program you use. I have a 40 meg drive that is divided into two 20 meg partitions. I maintain TWO backup for each partition - for a total of four. Here is the thinking. If you only have one backup for a partition and you are doing a new backup over the top of the existing backup disks and you run into a I/O (input/output) problem, you may lose many of your files.

Let's consider just one partition. I make a standard backup using a backup program. I date this backup. When it comes time to make another backup - be it at the end of the week, or a longer period of time, I use a fresh stack of blank disks. Now I have two sets. Later, upon making a third backup, I will make it over the top of



the OLDEST backup stack. This way, if anything goes wrong during a backup, I will still have the most recent backup to rely on.

Backups are important. Hopefully you will never have to use one, but a little insurance is very worthwhile. Each partition takes about 17-20 3.5 disks. I need four sets for my whole drive. With disks selling at about \$.39 each, the expense is not too prohibitive.

ProSel 16 allows me to do something else that not all backup programs permit. I can accomplish an incremental backup—that is, backing up only those files that have been added or files which have been modified on my hard drive since the last backup. Such a backup only takes 1-3 disks and does not involve a lot of time. These disks are maintained with the newest backup stack until that stack is written over.

Pity my brother who runs several medical offices in Florida. He has to make backups of his hard drives on a DAILY basis so that records will not be lost. Of course, he does it from hard drive to hard drive with removable media — and the offices have money to afford the equipment.

ROM 01 to ROM 03

JONATHAN KERN was asking around with concern about upgrading his ROM 01 IIGS to the current ROM 03. KIM BRENNAN, always lending a helping hand, told him that, "...the ROM 03 GS, is NOT upgradable to from a ROM 01 GS. It (ROM 03) is in the current GS, but is little different in (the) operational details. There were a few minor things done to the ROM 03 GS that distinguish it from a ROM 01 GS. Apple's Policy on the upgrade is 'use GS/OS v5.0'. Differences are: Appletalk is selected directly at Slot 1 or 2 instead of Slot 7. Ensoniq chip is slightly better shielded from the Power supply noise (cleaner sound...slightly). Battery for battery backed RAM is in a socket instead of soldered in. The Classic Control Panel is slightly different also Mouse control has it's own entry rather than being under Options. The ROM 03 GS is rated at the same speed as the ROM 01 GS, 2.8MHz. However, there is 1 Meg of Ram on the motherboard of the ROM

03 GS (instead of 256K on the ROM 01 GS). Also the ROMs are slightly more up to date, with more of the current versions of tools in ROM. Because of this there would be a slight (less than 1 %) increase in speed of a ROM 03 GS over a ROM 01 GS. Accelerators negate that advantage anyway, and 1% is imperceptible to the user." Good coverage KIM, Thanks.

JON THOMASON was kind to add the following information relative to the GS/OS upgrades, advising that, "...Each revision addresses a number of bugs found in earlier versions. More specifically, 5.0 has a couple of very nasty Resource Manager bugs, and 5.0.3 has a few memory corrupting ones. A few toolsets were completely rewritten (Standard File and ACE come to mind) for greater speed and more features. The most current is the only supported version (and right now that version is 5.0.4). Don't bother paying anyone \$50 for it, though, when you can get it for free right here on the TCS! (Granted, you got a set(?) of manuals the last time, but you won't need another one...)"

HP printers

DENNIS KELLEHER was inquiring about using programs on the IIGS and taking advantage of an HP printer. Again, KIM BRENNAN had the quick response (must be his month!) stating, "First off you MUST remember that if a program is an 8-bit program (Appleworks Classic, Publish.It, etc.) then it will support a HP printer ONLY IF THE PROGRAM IS DESIGNED TO SUPPORT THE PRINTER. Currently neither is.

"Now, you CAN make use of Appleworks Classic and a Laserjet or Deskjet by making a custom printer. For Publish It! there is a niftier trick (should work for Appleworks Classic with TimeOut Superfonts too.) This is to make the Laserjet or Deskjet look like an Epson printer. WARREN WILLIAMS of the National Appleworks User Group (NAUG) suggested this too me, but I haven't yet tried it out...personally. For the HP Deskjet you can get an Epson emulation cartridge. I'm not sure that there is an Epson emulation cartridge for the Laserjet.

"For GS/OS programs such as Appleworks GS, Graphicwriter III, and the like then you will want to get something like Vitesse's Harmonie printer driver package (which has drivers for Epson LQ printers, HP Laserjet, Deskjet, and Paintjet printers...color for the last IS SUPPORTED) or Seven Hill's Independence driver (which is strictly for the HP Laserjet and Deskjet). Printshop GS is more akin to the 8 bit programs.

"If cost is a MAJOR concern, and full functionality with ALL of your programs is desired it seems to be your best choice would be a Deskjet printer with an Epson Emulation cartridge (you should be able to get this combo w/cable for under \$700...unless you get the Deskjet 500...which might cost you a few dollars more.)

"Interface connecting? I assumed that you would go serial, but a parallel connection is good too and would be faster for some things. Harmonie has GS printer PORT drivers for a wide variety of parallel cards."

Beyond the Apple memory card

ADAM TRACHTENBERG was answering a FRANK EVANGELISTA question concerning a new memory board that allows you to connect your existing Apple II memory board to it and allows expansion beyond the restricted 1.25 megs. He stated that the C.V Technologies board lets you keep your Apple memory board and chain theirs to it. It is also DMA compatible. He likes their chaining option, and advised that you can also chain the board to other cards, too.

DALE SMITH adds, "Beware ... the edge connector will only let you insert certain cards and the OctoRAM isn't one of them. It'll take the Apple card (1 Meg) and several of the 4 Meg cards (RAM 4000 [Chinook], GS Sauce [Harris], etc.)"

There are some alternate approaches for you to consider. Sell your Apple memory card to someone who really isn't interested in going over 1.25 megs and use the proceeds to defray the costs of a CVT (or other) expandable memory board. If you do a cost study, you may find out that you come out ahead if you do it this way.



Free BBS listing

SETH MIZE furnishes the following:

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The BBS is operated with a combination of TBBS and TDBS, eSoft Incorporated's revolutionary bulletin board software package and online dBase III-compatible interface. Callers can actually bring up their own database record and fill out all the information that will be included in their listings online.

ALAN R. BECHTOLD, president of BBS Press Service says "The listings that are entered on the new system are all verified by BPS staff, then compiled into a file that is essentially ready to be inserted into COMPUTER SHOPPER's typesetting equipment. This helps eliminate typographical errors and results in a much shorter lead time."

BBS operators who list their systems are all telephoned to verify the existence of a data system at the listed data line telephone number. User groups receive a postal form requesting a call-back to the BBS, to verify that the listing is correct. All listings must be updated every 60 days if a BBS or user group is to remain in the list. To list your BBS or computer user group, call the COMPUTER SHOPPER LISTINGS BBS by dialing 913/478-3088 at 300, 1200 or 2400 baud, 8/N/1, with your terminal set for ANSI emulation. For more information, contact: BBS Press Service, Inc., 8125 S.W. 21st Street, Topeka, KS 66615; 913/478-3157 (voice).

Battery problems?

I have been hearing that some IIGS batteries are starting to age and fade. As a reminder, one of the recommend supply sources, that many

have been pleased with, is: Nite Owl Productions, Slide-On Battery Dept., 5734 Lamar Street, Mission, KS 66202, Phone: (913) 362-9898. The most recent cost was \$14.95 each plus \$2 per order shipping. (10 for \$120). Mine hasn't gone as yet but I do have a Nite Owl on my shelf. Be Prepared - as the Boy Scouts say.

Bird's Better Bye

TOM VIER, the Apple II hardware man, was asking some questions concerning Bird's Better Bye — the SYSTEM program selector. DALE SMITH was alert and answered, "You don't need Bird's Better Bye with v1.9 of ProDOS (8) - it's (or a very similar routine) been built into the quitcode and it's executed IF you have an enhanced //e at least - the old quit code will still execute on machines that don't meet the requirements for the new quitcode.

"One other thing has changed, ProDOS will execute the QUIT code if there's no "*.SYSTEM" file for it to execute. It is no longer necessary to have a SYSTEM file that you must boot into.

"As for Bird's Better Bye, you can still get that to work by using the SYSTEM file form of it and make that the first SYSTEM file in the directory list. As for installing it into ProDOS, I haven't checked the addresses since v1.9 came out. I didn't see any need since Apple has bitten the bullet and provided an equivalent form - hey, it even scrolls - not limited to 32 items as the Bird's Better Bye 80 is or 16 as the regular BBB is.

"There is still a BYE command in BASIC.SYSTEM v1.4.1. One of the changes is that Apple finally adopted the patch to BSAVE that someone proposed in A2-Central [before the name change] ... the one that keyed on the B(yte) parameter to determine whether to change the load address or not [combining the strengths of v1.0 and 1.1 while leaving their respective weaknesses for this command behind]. This was first attempted in v1.3, got the BLOAD command messed up, fixed it in v1.4 with some more lesser fixes in v1.4.1."

Patching AppleWorks

JAMES MCCANN was wondering what is the best way to patch AppleWorks and in which order should the patches be applied. I suggested that he starts off with a pristine copy of APPLEWORKS and first apply Patcher 1.5 (available on the TCS, for a Beagle Buddy or a friend). Then install TO.ULTRAMACROS, if he has it. This will add ULTRA.SYSTEM to the directory and change APLWORKS.SYSTEM to APLWORKS.SYS. Then, if he has an other TIMEOUT series, add them at this time. Finally, if he desires to use other patchers such as AW COMPANION 3.0 or SUPERPATCH 6.0, 7.0, or 7.1 do so at this time, but please don't go hog wild by adding everything in sight as some of the patches will 'screw up' some of his existing macros.

Number squares

PHIL SHAPIRO, the Educational SIG Chairman of the WAP, writes, with excitement, telling us that he recently received a phone call from the Iowa City Community School District, telling him that they've decided to recommend his Number Squares logic puzzles disk (an interesting and fun program that PHIL demonstrated at one of the general membership meetings) for an annual book titled 'Only the Best', published by Bowker publishers. 'Only the Best' serves as a sort of Academy Awards for educational software. He was flattered that the folks out in Iowa think so highly of this disk. Shortly after, he received a call from PAUL STATT, at inCider magazine, who congratulated him on the honor he received, and said he (PAUL) is considering writing a review of Number Squares for the August or September (1991) issue of inCider. PHIL reports that orders for the disk have come in from as far away as Fairbanks, Alaska, and Etobicoke, Ontario and that several school lab packs have been sold too. Congratulations, PHIL.

Just saved you \$129

One of our busiest HotLine volunteers, LEE RAESLY, reports that a woman had called him about her Apple IIc monitor not working and

showing a green screen. She had taken the computer and monitor to a local Apple dealer who, after setting it up and testing it, told her that she needed a new monitor - \$129 please. Fortunately she hesitated and called LEE, who suggested that she take some sandpaper and roughen the RCA plug on the end of the wire that goes from the monitor to the computer and also roughen the female portion on the IIC. She did this and called LEE back to say that the monitor now works and that she was glad that she didn't buy a new monitor as the dealer had advised.

Another war story

How about this one? A Washington lawyer who had an original WOZ signature Apple IIGS (ROM 00) took his computer equipment to a local Washington Apple dealer advising that he wanted it prepared so that his daughter could write some papers for school. The dealer suggested and sold him AppleWorks GS, told him he would need more memory and sold him an Apple Memory Card (populated?), told him he would need another 3.5 drive and sold him an Apple UniDrive (not an Apple 3.5 drive). When he got home, the program, of course, didn't work. The dealer did not upgrade the ROM to 01, as he should of (for free) in order for AppleWorks GS to run. Upon inspection, the memory card that the dealer installed was only half populated and the memory chips were installed in the wrong place. It was later determined that if the chips are in the wrong place the Control Panel will indicate 1.25 megs even though the card only contained 512K of memory. In addition, the UniDrive is of a different color than the rest of the equipment and due to the nature of the drive, the light continues to annoyingly flash. Upon trying to get the dealer to rectify the problems, the dealer became defensive and ordered him out of the store. Needless to say, letters have been written to John Sculley and other actions are in process.

SoundSmith error

JAMES PANGRAZZI was responding to someone on the ProLine system who had asked a question

concerning an error message that appeared on the screen while attempting to run SoundSmith, the fantastic music player from Spain. JAMES advised that, "The error code you got (\$0046) means file not found. Simply stated, your computer was letting you know that you did NOT have the file (or in this case the tool) you needed to run that program. Don't fret, the tool you need is Audio Compression and Expansion tool set. You will find this on your (GS/OS) System Tools disk, it is known as A.C.E. tools, which is tool number 29. You take your installer and install it on your system disk or your boot volume of your hard drive, if you have one. There is one other problem you might have to take care of. If you have DFC.NDA you should remove it or you will find yourself rebooting after you leave SoundSmith. If you have stereo card and Bose speakers you really enjoy this program!!! Happy listening!"

Publish.IT! 3 questions

TOM VIER and family are just getting into Publish.IT! 3 and were asking questions concerning text vanishing in a text block. I was able to answer TOM, advising "...that the words disappeared because your text block was too small. You can tell this generally, because there is a darker line at the bottom of the box which indicates that there is more text but you can't see it. Just enlarge the text block and the text will flow back in again. Also operations that you perform in the text block WILL NOT carry over to the text that is not displayed.

"Word unwrapping will take place automatically when you enlarge the box. If you have a need to cause a wrap, just type a RETURN at the appropriate place. If you don't, word wrapping will take place in a 'normal' manner. I am not sure what you mean by 'spacing over text'. Maybe you need to place another text block or graphic block in the way of the flow of text which will create the space allowing the text to move by itself to the other side. Tabs also work fine for moving text, IF THEY ARE SET. You have to do this from one of the pull down menus. Spaces, in general, are quite narrow (remember this is proportional type in

most cases) so just pushing the space bar doesn't advance the cursor much. HOWEVER, you can use the STICKY SPACE, that's an OPEN-APPLE SPACE. I think that you need to develop a technique here. You shouldn't (ordinarily) be using the spaces to push your text. The program is quite intelligent and does things automatically if you use all the features."

The author is currently Chairman of both the AppleWorks and Apple IIGS Special Interests Groups. He is published frequently in the Journal of the Washington Apple Pi. He is also a Beagle Buddy and a Seven Hills Partner for the WAP. Professionally, he is a Certified Hypnotherapist in private practice in McLean, Virginia and does part-time Apple II family computer application programs consulting and teaching.



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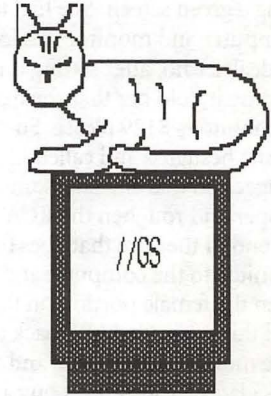
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View from the Cat House

by Kim Brennan



My system is now completed (ha!). My GS now has 9 slots filled out of 8 available slots, which even I will admit is a pretty neat trick. The last and final board was an Ohio Kache Systems MultiKache Disk Expander board for my MultiKache. This board is a half height half width (i.e., tiny) board that fit into the only remaining slot of my GS, the one partially blocked by the MultiKache (due to the piggy back SCSI option board). This little tiny board performs some of the functions that are built into a CVTech RamFast board. Basically it allows ProDOS 8 to see more of my hard disk partitions than ProDOS 8 could normally see.

ProDOS 8 has a limitation of two devices per slot. This means that for most hard disk users you would only be able to see up to 2 32Meg partitions of a hard disk, for a total of 64Megs of storage. Slot 5 on the Apple II is treated

specially. ProDOS 8 allows for any disk controller board their to automatically map additional devices to slot 2 (this is known as Phantom slotting). On the GS this is most frequently encountered when one has two 3.5 drives and either a ROM disk or a RAM disk. The smartport assigns the RAM/ROM disk as the 2nd device in Slot 5 and the other 3.5 drive to Slot 2 device 1. If one is using a SCSI card in Slot 5 instead of the built in Smartport then ProDOS 8 would be able to access up to 4 32Meg partitions of a hard disk (2 partitions are in Slot 5 and 2 are assigned to Slot 2).

In my case, the MultiKache board gives me all the same functionality of the built in smartport of the GS plus, due to the SCSI piggy back board, I can also use it for my hard drives. Due to this reasoning I finally put the Multikache into slot 5 (I had been using it in slot 6) and moved my PCTransporter from slot 5 to slot 7. I should emphasize that the MultiKache gives me the same functionality as the GS's built in Smartport. It does not necessarily work the same. I have found that the 3.5 drives on the Smartport actually read and write faster than when they are on the MultiKache. They also only format in a 4:1 interleave (unlike the Smartport which supports 2:1 also).

Anyway, the Disk Expander board allows for additional ProDOS devices to be mapped to different slots. With the Disk Expander in Slot 6 and the MultiKache in slot 5 I can now access up to 6 32Meg partitions of my hard drives directly from ProDOS 8. Be aware, that the above limitations apply to ProDOS 8, not GS/OS. Under GS/OS I could always access all of my hard disk partitions.

Now I would be amiss if I didn't mention that the MultiKache is a

discontinued product, though you may be still able to purchase it from some mail order places (such as Roger Coates). The nearest equivalent to it is the CV Technologies RamFast SCSI controller board which only works on SCSI devices not floppy disks. Actually, with the new v.2.0 ROMs, the RamFast is now a better board. The new ROMs offer many neat utilities, such as direct support for Syquest removable cartridges, tape drives (with background backups) and something that is very important to ProDOS 8 users, the ability to access up to 12 hard disk partitions directly.

An interesting related discussion occurred on America Online recently, where the limits of GS/OS were related. If you are using the MultiKache SCSI board you are limited to 8 32 Meg partitions unless you use Disk Expanders (which give you 2 additional partitions for each Disk Expander you use). It doesn't matter if you have more disk drives or more partitions than that, 8 is the limit (with the exception noted). The RamFast SCSI board can access 12 partitions per SCSI device with a maximum of 32 megs per partition. The RamFast can access up to 8 different SCSI devices, giving you a maximum of 96 partitions. The Apple SCSI boards can access up to 7 different SCSI devices. Each device may access up to 32 partitions. Each partition can be up to 32meg in size. You can do the math.

A last note on all this, the above limits of GS/OS only apply if you are using the ProDOS FST (File System Translator) which is what almost all GS users currently use. Other FSTs (if there ever are others) will not necessarily have limits identical to these.

Print Shop Companion GS

by David Jernigan

The Print Shop Companion GS is a self-contained adjunct to the Print Shop GS and, among other things, solves the mystery of where do you get the envelopes to fit all those cards you generate with your regular Print Shop? The answer - Print Your Own! Print your own with your return address. Print your own with the delivery address. Print your own with neat graphics. Mix and match. The envelope designs and formats can be saved to disk.

Before we go on to some of the other things this program will do, let's talk about what it needs and what it would like you to have. Obviously, you need a GS (with a minimum of 768K RAM), a 3.5 inch drive, a color monitor (RGB Preferred), a mouse and of course a compatible printer. It is nice to have the basic Print Shop GS, an additional drive(s), a color printer and colored paper.

If you have played around with Print Shop before, you probably will not have to refer to the instructions initially, you can just jump in and experiment. The system will prompt you to set up the Companion to work with your (configure it to your) system the first time you boot it. We did have a problem one time getting the GS/Companion/Printer to recognise that our Image Writer II had a color ribbon as we said it did. We told it (like some kids) a second time and it printed in color like it should have instead of black and white. The Companion may be installed on a Hard Drive or a RAM disk. The manual will walk you thru each of the features and besides it was fun—so why not use the manual?

Being somewhat new to mice, I often used the keyboard instead of the mouse and found the need to "double click" certain things twice to be a chore but a logical one. At logical points in

the creation process, you can jump to the beginning or end of a task without going all the way thru each step of the menu.

The Companion allows you a choice of borders for your envelopes, cards, signs and banners. You may also choose your font but, like the rest of the Print Shop Series, the choice of font determines how many characters you will be able to use in your text and you might not be able to fit a complete line of address onto the envelope, for example, without creating some abbreviations. Text can generally be solid, outlined, 3D, centered or left or right justified. It can be regular or double sized and even underlined on a line by line basis.

The preview feature allows you to peek at just about any time to see how your creation is progressing and, of course, you may save the design.

There is a nice calendar function which will generate Daily, Weekly, Monthly, and Yearly calendars without keying in each day of the week and each date. Graphics and text may be added at various points. For example, I created a monthly calendar for my child's fifth grade class and chose borders (top and bottom),

Graphics (top and bottom) along with text and graphics within special days (birthdays, holidays etc.).

It has a label function which may be used to create reward stickers, mailing labels, and disk labels (3.5 or 5 1/4"). Don't get excited about the labels though—it will not put the names of individual files on the label, just the volume name—but you can stick a graphic or two on.

There is a "Quick Page" function which allows you to import graphics to create a poster. The icons on the screen were difficult to decipher

without the manual. You can enter text, move and change the size of the graphics and make the text and image transparent (you see both) or opaque (you see one).

There is a catalog option which is time consuming but nice because it will catalog the graphics on each disk by type (border, etc.) and print the graphic with the name of the file "in living color." It allows you to choose the types of files to be cataloged and also permits you to separate the various types on their own page in case you want to create a sample book.

If you read the manual, it will tell you how to get some free goodies. (hum, sounds like a plot to get us to read manuals). Your choices will be a Kaleidoscope where you can choose from 11 main patterns and let it change continuously, freeze it or preview it for printing. There is a creature maker consisting of ten characters with top, middle and bottom sections which can be mixed or match on purpose or at random. There are several other "goodies" waiting for you after you read the manual including a choice which shows the factors in any given number. (No Ma, I'm not playing on the computer, I'm doing my math homework).

We would recommend it.





CDA for Creating Subdirectories

by Chester H. Page

Did you ever get to the point in a program where you are supposed to save something to a subdirectory folder, and realize that you hadn't created the appropriate folder on the disk? If so, FOLDER.CDA is just what you need; it lets you interrupt a running program, create a new folder, and return to the running program. It doesn't matter whether the program is running under GS/OS or ProDOS 8, the appropriate ProDOS command and parameter table are generated automatically. All you have to do is to supply the complete pathname of the folder to be created.

THE PROGRAM

The principle behind this program is to interrupt a running program, poke an emulation mode dialog routine onto page \$300, run this routine, and return to the CDA menu, then back to the original program - and continue its operation from the point of interruption. (I chose to put this routine at \$340 to avoid interference with a memory searching routine at \$300.) Since the original program may have been operating under either ProDOS 8 or GS/OS (ProDOS 16), there must be alternative calls to ProDOS to create a subdirectory, and the proper one selected. If the interrupted program is running under ProDOS 8, we must make an MLI call to ProDOS 8 in emulation mode; if the interrupted program is running under ProDOS 16, we return to the native-mode base of the CDA to make our CREATE call.

The routine at \$340 is the following:

LISTING 1 The emulation mode program on page \$300

```

38          SEC
FB          XCE          Enter emulation mode
A9 0D      LDA #$D       Load a <CR>
20 ED FD   JSR $FDED     Print to screen
20 6A FD   JSR $FD6A     Call Monitor GETLINE
8A         TXA          Move subdirectory
pathname to parmlist 8D 7C 03 STA $37C BD
FF 01     LDA $1FF,X 9D 7C 03 STA $37C,X
CA         DEX D0 F7     BNE $34E When
move finished, continue AD 01 BF LDA
$BF01 This will hold 00 if ProDOS 16 F0 14
BEQ $370 20 00 BF JSR $BF00 ProDOS 8
MLI call C0
CREATE 64 03
parmlist 80 0C BRA $370 Leave
routine 07 Parmlist
starts here 7C 03 Address
of pathname C3 0F Access

```

```

bits and file type 00 00 0D 00 00 00 00
etc. 18          CLC FB          XCE
Enter native mode C2 30 REP #$30
16-bit registers A5 06 LDA $6
Recover stack pointer as it was 38
SEC             when emulation routine entered
E9 03          SBC #3 1B          TCS 6B
RTL             Return to native mode base of
CDA

```

MAIN PROGRAM, source code form

LISTING 2

```

KEEP SUBDIR
TOOLBOX GEQU $E10000
PRODOS GEQU $E100A8
SUB START
DC H'13'
DC C'Create subdirectory'
DC I4'BEGIN'
DC I4'FINISH'
BEGIN PHK
PLB
LONGA ON
LONGI ON
REP #$30
TSC             Save stack pointer
TAX
STA >$000390
AND #$FF00     If stack is on page $100,
CMP #$100      use same stack, else
BEQ SAMESTK    set up a stack at $180
LDA #$180      for use of emulation mode
routine
TCS
SAMESTK PHX
PEA $FF        Set up text screen for
dialog
PEA $80
LDX #$A0C
JSL TOOLBOX    SetOutGlobals
PEA 0001
LDX #$150C
JSL TOOLBOX    Clear screen
LDA #^REQUEST
PHA
LDA #REQUEST
PHA
LDX #$200C     WriteCString
JSL TOOLBOX    requesting
subdirectory name
PHB           Save bank and direct-page
data

```




```

PHD
LDA #0
PHA          Set up page 00 for emulation-mode
program PLD PHA PLB PLB * At $000340, POKE emulation-
mode program: LDA #$FB38          STA $340
LDA #$0DA9          STA $342          LDA #$ED20
STA $344 LDA #$20FD STA $346 LDA #$FD6A STA $348 LDA
#$8D8A STA $34A LDA #$037C STA $34C LDA #$FFBD STA
$34E LDA #$9D01 STA $350 LDA #$037C STA $352 LDA
#$D0CA STA $354 LDA #$ADF7 STA $356 LDA #$BF01 STA
$358 LDA #$14F0 STA $35A LDA #$0020 STA $35C LDA
#$C0BF STA $35E LDA #$0364 STA $360 LDA #$0C80 STA
$362 LDA #$7C07 STA $364 LDA #$C303 STA $366 LDA
#$000F STA $368 LDA #$0D00 STA $36A LDA #0 STA $36C
LDA #0 STA $36E LDA #$FB18 STA $370 LDA #$30C2 STA
$372 LDA #$06A5 STA $374 LDA #$E938 STA $376 LDA
#$0003 STA $378 LDA #$6B1B STA $37A TSC
Save stack pointer, then STA $6 JSL $000340
enter emulation dialog OUT PLD          Dialog
exit PLB LDA >$00BF01          Check whether P8 or P16
BNE DONE          For P8 operation JSL PRODOS
For P16 operation DC I2'1' DC I4'PARMS' DONE LDA
>$000390 TCS FINISH RTL PARMS DC I4'$37C'          Address
of pathname DC I2'$C3' DC I2'$0F' DC I4'0' DC I2'$0D'
DS 6

REQUEST DC H'0D'
DC C'Enter complete subdirectory path'
DC H'0D0A0A00'
END

```

LISTING 3, screen dump of CDA

```

2000:01 00 00 00 00 00 00 00 6F 01 00 00 00 0A 04 01
2010:00 00 01 00 00 00 00 00 00 00 00 00 00 00 00
2020:00 00 01 00 00 00 00 00 2C 00 40 00 20 20 20
2030:20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
2040:F2 6F 01 00 00 13 43 72 65 61 74 65 20 73 75 62
2050:64 69 72 65 63 74 6F 72 79 1C 00 00 00 35 01 00
2060:00 4B AB C2 30 3B AA 8F 90 03 00 29 00 FF C9 00
2070:01 F0 04 A9 80 01 1B DA F4 FF 00 F4 80 00 A2 0C
2080:0A 22 00 00 E1 F4 01 00 A2 0C 15 22 00 00 E1 A9
2090:00 00 48 A9 4A 01 48 A2 0C 20 22 00 00 E1 8B 0B
20A0:A9 00 00 48 2B 48 AB AB A9 38 FB 8D 40 03 A9 A9
20B0:0D 8D 42 03 A9 20 ED 8D 44 03 A9 FD 20 8D 46 03
20C0:A9 6A FD 8D 48 03 A9 8A 8D 8D 4A 03 A9 7C 03 8D
20D0:4C 03 A9 BD FF 8D 4E 03 A9 01 9D 8D 50 03 A9 7C
20E0:03 8D 52 03 A9 CA D0 8D 54 03 A9 F7 AD 8D 56 03
20F0:A9 01 BF 8D 58 03 A9 F0 14 8D 5A 03 A9 20 00 8D
2100:5C 03 A9 BF C0 8D 5E 03 A9 64 03 8D 60 03 A9 80
2110:0C 8D 62 03 A9 07 7C 8D 64 03 A9 03 C3 8D 66 03
2120:A9 0F 00 8D 68 03 A9 00 0D 8D 6A 03 A9 00 00 8D
2130:6C 03 A9 00 00 8D 6E 03 A9 18 FB 8D 70 03 A9 C2
2140:30 8D 72 03 A9 A5 06 8D 74 03 A9 38 E9 8D 76 03
2150:A9 03 00 8D 78 03 A9 1B 6B 8D 7A 03 3B 85 06 22
2160:40 03 00 2B AB AF 01 BF 00 D0 0A 22 A8 00 E1 01
2170:00 36 01 00 00 AF 90 03 00 1B 6B 7C 03 00 00 C3
2180:00 0F 00 00 00 00 00 0D 00 00 00 00 00 00 0D
2190:45 6E 74 65 72 20 63 6F 6D 70 6C 65 74 65 20 73
21A0:75 62 64 69 72 65 63 74 6F 72 79 20 70 61 74 68
21B0:0D 0A 0A 00

```




New Apple II Downloads

File area 1 - Apple II Games

023 TETRIS.II.SHK 03/27/91 0057K
TETRIS.II
022 SOCCER.BXY 03/24/91 0012K
Estimation Soccer
021 BARTSPINBALL 01/23/91 0108K
pinball game double packed w/shrinkit

File area 2 - Apple II Misc.

023 ASPHYXIA.1.SHK 03/31/91 0037K
Issue #1 of Asphyxia Apple II magazine
022 MAP.SHK 03/27/91 0010K
Weather map maker
021 HERSHEY.BXY 03/17/91 0065K
A fun story disk.
020 KANSASFESTINFO 03/11/91
0007K Info about 1991 Kansasfest
019 XMODEM.SPEC.SHK 02/05/91
0028K Specs for various Xmodems
018 AREA...ZIP.CODE 01/21/91 0031K
Area & Zip Codes
017 HST.DS.TXT 01/16/91 0024K
Text file- Configure HST/Dual Standard
016 CIVILWAR.TXT 01/02/91 0018K
Letters from the Civil War, 77th NY
015 RDGLS5T8.TXT 01/02/91 0024K
Summer Reading List, Trinity, Gr. 5-8
014 RDGLS1T4.TXT 01/02/91 0015K
Summer Reading List, Trinity, Gr. 1-4

File area 4 - Apple II Utils

132 SHRINKIT323.XTX 03/22/91 0072K
Self-extracting form: Shrinkit 3.2.3
131 DOC.STUFF.SHK 03/19/91 0064K
Karl Bunker text handling routines
130 SHRINKIT323.SHK 03/18/91 0054K
Shrinkit v3.2.3 - bug fix
129 SNEEZE101.SHK 03/11/91 0034K
Comprehensive file browser/launcher
128 SCSI PART.SHK 02/23/91 0023K
SCSI Partition ver 2.20
127 PHOTOMAT11.SHK 02/08/91
0009K Print "mug shots" of HGR/DHR
graphics

File area 5 - GS Desk Accs

114 VERIFY.NDA.SHK 03/31/91 0007K
Background disk Verify NDA
113 LAUNCHPAD.SHK 03/31/91 0018K
LaunchPad CDev (v1.0b) - see browse
112 GSCIPLUS20.SHK 03/27/91 0026K
GSciPlus NDA, v2.0 (beta)
111 DATAPATH.DA.SHK 03/23/91
0012K An NDA that sets default data
directory
110 ZIPTALK1.0.SHK 03/19/91 0004K
PIF to let ZipGSX go full speed w/ATalk
109 SF.FIX.SHK 03/18/91 0002K
Standard File bug fix (PIF)
108 PIC2ARCHIVE.BXY 03/11/91 0005K
Captures screens into SHK files
107 ALERT.1.1.SHK 03/10/91 0016K
Alertsound 1.1 Update file
106 FRED.A.SHK 03/04/91 0009K
Freda - debugging util (CDA & INIT)
105 PIXIE.SHK 03/04/91 0054K
Programmer's aid-manipulate memory, etc
104 SPRINFO2.1.SHK 02/28/91 0076K
Complete info NDA.

103 ALERTSOUND.SHK 02/27/91
0048K Cdev to customize sysbeep.
102 PORTDRIVERS.BXY 02/24/91
0007K GS Port drivers
101 MODEMBUF1.1.SHK 02/24/91
0003K Set up 64K modemport buffer
(v1.1)
100 CARPET2.41.SHK 02/09/91 0007K
Carpet Bag v2.41 (load NDAs/CDAs)
099 SPOOLER.SHK 02/01/91 0009K
CDA print spooler
098 CURSORNDAS.SHK 01/21/91
0041K Change your cursor! Scroll the
menubar!
097 DESKCOLOR.PATS 01/20/91
0012K DeskColor CDev desktop patterns
096 DESKCOLOR25.SHK 01/20/91
0021K DeskColor CDev v2.50
094 GRAFSPEED.SHK 01/20/91 0004K
NDA to speed drawing to grafports
093 TRANSPROG21.SHK 01/18/91
0084K V2.1 - select appl. during boot
092 MINES.NDA 01/07/91 0039K
Mines GS: NDA strategy game.

File area 6 - GS Fonts

008 APPLEII.FONT 03/30/91 0006K
Mono-spaced font in 9, 18 and 36 point.

File area 7 - GS Games

048 JEWELS.COLUMNS 03/17/91
0007K Modify the boxes to Jewels in
Columns.
047 COLUMNS.V2.0 03/17/91 0315K
Columns.GS.V2.0
046 ONEARMBAT.SHK 03/10/91
0292K One Arm Battle
045 BALIHI.M18.SHK 03/03/91 0028K
A Mean 18 Golf course: Balihi.M18
044 TESERAC20.SHK 03/02/91 0045K
Tesseract.Shk, a text adventure game.
043 TREK.GS.SHK 02/04/91 0449K
Star Trek GS (read browse information)
042 ELEVATORZ.SHK 02/03/91 0010K
Shareware Game - simple
041 MORIA.MAG.SHK 01/24/91 0008K
Moria Advent Guild
040 TICTACTOE.SHK 01/24/91 0020K
Tic Tac Toe Game

File area 8 - GS Graphics

038 PYROMANIA.SHK 03/03/91 0029K
Def Leppard in 3200.
037 ORCHID.3200.SHK 03/03/91 0013K
Cone orchid in 3200.
036 CATFOOD3200.SHK 03/03/91
0008K Far Side cartoon in 3200.
035 A7E.3200.SHK 03/03/91 0026K
A7E getting ready for take off in 3200.

File area 9 - GS Misc.

049 LONGPLAY2.0.SHK 03/22/91 0025K
V2.0 - util. plays disk sound files
048 AWGS2.TMPL.SHK 02/28/91
0004K Extended Keyboard templates
047 AWGS1.TMPL.SHK 02/28/91
0004K AWGS Page Layout Templates 1
046 AWGSTEMP.SHK 02/18/91 0208K
AWGS templates, shareware from AOL
045 VIRUSRX.3.0.SHK 02/15/91 0029K

GS-specific Virus Rx by Bredon.

044 DISKCOPYGS.SHK 01/04/91

0012K DiskCopyGS - convert those dlmg
files

File area 10 - GS Utilities

066 UTILWORKS9J.BXY 03/23/91
0310K UtilityWorks v0.9J - file utilities
065 ULAUNCHDOX.BXY 03/23/91
0049K UtilityLaunch (v2.1) docs
064 ULAUNCH2.1.BXY 03/23/91 0107K
UtilityLaunch v2.1
063 SYNTHCREATE.SHK 03/21/91
0019K Define SynthLab sounds
062 LLRE.SHK 03/04/91 0034K
Low-level resource editor/salvager.
061 GSHK1.0.4.SHK 01/20/91 0103K
GS/Shrinkit 1.0.4 - a MUST HAVE bug fix
060 SNOWTERM205.SHK 01/16/91
0092K Snowterm V2.05
059 SWCP.2.7.SHK 01/10/91 0038K
Change ANY CP setting "on the fly"
058 GSXEDIT1.0.SHK 01/02/91 0029K
GSXEdit v1.0 - text editor

File area 11 - AppleWorks

068 VA90FORM760.SHK 02/03/91
0030K Tax Template for Va. Income Tax.
AW-SS.
067 TAX90.RAM.SHK 01/26/91 0053K
Tax Template for RAM cards - Koskos'
066 TAX90.NORAM.SHK 01/26/91
0052K Tax Template for 128K Apples -
Koskos'
065 FED.TAX.90.TEMP 01/20/91 0009K
APW SS for 1990 Federal Income Tax
064 IRA.VALUE.EST 01/20/91 0002K
APW SS to calculate IRA rate of return.

File area 12 - ProSel Updates

029 REVISE866.BXY 03/25/91 0025K
Recent revisions to ProSel-16
028 PROSEL866.BXY 03/25/91 0194K
ProSel-16, Version 8.66
027 PROSEL.DOCS.SHK 02/28/91
0163K Latest docs for version 8.64
026 ALIAS.SHK 01/19/91 0007K
Printer alias files for v8.64(& up)

File area 26 - Apple II DHR Graphics

025 DHRG.4.PEOPLSHK 03/11/91
0213K FAMOUS PEOPLE SLIDE SHOW
DHR
024 WW.I.PLANES.SHK 01/27/91 0245K
WW I Planes - 43 of them /w desc
023 ALPHAPI3BLN.SHK 01/17/91 0003K
AW Alphabets file and PI 3 blank form
022 OCR.COURIER.SHK 01/17/91
0003K OCR Courier for InWords

The Apple IIGS: What the Mac LC Should Have Been?

by Roger Wagner

A review of the Mac LC in the December, 1990 issue of *inCider* magazine was subtitled "What the Apple IIGS Should Have Been?" The underlying idea was reasonable: If the Mac LC had been introduced in 1986, rather than the IIGS, people would most likely have been fairly happy with this transition machine to the Mac. However, history does not accommodate "what ifs", and at this point, one can legitimately ask, "Is the Apple IIGS what the Mac LC should have been?"

The unexpected factor today is the world of multimedia, and that the Apple IIGS is arguably the ideal multimedia (or hypermedia) machine. Regardless of what term you use, this environment will be more significant in the 90's than desktop publishing was in the 80's, particularly in the classroom.

The ideal multimedia machine should have good color graphics, excellent sound, and the ability to connect to laserdiscs, CD-ROM, and VCRs. It should be easy and intuitive to use, and as affordable as possible. You should be able to present your work, and easily record and transport it to share with others. The Apple IIGS has all this and more.

Let's suppose a student creates a multimedia report, and then presents it to the class. With the Apple IIGS, a standard classroom monitor or TV can be used with no special hardware. Although a TV isn't great for displaying 80-column text screens, multimedia presentations with graphics, larger text, and video sequences from a laserdisc will look quite nice. On a Mac or PC, a projection system that can handle true color is likely to cost \$2000-\$3000, or more.

Laserdiscs, combined with a video

overlay card, add a very attractive component, and allow anyone to create very exciting results. On the Apple IIGS, a school can buy a Video Overlay Card for about \$400. On the Mac LC (if a card were available), using the slot for a video card would preclude using the IIGS card. Cards similar to the Video Overlay Card on other Mac models cost around \$2500. (By the way, services are now available that will convert your own videotapes to a laserdisc for \$200-\$300!)

On its way to that TV or monitor, the Apple IIGS video can be routed through any common VCR, recording both the audio and video portions of the presentation, so Mom and Dad can see what they did at school, and keep a permanent record of the moment. Presenters can go to conferences with just a video tape, without lugging tons of computer hardware. Macs and PCs require a special adapter (an "NTSC Converter"), and these can be an expensive addition.

You heard it here first: The VCR will be the printer of the 90's. How else to record sound, animation, graphics, video and more, and in a form that anyone can view (virtually all homes and schools now have VCRs). Once you're aware of what the GS can do, hearing that another computer can't be recorded with a VCR is like hearing it can't be attached to a printer. An article in the October 15, 1990 issue of *BusinessWeek* discusses Apple's generation of computers AFTER the Mac: "At least two years off, Jaguar will include extensive video technology and the ability to connect to TVs and VCRs, Apple employees say." How great for Apple IIGS owners to know that they don't have to wait for the successor to the Mac. They can have all

this now!

Schools that purchase Mac LC's, hoping for a color multimedia machine, will be surprised to discover that HyperCard on the Mac is only black & white. A limited ability to display single color graphics is available, but to just draw a line or two in color, you'll need a GS with HyperCard or HyperStudio. Want to use the microphone on the LC? You'll have to leave HyperCard, run a separate program, and then go through some additional steps to incorporate the sound. On a GS with HyperStudio, adding sound is easy and perfectly integrated into the overall environment.

Last of all is the working environment itself. Stackbuilding on the GS is significantly easier. Thousands of schools are using the Apple IIGS for multimedia right now, and projects created entirely by 1st graders are by no means unusual. Home users of the Apple IIGS find it perfect for not only the kids, but fun for personal-interest uses from family trees to hobby-related projects. Through user groups, mail-order catalogs, and online services like America Online, CompuServe and GEnie, there are already almost 200 megabytes of existing hypermedia applications (stacks) of every imaginable kind—all for the Apple IIGS.

What does the future hold for the Apple IIGS? The Apple IIGS is not an outdated technology. The Apple IIGS has features that are not currently available in any machine, and offers a solution that couldn't be more relevant to the next revolution in computing. I've personally travelled extensively across the U.S. in the last year, and everywhere I've seen a tremendous amount of interest and enthusiasm for what the Apple IIGS offers. This interest is the result of recognizing a practical and immediate tool. If you haven't yet seen what multimedia and the Apple IIGS are all about, there couldn't be a better time than now to find out what the future holds, and how you can make that future a present reality. If you already have an Apple IIGS, then you'll be happy to know you own the best machine possible to enter the 90s!

From a letter to *inCider/A+* magazine, March, 1991. Permission is hereby given by the author to anyone wishing to reprint this letter.





Playroom

by Amy Blumenstein's Dad

Hey Kids, my name is Amy, and I want you to meet PEPPER, the Playroom "mouse", and his friends: Look-a-Lot, Dragon, and the Mixed-up Animal. They are all in the Playroom which is kind of like PeeWee's Playhouse (without PeeWee). You just click on neat things like the goldfish bowl and watch the goldfish jump or click on the curtains and watch them open and close to see Dragon breathe fire. Radical!!!

Or you can click on one of 6 games:

Clock—Tell what Pepper's doing at any hour of the day using clock face, digital time, or the time as words.

Computer Spell—a word for the picture of a gift and watch it move.

Mixed-up Toy—Make goofy animals by changing heads, torsos and legs.

Mousehole Play—a board game with Look-a-Lot or the computer by counting squares but watch out for white circles.

ABC Book—Using a fantasy land background, create and print your own story by placing and moving around animals and things that you select from the starting letter of the animal or thing.

Spinner Toy—Match a picture with a number and then

wake up Pepper for a counting game, and watch everything move.

You get a cute little Pepper guy to play with. I keep him on top of my Mac Plus where he is cosy and sleeps when I am away. You also get a great program book with cut outs, coloring pages and finger puppets. There are 2 disks (one you have to put in each time you play - what a drag!) You can get an Apple II version, also.

So, go for it!! Tell your Mom or Dad, you have to have the Playroom from Broderbund or you'll just die. It's only \$29, mail order; even my Dad can afford it!

I first used playroom when I was 4. Now I'm 5 and 1/2, and it is still my favorite.

Cowabunga,
Dudes.

Classified Advertisements

Classified advertisements can be placed by mailing copy to the business office of Washington Apple Pi. Ltd., 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814. Be sure to include your WAP membership number and indicate area codes with your phone numbers. Ads must be received by the 1st of each month for inclusion in the following month's issue. Any ads postmarked after that time will be included at the discretion of the Editor. Cost is \$2.00/line (40 characters per line), maximum 12 lines. Members of Washington Apple Pi., Ltd., may place ads up to 3 lines at no charge. The editor reserves the right to refuse any ads deemed inappropriate.

VOLUNTEERS NEEDED

Your Users' Group needs you!! Washington Apple Pi needs volunteers to coordinate and/or help with the following tasks:-

- Apple II Tutorial Coordinator
- Apple II Disk Librarian
- Hotline Volunteers
- Apple II Disk Annotators
- Hotline Volunteers
- Apple II Disk Duplicators

If you are interested in lending us a hand, please call Nancy at 301/654-8060.

HELP WANTED

Desktop Publisher needed to work in an association in Alexandria. Salary in the 20's with excellent benefits. Call Tamara at 703/998-0072.

HELP WANTED

Production Manager - Mature, motivated person needed to manage a 4-10 person graphics facility. Must have graphics background and be able to work with both Macintosh and IBM computers as well as Linotronic, typesetters, stat cameras and all other production equipment. Call Rossi at 301/948-2175

VIDEO PRODUCTION SERVICE

Network quality video production is now affordable to both large and small businesses, thanks to special "wholesale pricing" of Award winning company: International Television Productions, Inc.

Full production and editing services, special effects, animation, all you need is available, and cost effective. Call Guy Durant at I.T.P. District Sales Office: 202/575-0414 ext. 123

WANTED

Explorer Scout Search & Rescue program seeks donations of Macs, SEs, and printers for networking emergency services incident command mobile operations. Call Peter McCabe, 301/596-5554.

FOR SALE

Computerized Classic Accounting version 2.2.2, for Mac/Excel 2.2. Never used, too much power for this user. Make offer. Call 301/585-1939.

FOR SALE

Apple IIGS with 2 external drives, one 5-1/4" and one 3-1/2". Excellent condition. \$1300 or best offer. Call 547-0170

FOR SALE

Mac Table 48" \$239, Lawyer bookcase with leaded glass \$199, Apple Personal Modem 1200 baud \$49. Call 301/299-5137.

FOR SALE

Shrink-wrapped software:
MacPaint 1.5 \$10, MacWrite 4.6 \$10,
MacWrite 5.0 \$25, MacDraw 1.9.5 \$20,
Switcher \$2, AppleShare 1.1 \$25,
Microsoft File \$20, Microsoft Charge \$25,
System 5 \$5, CricketDraw \$40, apple II
SuperPilot \$20, MacPascal 2.1 \$40, SCSI
Cable \$15. Call Clint or Annette Hyde at 703/318-8577.

FOR SALE

Apple flatbed scanner, 256 shades of gray, 300 dpi, 1 year old. \$700. Call 301/437-4325.

FOR SALE

ImageWriter II. \$250 or best offer. Mac 400K external drive. \$100 or best offer. 703/370-6357.

FOR SALE

Citizen, Premier-35 wide carriage daisy wheel printer, mint condition. Similar to Qume and Diablo printers. Best offer. 301/596-5554 evenings.

FOR SALE

NEW WACOM pressure sensitive drawing tablets. Price: \$639 for 6" x 9" tablet, 12" x 12" \$889. Call 301/984-3706.

FOR SALE

ImageWriter II with automatic sheet feeder for \$280.00 (retail price for combination: \$550—the Macintosh Bible calls the sheet feeder "the wisest addition you can make to your Mac after a hard drive.") Both in excellent condition, Call Mike High 703/768-1187

FOR SALE

Amplifiers and speakers, one Peavey XR-500, mixer amplifier and two Peavey FP-3 precision transducers. \$500 or make us an offer. Call 301-654-8060

OFFICE ASSISTANT

Self-starter with good organizational and prioritization skills; duties include reception, membership computer entry, mail handling, filing, and register sales. Send resume to Assistant, 9509 Page Avenue,

**This Space for Rent,
Call (301) 654-8060**



Macintosh Disk Library

by Dave Weikert

New Disks

We have ten disks this month; four new LaserWriter Fonts series (Mac Disks #6.15 through #6.18), two revised and one new Word Processing series (Mac Disks #17.01A through #17.03A), one new Mac II series (Mac Disk #20.13A) and two new Apple TrueType System Software (Mac Disks #TT.FS and #TT.PT).

TrueType Outline Fonts

You don't have to wait for System 7 in order to use Apple's new TrueType outline font technology. If you have either System Software 6.0.5 or 6.0.7 you may install TrueType in your system and start using it now. Just buy the two disks released by Apple this month and follow the installation directions. The TrueType Fonts and Software disk includes the required font suitcase, the Font/DA Mover and the INIT for the System folder. The TrueType Printing disk has all of the necessary drivers for Apple's Laser and Impact printers.

LaserWriter Fonts series

If this description sounds like a repeat of last month's, that's because it almost is. The LaserWriter fonts issued this month (Mac Disks #6.15 through #6.18) are the last four disks of fonts that were downloaded from GENIE last month. The majority are Type 1 PostScript fonts which means that you may use them with Adobe Type Manager and they will look good on the screen and on an ImageWriter or DeskWriter as well as a LaserWriter. Like last month, many of the fonts in this collection are decorative faces and are designed for use at larger point sizes.

Word Processing series

This month we revised the Word Processing series for the first time in over two years as Mac Disks #17.01A through #17.02A. A lot of the dated material has been removed or updated with more current applications. However, there is nothing in the first two disks of this series that was not previously included on Mac Disks #17.01 through #17.06. Mac Disk #17.03A contains revised and new programs not previously offered.

Mac II series

William Jones has completed another of the Mac II series of disks; one dedicated to the application PICT Ripper. PICT Ripper allows you to lay text objects on top of PICT files. Bill has some other Mac II material that he is working on so watch for additional disks in this space in the future.

About Shareware Requests

Please honor authors' requests for shareware fees if you decide to add shareware programs to your software library. Shareware is an important distribution channel for low cost software and it is important to encourage authors to use this channel by paying them for their efforts.

Mac Disk Catalog

Upon completion of the disk duplication this month, we will start updating the Mac Disketeria Catalog. We usually reorganize a number of the disk series to remove older versions of files and applications that no longer work with newer Macs and Apple System Software at the same time we revise the catalog. We have already revised the Telecommunications and Word Processing Utilities series in the past two months. We will be examining the Desk Accessories, INITs and cdevs,

Miscellaneous Utilities and System Utilities series in the coming month. For this reason, we do not expect to have enough time to also develop any new disks for next month. However, we will be ready to duplicate Apple System Software 7.0 upon its release if we are permitted to do so by Apple (and if we can get a copy).

DISK #6.15 — LW 15 LASERWRITER FONTS

Rossbauer Caps f:sea: Rossbauer

Caps: By David Rakowski. A set of five really big PostScript fonts that contain very ornate early 20th century German woodcut drop caps. Each image is of an outlined serif capital letter with a backdrop of a person and some sort of landscape. Don't use more than one drop cap at a time, and use "Unlimited Downloadable Fonts" from the Page Setup command if you plan to use the font with another downloadable font. Rossbauer Caps is not compatible with Adobe Type Manager. **Read Me Rossbauer Caps** is in text format.

Saint Francis f: Saint Francis:

By Hank Gillette. Saint Francis is a Postscript version of Apple Computer's venerable San Francisco font. It has the full character set that San Francisco has, plus some alternate characters (try Option e, Option g, and Option W), and some visual puns included for the author's amusement. **St. Francis Read Me** is in MacWrite format.

Sharktooth 2.0 f: Sharktooth 2.0:

By Peter S. Bryant. A Type 1 typeface. Since Sharktooth is a display font, it is generally not acceptable for body text. Sharktooth is also hinted to optimize output on 300 dpi or less printers. **Sharktooth Read Me** is in text format. **Shareware — \$10.**

Showboat f: Showboat:

By David Rakowski. A Type 1 font created with Fontographer 3.1 in an old nineteenth century *marque'e* style. It includes all 26 capital letters plus rudimentary punctuation. **Read me Showboat** is in TeachText format.

Shpfltnat 2.3 f: Shpfltnat 2.3:

By



David Rakowski. A Type 1 PostScript font. Used to print musical characters that can be inserted in text, as in a word processor—not for musical notation. Adobe's SONATA font has beautifully drawn characters, but since they are scaled to relative sizes, using them in text changes the line spacing drastically; for instance, to use the "natural" sign at the correct size in a line of text, the spacing gets changed to quintuple spacing (the character has a ton of white space above and below it). The notes in shpfltnat have deliberately large noteheads so that they will print large enough to read in a block of 12-point text. **About Shpfltnat 2.3** is the documentation in double-clickable application format. **Shareware – donate \$10.01 to Columbia University.**

Disk #6.16 — LW 16

LASERWRITER FONTS

Tribeca f: Tribeca: By David Rakowski. A Type 1 font containing a full character, number and punctuation character set. It is modeled on "Newton Inline," an Art Deco font often used for titles on paperback editions of mysteries. **Read me Tribeca (Teach Text)** is the documentation.

Upper East Side f: Upper East Side: By David Rakowski. A Type 1 font in an art deco style that works well in both text and display applications. It contains a full set of characters, including diacritics, and has 477 kerning pairs. It resembles the well known Parisian display font. **Read me UpperEastSide** is in TeachText format.

UpperWestSide1.1 f: Upper West Side1.1: By David Rakowski. A Type 1 PostScript font. This font is the font which is used for the logo of the NEW YORKER magazine and which is also used for headings throughout each issue. It contains a full set of upper- and lower-case characters, punctuation, and numbers. And several characters are filled with the image of the New Yorker's famous FOP. **About**

UpperWestSide is in double-clickable application format. **Shareware – donate \$6.41 or more to Columbia University.**

Varah Caps f: Varah Caps: By David Rakowski. A Type 1 PostScript font. The font consists of all 26 upper-case alphabetic characters drawn as black characters on what looks like rectangular stained glass windows in the background. It is extremely detailed and ornate. Because it is so detailed, it is not recommended for use in sizes smaller than 48 points on a 300-dpi printer, not smaller than 120 points on an ImageWriter. **Read me VarahCaps** is in text format. **Shareware – donate \$4.99 or more to Columbia University.**

Wiemann Caps f: Wiemann Caps: By David Rakowski. This Type 3 PostScript font consists of 25 capital letters (J is missing) drawn in a very ornate Art Nouveau style. **Read me Wieman Caps** is in text format.

Zaleski Caps f: Zaleski Caps: By David Rakowski. A Type 1 PostScript font named for Jean Zaleski, the New York painter who is, among other things, short. It is modeled on an Art Deco typeface called Ashley Crawford. It is bold and brash and serified. Numbers and punctuation are also in the font. **Read me Zaleski Caps** is in text format.

Disk #6.17 — LW 17

LASERWRITER FONTS

Ambrosia Cap f: Ambrosia: By Sam Wang. A Type 1 graceful Art Nouveau display font. The lower case letters are reduced sized duplicates of their upper case counterparts. **ReadMe** is in text format. **Free but \$5 donation cheerfully accepted.**

Arctic f: Arctic: By Sam Wang. A Type 1 brushscript font from the Dover book on Solotype fonts. It is complete with upper and lowercase letters, as well as numbers, punctuation etc. **ReadMe** is in text format. **Free but \$5 donation cheerfully accepted.**

Edda f: Edda: By Sam Wang. A Type 1 Art Nouveau display font.

The lower case is same as upper case except smaller. **ReadMe** is in text format. **Free but \$5 donation cheerfully accepted.**

Harrington f: Harrington: By Sam Wang. A Type 1 flamboyant Art Nouveau font that's full of curls and curves; perfect for love letters. It's complete with upper and lower case and numbers. **ReadMe** is in text format. **Free but \$5 donation cheerfully accepted.**

Isadora f: Isadora: By Sam Wang. A very classy looking Type 1 Art Nouveau font. The upper and lower cases are the same, with numbers, etc. **ReadMe** is in text format. Please Read Me First! is in text format. **Free but \$5 donation cheerfully accepted.**

Knitter's Symbols f: Knitter's Symbols: By David Xenakis. Type 3 fonts which produce publishing quality knitting graphs without the assistance of high-end PostScript drawing programs. Each font folder includes an .EPS format file of the keyboard layouts.

LibbyScript f: LibbyScript: By Sam Wang. A very graceful brush script typeface. **ReadMe** is in text format. **Free but \$5 donation cheerfully accepted.**

MachineBlock f: MachineBlock: By Gary Hagestead. A bold headline Type 1 font consisting of upper case letters and most of the commonly used symbols. It is patterned after the "Machine" type style. **MachineBlock.docx** is in MacWrite format. **Shareware – \$15.**

Mira f: Mira: By Sam Wang. A Type 1 Art Nouveau font that contains both upper and lower case. **ReadMe** is in text format. **Free but \$5 donation cheerfully accepted.**

Stencil Cut f: By Gary Hagestead. A Type 1 bold display font consisting of upper case letters, and most of the commonly used symbols. It is patterned after Adobe's "STENCIL" type style. **StencilCut.docx** is in MacWrite format. **Shareware – \$15.**

Disk #6.18 — LW 18

LASERWRITER FONTS

TechPhonetic f.sea:

TechPhonetic: By Rob Kassel. This is a self extracting archive (.sea) file; move it to your hard disk or a blank floppy and double click to expand it to a useable file. An IPA (phonetic symbol) Type 1 font based on GoudyOldstyle. It is designed to represent anything the IPA can, but not necessarily in all the ways IPA can. **Read Me!** is in text format.

TempoFonts f: **TempoFonts:** By David Rakowski. A Type 1 PostScript font. A full serif character set is included, along with musical symbols on the option and shift-option keyboards. The point is to be able to mix text and musical symbols in text blocks in programs that don't allow multiple fonts in text blocks. **ReadMe** TempoFonts is in text format.

Thalia f: **Thalia:** By Sam Wang. Another Type 1 Art Nouveau display font. A little different from most of the other Art Nouveau fonts that you may have come across. **Free but \$5 donation cheerfully accepted.**

UltraBlack f: **UltraBlack:** By Gary Hagestead. A bold headline Type 1 font consisting of upper and lower case letters, and most of the commonly used symbols. It is patterned after the "HelveticaBlack" type style. **UltraBlack.docx** is in MacWrite format. **Shareware - \$15.**

Woodcut Drop Caps f.sea: **Woodcut Drop Caps:** By David Rakowski. This is a self extracting archive (.sea) file; move it to your hard disk or a blank floppy and double click to expand it to a useable file. This font was created by scanning figures from a late nineteenth century children's book, tracing the result with Adobe Streamline and then using Art Import to create the font. All characters are images of quite ornate capital letters. **Read me Woodcut fonts** is in text format. **Shareware - donate \$.99 to Columbia University.**

Acta Reader: By David Dunham. Allows you to read and print any file created by the Acta desk accessory. Acta is a commercial outline processor.

AddTabs 1.1 f: **AddTabs 1.1:** By John Wind. Replaces a series of spaces with a tab and removes trailing spaces. You specify the length of the string of spaces. Also removes ASCII characters with a value less than nine. **AddTabs 1.1 Docs** is program documentation.

Detab: Changes a tab to a specified number of spaces. Great for preserving column layouts in formatted files converted to ASCII.

Document Builder f: **Document Builder:** By Andrew Welch. Allows you to create stand-alone documents which include text and graphics. Since Document Builder documents are applications, the reader does not need a word processor to show them on the screen or to print them. **Document Builder Docs** describes the application. **Shareware - \$20.**

Enable/Disable Test Page f: **Enable Test Page:** Instructs the LaserWriter (using PostScript) to print the test page at start up that includes the number of copies. **LaserWriter/LaserWriter Plus compatible.**

Disable Test Page: Instructs the LaserWriter (using PostScript) not to print a test page in the event you are tired of seeing the charts and graphs with a record of the number of copies produced to date. **LaserWriter/LaserWriter Plus compatible.**

Entab: Changes a specified number or more of spaces to a tab character. Great for preserving monospaced ASCII layout material when converting to word processor formats.

File Cleaner: By Kent Flowers. Permits you to strip line feeds, carriage returns, high-bits, etc., from text files on the way to converting them into importable format for word processors or data bases.

Idealiner f: **Idealiner:** By Jimmy Mac Software. An outliner for the Mac. It lets you organize headers on many different levels. It lets you

add text to the headers and lets you print with or without a table of contents. **Read me first** is an "intro. to the introduction." **A Tutorial Introduction** is an actual "introduction" and tells you how to launch this program. **Idealiner Release Notes** gives tips on this version and is in Idealiner format so it will aid in comprehending how to use the program. **Idealiner User's Guide** is a formal manual on how to use this program. It too is in Idealiner format. **Shareware - \$30.**

Ink: By Roy A Leban and Ken Jordan, SoftPlus, Inc. This is freeware and is a text file printing utility which will print any ASCII text file or series of files in almost any format on almost any printer, including the LaserWriters. There is extensive online help.

LaserPrint: A substitute for printing from within any word processor or other application. You **MUST** have a printer driver (like ImageWriter or LaserWriter) on your startup or hard disk but you don't need a word processor. If you have to print something without having the word processor present on disk this seems to work just fine—keep in mind you cannot preview the document or make any editing changes, though.

MindWrite Import Filter f: **MindWrite Import Filter and Filter Installer:** Not tested.

ReadWrite© f: **ReadWrite©:** By PEEK[65]. Reads text files created by any Macintosh program, MacWrite files, or AppleWorks word processor files imported using Apple File Exchange. ReadWrite saves copies of original text in new files, either in text AppleWorks format, ready to export via Apple File Exchange. **ReadWrite Doc** is the documentation. **Shareware - \$5.**

TabUtil 1.1: By Chet J. Graham. Adds or subtracts horizontal tabs, converts to or from spaces to tabs and can also strip control characters and trailing spaces. Quite useful for what it does, though a program like Macify, which does this and much more, is more useful overall.

DISK #17.01A — WP 1 WORD PROCESSING UTILITIES



Take a Letter 1.01 f: Take a Letter 1.01: By Joel McNamara. A clever little program which allows anyone to create stand-alone, double-clickable documents which need nothing to be read or printed. **Take a Letter Docs** is an application-combined-user document; consequently, though it is really only two pages long, it does take up about seven times the size of an equivalent text file. **Chicago 12 Form Letter** is one of the standard templates for the standalone document-making process. You will need this and the other three templates to form the complete set. **Geneva 9 Form Letter**, **Geneva 12 Form Letter** and **Monaco 9 Form Letter** are the remaining three templates. **Shareware – \$10.**

Text Convert 1.1 f: Text Convert 1.1: By Stephen Scandalis. Converts line endings of text file to types required by either the Macintosh or IBM PC computers.

Tools f: Tools: By Eva Thury. An aid-to-composition program which examines a text file and performs a number of functions including predicate-nominative case matching, spell checking, "vague" word notification, average word length and other compositional analysis elements. **What to Wear** is a sample report based on one analysis of a text composition. You can trash this, along with the A, B, C, and D sample documents once you have examined them. **spell words** is not a spell checker, but a list of "trick" words which, like the vague words list below, you create. The spell words and vague words list are presented here as templates and are easily edited. **vague words** is a list of such words. **A- Paper**, **B- Paper**, **C- Paper**, and **D- Paper** are the sample compositions.

TypingHelper f: TypingHelper: By Richard Harvey. A typing improvement program which uses words stored in the Words File. The program allows a number of options and includes an analysis of your typing speed and the number of errors committed during each session. **Words File** is the list of words which Typing

Helper must have in order to run and is completely editable by the user. **Shareware – \$36.**

UnWS+ 1.53: By Pete Johnson. Allows the conversion from MS/PC-DOS WordStar files to Mac ASCII files and back. It preserves most standard formatting instructions (soft wrap, tabs) but not all the text formatting. Highly formatted text is indicated with a backslash to enable the insertion of WordStar formatting characters in the conversion from Mac ASCII back to WordStar. Useful only if you must convert from WordStar to Mac ASCII and back.

WN VERS Installer: This utility installs the version number for WriteNow versions 1.00 through 1.07 into the program. This enables it to successfully run under MultiFinder. If you use MultiFinder and WriteNow this will make things easier. The program is nice to have but not essential since the same thing can be done with ResEdit.

WNTranslator.DA f:

WNTranslator.DA: By Edward L. Bolson. This desk accessory enables the import of text (ASCII) files to WriteNow document format, export of WriteNow documents to text format, and export of WriteNow to MacWrite. Of course, under MultiFinder and running WriteNow and Word or MacWrite, you can cut and paste from one to the other with ASCII anyway. Possibly useful for individuals who do not use MultiFinder and who don't want to run two word processors at the same time.

TranslatorDA Doc 1.72 is the very complete and useful instructions as well as tip sheet. **Shareware – \$20.**

Disk #17.02A — WP 2 WORD PROCESSING UTILITIES

Dictionary Helper f: Dictionary Helper file: By Larry Pina; expanded by Arthur Naiman and others. A text file of commonly used words normally not found in the dictionaries of spelling checkers. **Dictionary helper**

docs (text) tells how to add them to your spelling checker.

Dictionary Merger 2.1 f: Dictionary Merger 2.1: Allows you to add the words in one Spellswell dictionary to another Spellswell dictionary. **Merger Instructions** is in text format.

Evolutions 1.05 f: Evolutions 1.05: By Kevin M. Hctor. Converts series of spaces in a file into tabs and removes control characters and adds or deletes linefeeds (for IBM to Mac conversions and the reverse). **Shareware – \$10.**

Excel Em Charts f: 24_48_100 Em Charts: By Andy Burns. Displays a table for each of three EM unit systems; 24, 48 and 100 Units. Each table shows the number of points moved as a function of point size and kern size. **Read Me.txt** is a brief description.

FWRecover 1.0 f: FWRecover 1.0: By Kent Irwin. A utility for extracting text from FullWrite documents. This may be particularly useful if you cannot otherwise open the document as you may be able to extract the text and notes. **Readme (FWRecover)** is in text format.

Macify 2.8 f: Macify 2.8: By Eric Celeste. Converts a plain text document into a useful one by removing hard carriage returns, lower 32 ASCII characters (all the "control" characters) and generally cleaning up things. It also lets you modify the appearance of a document by using ligatures (the little "fi" and "fl" items seen so often in booktype) and inserting proper "open" and "close" quote marks. This is a most useful program and performs a real service if you do much file transferring. **About Macify Stack** is the users manual in HyperCard format. **Shareware – \$10.**

MW->MWII Startup f: MW->MWII Startup: By Al Heynneman. When installed into the MacWrite II folder, allows the user to double-click on both MacWrite and MacWrite II documents, and have the document open without further action. MacWrite documents will automatically be converted to MacWrite II format. The application is really Path v 1.0. **MW-**



>**MWII Docs** is in MacWrite format.

Quote Converter .1b f: Quote Converter.1b: By Carl Powell III. Use this utility to convert databases between Apple II/Mac and IBM PC formats. Replace tab delimited fields with comma delimited fields with leading and trailing quotation marks. Not a very friendly interface but the function is useful. **Shareware** — \$5.

ReadWrite 1.2 f: ReadWrite 1.2: By PEEK[65]. Reads text files created by any Macintosh program, MacWrite files, or AppleWorks word processor files imported using Apple File Exchange. ReadWrite saves copies of original text in new files, either in text AppleWorks format, ready to export via Apple File Exchange. **ReadWrite Doc** is the documentation. **Shareware** — \$5.

Reponer 0.28 f: Reponer 0.28: By Jon Wind. Performs global replacement and/or deletion of targeted characters in TEXT files. It allows access to all 255 characters, including carriage returns. Up to 5 character replacement sets may be active at a time. **Reponer 0.28 Docs** is in test format. **Make Paragraphs** is a template.

TextConvert 1.62C f (Demo): Text Convert 1.62C: By Stephen Scandalis. Converts line endings of text file to types required by either the Macintosh or IBM PC computers. **Test Files** includes samples for conversion. **TC ReadMe** is in text format. **Shareware** — \$5 for application shell source.

TextPrint f: TextPrint: By Gerald Baron. An ASCII text file lister for a Grappler driving a 9 pin parallel Epson compatible dot matrix printer. **TextPrint.Doc** is in text format.

WireDesk 1.0: By Louis King. Permits you to open, browse, copy and delete text format files.

WN VERS Installer: This utility installs the version number for WriteNow versions 1.00 through 1.07 into the program. This enables it to successfully run under MultiFinder. If you use MultiFinder

and WriteNow this will make things easier. The program is nice to have but not essential since the same thing can be done with ResEdit.

WordRef 1.0 f: WordRef 1.0: By Mark Nodine. Allows users of Microsoft Word to define and refer to cross-references and to have citations and bibliographies automatically generated. Designed to accommodate virtually any bibliographic style or cross-referencing needs. **WordRef User's Guide** is in Word format. **WordRef Stack** is provided for maintaining the bibliography files in HyperCard. **Shareware** — \$25.

DISK #17.03A — WP 3 WORD PROCESSING UTILITIES

Add/Strip 2.9.2 f: Add/Strip 2.9.2: By John Wind. Adds or strips line feeds and/or carriage returns from text files; that is it converts PC format files to Mac format and vice versa. It also has a feature to strip carriage returns from all lines not followed by two carriage returns thus creating paragraphs. **Add/Strip 2.9.2 Docs** is the documentation for the program. **Edit Add/Strip 2.12** permits you to personalize your copy of Add/Strip. **Shareware** — \$25.

DOCMaker v3.72 f: DOCMaker v3.72: By Mark S. Wall, Green Mountain Software. This program was formerly named "The DOCTer." Allows you to create stand alone documents that do not need a word processor to open them. **DOCMaker Shareware Doc** is double clickable. **Shareware** — \$25 with disk.

Address & Mail Manager f: Address & Mail Manager: A FileMaker Pro template designed as an address and mail list manager for business or personal use. The template includes scripts to automate printing of #10 envelopes and mail labels on LaserWriters and to print rolodex cards and mailing labels on ImageWriters. Other scripts automatically create MS Word mail merge files, and create output files for the DayTimer system.

Template Description is in Word format and Template Description (txt) is in text format.

CheckList 1.0: By ElseWare Corporation. Use to examine PageMaker files to determine the fonts, document styles and links with other documents. It shows all of the font faces, styles, sizes, etc. and their first use. It also analyzes whether the document fonts are properly supported by the PostScript drivers. **Shareware** — \$45.

TeachTextMaker 1.1 f: TeachTextMaker 1.1: By Karl Pottie. Create TeachText documents with embedded graphics in the text using this utility and your favorite Word Processor and screen capture, paint or drawing program. **TeachTextMaker doc** is in TeachText format. **Shareware** — \$15.

DISK #20.13A — Mac II 13 PICT RIPPER

PICT Ripper: by Scott Gillespie PICT Ripper allows you to lay any number of text objects on top of PICT files. When the resulting PICTs are printed, the text is printed at whatever resolution the current printer supports. Therefore, you can take a bit-mapped PICT file created with Modern Artist or PixelPaint and print it with high-resolution text superimposed. If you have a high-res color printer PICT Ripper is ideal for creating color presentation graphics. PICT Ripper allows you to print any portion or all of a PICT file. If you have a Tektronix 4693D Color Image Printer (300 dpi Thermal Transfer), special PICT Ripper options allow you to take full advantage of the 93D's various sizing options. You can also print posters and print reduced pictures. Ample built-in Help files are provided.

Magic: A PICT Image created with Modern Artist displaying the use of PICT Ripper to add text.

Trois Balons: A PICT Image demonstrating ray tracing with a PICT Ripper caption.

Hints: A PICT file offering hints about the use of PICT Ripper with the Tektronix printer.

PICT Ripper.support.sea: A file compressed using Auto-Extractor which contains two folders of PICT files, as follows:

Backdrops f: A Note of Explanation....: These files are provided as "backdrops" for word slides. You can use PICT Ripper to add text to these files and create word slides with interesting background effects. These backdrops were created using PixelPaint™ software and were saved as PICT files. They are deliberately made smaller than the maximum potential size to conserve disk space. Try adding text and printing them using PICT Ripper.

Color Maps f: Read This First:

Note: This Read This First file can't be opened by PICT Ripper or any PICT program available to the disk annotator. The description which follows was extrated with ResEdit. These files are provided so that you can print a color guide to better predict the colors of printed output from your Tektronix 4693D Color Image Printer. Each file contains a color chart with a fixed value of RED. There are 11 such files, with RED ranging in value from 0% to 100% in 10% increments. Each color chart has 121 squares with BLUE increasing in 10% increments from left to right, and GREEN increasing from top to bottom. In all, this gives you about 1300 colors from the much larger palette of the 4693D. The technique used to create these files involved some special tricks. The resulting files can only be printed using PICT Ripper and will not necessarily display correctly. To print the files, simply click on the desired file icons, then go to Print Entire PICT under the file menu. This will automatically set the correct printing parameters from PICT Ripper.

SYSTEM SOFTWARE —

TT.FS

TRUETYPE FONTS & SOFTWARE

Font/DA Mover 4.1, TeachText, TrueType™ and TrueType™ Fonts. By Apple Computer, Inc. Install the TrueType Fonts into your system with the Font/DA Mover and copy the TrueType INIT into your system folder. Ta Dah; Apple's new outline font technology on your own Mac. **Installation Instructions** is in TeachText format. Requires System Software 6.0.7 or 6.0.5.

SYSTEM SOFTWARE —

TT.PT

TRUETYPE PRINTING TOOLS

AppleTalk ImageWriter 6.1, ImageWriter 6.1, LQ AppleTalk ImageWriter 6.1 and LQ ImageWriter 6.1 are the printer drivers for the ImageWriters that get copied to the System folder. **LaserWriter Software:**

Backgrounder 1.3, LaserWriter 6.1, Personal LaserWriter SC 6.1 and PrintMonitor 6.1 support all of Apple's LaserWriters and are copied to the System folder.

Utilities: Laser Prep 6.1 and LaserWriter Font Utility 6.1. The Laser Prep file is for use with any Mac running the AppleShare Print Server software. **About Laser Prep** is the TeachText documentaion. The LaserWriter Font Utility downloads, lists and prints catalogs of fonts on any PostScript imaging device.

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On the learning curve...

Tutorials — May

Washington Apple Pi Training Classes for May

Have a new computer, but don't quite know how to use it? Or do you just want to learn a specific program, like Word, Excel, or AppleWorks? Then the Washington Apple Pi Education Program is for you. We provide a number of training classes for WAP members, on a regular basis. Not a member? Well, we have training for you, too—they are just a little bit more expensive. Read on for important details. We've provided complete course descriptions for the Macintosh tutorials, and a general description for the Apple II courses. Unless otherwise indicated, the tutorials will be held at the WAP office.

We urge you to bring your computer with you to most classes, since we have no computers for you to use at the office. If you can't bring your own computer, you'll have to look over someone else's shoulder. Please note that some classes not require you to bring your computer with you.

Occasionally, the WAP class schedule changes due to circumstances out of our control. Please call the office at least one business day prior to the class date to confirm that your class will be held as scheduled. We regret any inconveniences that may arise. We cannot not call you!

Payment for Courses

The fees for each session are \$15 for members, \$20 for nonmembers. Mail or phone in your registration to the WAP Office. We request that you pre-register for the class or classes you wish to take by either sending in the registration form or by phoning your registration into the office. Please do not ask any of the Education Program

volunteers to register. If you've signed up for a class and need to cancel, please do so 2 business days prior to the class, otherwise we can not refund your money.

Apple II GS Tutorials for May

We're providing the Apple II GS Introductory Tutorials, a three part series in May. These courses are held each of the first three Tuesday evenings in May from 7:00 to 10:00 pm at the WAP office. The dates are May 7th for Part I (course # GS 10591), May 14th, for Part II (course # GS 20591), and May 21st, for Part III (course # GS 30591). You may sign up for just one, or for all three, if you wish. Of course all three courses provide you with the most benefit. These classes are designed for beginners, not experienced users.

Introduction to Macintosh, Part I (Course # M10591). This class is designed for the beginning user. You should go through the Guided Tour disk that came with your computer before you come to this class. You'll learn each of the components of your Macintosh, both hardware and software. You'll discover what the System, Finder, Icons, the Active Window, and how they all work. You'll also investigate the components of the Control Panel.

Materials required: Your Macintosh, external drive, start-up disk, and an unformatted disk.

Course Date: Monday, May 6th, 1991, at 7:00 pm.

Introduction to Macintosh, Part II (Course # M20591). This class is designed for the beginning user. You should go through the Guided Tour disk that came with your computer before you come to this class. You'll learn each of the components of your Macintosh, both hardware and

software. You'll learn the finer points of the Menu Bar, various error messages, what the Clipboard and the Scrapbook are, various peripherals and how they are connected to your Macintosh, and, finally, you'll learn about command key equivalents (key board shortcut for Menu Bar commands).

Materials required: Your Macintosh, external drive, start-up disk, and an unformatted disk.

Course Date: Monday, May 13th, 1991, at 7:00 pm.

Introduction to Macintosh, Part III (Course # M30591). This class is designed for the beginning user. You should go through the Guided Tour disk that came with your computer before you come to this class. You'll learn which version of the System software you should be using; you'll learn how to update your system files; about the Set Start-up command; how to use the Font/DA Mover; learn about MultiFinder; and finally, you'll learn about the various RAM configurations possible with each Macintosh.

Materials required: Your Macintosh, external drive or hard drive, start-up disk, and an unformatted disk.

Course Date: Monday, May 20th, 1991, at 7:00 pm.

Introduction to Microsoft Word (Course # MW10591). This class is for those who little or no experience with Microsoft Word. Topics covered are: the many uses of Microsoft Word, Word's environment, a simple demonstration of Word's features, menus and menu commands, window icons, keyboard shortcuts, formatting exercises, and Word's different views of your document.

Materials required: Your Macintosh, an external drive, a copy of your Microsoft Word software.

Date: Wednesday, May 8th, 1991, at 7:00 pm.

Introduction to Microsoft Excel (Course # ME10591). This class is for those who little or no experience with Microsoft Excel. Topics covered are: the many uses of Excel, what Excel is used for, environment, a demonstration, Excel window and tools, menus and menu commands, keyboard shortcuts, advanced features, exercises,

and other views.

Materials required: Your Macintosh, an external drive, a copy of your Excel disks.

Date: Saturday, May 11th, 1991,
at 9:00 am

All About Fonts (Course #MF10191). This is a special class designed to help the new user learn about the various types of fonts for the Macintosh. This class will cover bit mapped fonts (also called screen fonts), outline fonts, Postscript and what it does for fonts, Type 1 and Type 3 Postscript fonts, Adobe Type Manager, what it is and what it can do for you (and can't) do for you, and more. This is one of our more popular classes, please sign up today!

Materials required: None

Date: Saturday, May 18th, 1991,
at 9:00 am.

Index to Advertisers

Award Publications	17
B.O.S.S.	27
Bruce Presentations	27
Capital Presentations	31
Computer Age	6, 7
Data Conversion Services, Ltd.	63
Executive Presentations	18, 40
FedSoft Corporation	30
Hewlett Packard	57
Interactive Data Systems (IDS)	36
ISM, Inc.	49
Laser Print	57
Laser's Resource	39
Mac Corner	Cover 4
Mac Temps	31
Mac Upgrades	Cover 2
Macintosh Business Solutions	84
Maya Computer	13
Multisoft Resources	56
PET Software	57
Publishers Service Bureau	1
Rent-A-Computer	59
Software Ventures	37
Solutions Incorporated	25
U-Print	77
Williams Designs	53
Word Express, Inc. (The)	77
WordPerfect Corporation	Cover 3
World Expo Corporation	28

Washington Apple Pi Tutorial Registration Form

Washington Apple Pi
7910 Woodmont Avenue, Suite 910
Bethesda, Maryland 20814
301-654-8060

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WAP Form #CL006 (mod. 7-90)

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Class # 2 _____

Class # 3 _____

Class # 4 _____

Class # 5 _____

Class # 6 _____

Please leave my name on the Pi mailing list. (The list never leaves the office and all mailings are supervised by the Pi staff). Yes No

APPLE II DISKS

THESE ARE ALL 5.25" DISKS

APPLE SYSTEM DISKS

APSD-01 System Disk - Utilities V.

APPLEWORKS

APWK-01 Desk, Printer and Money Helpers
APWK-02 Food, Lists, etc. (815/816)
APWK-03 Reserved for Tax Templates

COMMUNICATIONS

COMM-01 TCS Instructions 1.05 A & B - Disk 1
COMM-02 TCS Instructions 1.05 C & D - Disk 2
COMM-03 WAPABBS.1 Documentation (121)
COMM-04 WAPABBS.1 (135/136)
COMM-05 DI COMM - Shareware (503)
COMM-06 Kermit 3.78 - Kermit File Transfer
COMM-07 Comm Term and Telecom (808/817)
COMM-08 MicroModem II (SW) - Hayes Term

CP/M

CP/M-01** Master Catalog (401)
CP/M-02 Utilities I and II (402/404)
CP/M-03 Communications (403/409)
CP/M-04 ZCPR2 Install and Utilities (406/408)
CP/M-05 ZCPR2 Docs /Essential Utils (407/410)
CP/M-06 Text Editor and Spreadsh (411/412)
CP/M-07 MDM740 (SSC//7710, & A-CAT)
CP/M-08 Kermit Source and Running Codes
CP/M-09** Kermit Documentation (417)
CP/M-10 Utilities (419)
CP/M-11 Small C. Compiler (420)

EAMON ADVENTURES

EAMN-01 Utilities II and III (220/221)
EAMN-02* Dungeon Designer and City /Clouds
EAMN-03 Beginners Cave (Master) & Alt
EAMN-04* Lair of Minotaur and Cave of the Mind
EAMN-05* Zephyr Riverventure and Castle/Doom
EAMN-06* Death Star and Devil's Tomb
EAMN-07* Caves of Treasure Is. and Furioso
EAMN-08* Magic Kingdom and Tomb of Molinair
EAMN-09* Lost Island and Abductor's Quarters
EAMN-10* Quest and Undergr City (194/195)
EAMN-11* Merlin's and Hogarth Castle (196/197)
EAMN-12* Deathtrap and Black Death (198/199)
EAMN-13* Temple of Ngurct Black Mountain
EAMN-14* Nuclear Nightmare /Feast of Carroll
EAMN-15* Master's Dungeon /Crystal Mountain
EAMN-16* Lost Adventure and Manxome Foe
EAMN-17* The Guantlet and Caverns of Langst
EAMN-18* Future Quest and House of Secrets
EAMN-19* Sewers/ Chi /Slave Pits of Kzorland
EAMN-20* Lifequest and Swordquest (215/216)
EAMN-21* Priests of Xim! and Heroes Castle
EAMN-22* Temple of the Undead and Quest
EAMN-23* Caves/Mondamen & Orb of Polaris
EAMN-24* Death's Gate /Escape From Orc's Lair

EDUCATION

EDUC-01 Education and Personal Education
EDUC-02 Personal Education 2 and Education 3
EDUC-03 Math / Science and Education 4
EDUC-04 Advanced Math and Vectors / Motion
EDUC-05 Albert Camus Int and Elementary Math
EDUC-06 French Vocab/ Tutorial (46/123)
EDUC-07 Boot for L'Hote and L'Hote (48/49)
EDUC-08 Tic-Tac-Toe in French /L'Hote Quiz
EDUC-09 French Poetry Tut and Appollinaire
EDUC-10 Rafel Boot Disk and Rafel (55/56)
EDUC-11 Tic-Tac-Toe in Spanish /Rafel Quiz
EDUC-12 Matute and Lo Fatal (58/59)
EDUC-13 Reading Fun (Shareware) (505)
EDUC-14 Language Arts Treasures
EDUC-15 Floppy Book 1
EDUC-16 Computration Game /AW Temp
EDUC-17 Algebra Tutorial and Bagels Disk
EDUC-18 Newton's Apple (Cocaine)
EDUC-19 Newton's Apple (Teeth)
EDUC-20 WAV Stack and Tutorial Demo

FORTH

FRTH-01 Assembler/Disassmblr /Screen Editor
FRTH-02 Go Forth Tutorial and Fig/Forth 78
FRTH-03 Forth and Floating Point Arithmetic

GAMES

GAME-01 Games A and B (102/107)
GAME-02 Games C and D (111/128)
GAME-03 Games E and F (162/164)
GAME-04 Keyboard and Paddle Games (72/74)
GAME-05 Pinball and Arcade Games (142/157)
GAME-06 Text Adv /Mystery House (SIERRA)
GAME-07 Educational Games G and H (508/509)
GAME-08 Sports and Utilities / Games (143/160)
GAME-09 Adventures /Game Room (811/812)
GAME-10 Haunted House (176/810)
GAME-11 Mostly Games /Wizard Worker I

LOGO

LOGO-01 Logo Tool Kit and \DocS (145/146)
LOGO-02 Sample Disk and Dallas Apple Logo

MISCELLANEOUS

MISC-01 SS (Coin Collect) and Misc. (95/115)
MISC-02 Miscellaneous (119/120)
MISC-03 Miscellaneous and Recipe Files
MISC-04 Glaq and No Name Yet (129/175)
MISC-05 Special Databases /Jim's Data Base
MISC-06 Misc and Applesoft /AppleWriter IIe)
MISC-07 Astronomy Short Programs (506)
MISC-08 Griffith and Weise Astronomy (507)
MISC-09 Aviation - General (Disk 1 of 2) (514)
MISC-10 Aviation - Navigation (Disk 2 of 2) (515)
MISC-11 Gardner's Assistant (518)
MISC-12 Music and Sights / Sounds (71/126)
MISC-13 Merry Christmas and Happy Holidays
MISC-14 Graphics and Cat Graphix (108/171)
MISC-15 Print Shop Graphics (172)
MISC-16 Color Graphics for Fun/Science / Engi.
MISC-17 Plots / Graphs and Charts / Graphs
MISC-18 Business/Math Stat and SS (70/90)
MISC-19 SS (Investment) and SS (Business)
MISC-20 Business A and B (104/113)
MISC-21 Investments A and B (153/154)
MISC-22 Spreadsheet A and Miscellaneous
MISC-23** Riley's Personal Instrumentation (173)

PASCAL

PASC-01 AttachBios for Pascal 1.1 and Utilities
PASC-02 Crypto / Graphics and Bios / Printers
PASC-03 Misc and Read/Write DOS / Printers
PASC-04 Catalogor and Hires Printing / Lisp
PASC-05 Puffin / Holiday Music -CPM-Pascal
PASC-06 3D Education /Drill /Hackers Stuff
PASC-07 Stocks / Weightwatch/Guerilla Guide
PASC-08 Pascal / To & From DOS /(133/314)

PILOT

PILT-01** Pilot Language (167)

UTILITIES

UTIL-01 New Member's Disk - 2.01 A/ B (821)
UTIL-02 New Member's Disk - 2.01 C/D (822)
UTIL-03 Utilities A and B (100/101)
UTIL-04 Utilities C and D (112/118)
UTIL-05 Utilities E and F (124/132)
UTIL-06 Utilities G and H (138/43)
UTIL-07 Utilities I and J (44/77)
UTIL-08 Mach. Lang. Utilities and One-Key DOS
UTIL-09 Beginners Choice /Intermediate Utils.
UTIL-10 Diversi Copy and Diversi DOS (45/130)
UTIL-11 Additions to ProDOS and Zap Utility
UTIL-12 Utilities A (ProDOS) and File Cabinet
UTIL-13 Imageworks (174/807)
UTIL-14 DOS 3.3 System Master and Tutorial
UTIL-15 Visi-Trend / Visi-Plot and Calculink
UTIL-16 AppleSoft Tutor and Picture Packer
UTIL-17 AppleWriter Utilities (168)
UTIL-18 AppleSoft Programs and Love's Follies
UTIL-19 "Old" New Member's Disk (134)
UTIL-20 JoyReader (Shareware) (819)
UTIL-21 Large Type JoyReader (SW) (823)
UTIL-22 DB Master V. 5 - Sample Disk
UTIL-23 DB Master V. 5 - Sample Files /Docs

APPLE IIGS DISKS

THESE ARE ALL 3.5" DISKS

IIGS SYSTEM DISKS

GSAS-01 System Disk V. 5.0.4
GSAS-02 System Tools V. 5.0.4

IIGS COMMUNICATIONS

GSCM-01A FreeTerm GS (2003)
GSCM-02A SnowTerm

IIGS DESK ACCESSORIES 8 DISK SET \$24)

GSDA-01 Desk Accessories I (2020)
GSDA-02 Desk Accessories 2
GSDA-03 Desk Accessories 3
GSDA-04 Desk Accessories 4
GSDA-05 Desk Accessories 5
GSDA-06 Desk Accessories 6
GSDA-07 Desk Accessories 7
GSDA-08 Desk Accessories 8

IIGS FONTS (10 DISK SET \$30)

GSFT-01 Fonts A-1
GSFT-02 Fonts A-2
GSFT-03 Fonts B-1
GSFT-04 Fonts B-2
GSFT-05 Fonts C-1
GSFT-06 Fonts C-2
GSFT-07A Fonts D-1
GSFT-08 Fonts E/F-1
GSFT-09A Fonts G-1
GSFT-10 Fonts H-1

IIGS GAMES (18 DISK SET \$54)

GSGM-01 Mean 18 Golf Courses 1 (2007)
GSGM-01 Mean 18 Golf Courses 2 (2018)
GSGM-03 Bouncing Bluster Boot Disk
GSGM-04 Bouncing Bluster Data and Docs
GSGM-05 Bouncing Bluster Consn Set
GSGM-06 Games 1
GSGM-07 Games 2
GSGM-08 Games 3
GSGM-09 Games 4
GSGM-10 Games 5
GSGM-11 Games 6
GSGM-12 Games 7
GSGM-13 Games 8
GSGM-14 Games 9
GSGM-15 Games 10
GSGM-16 Games 11
GSGM-17 Mean 18 Golf Courses 3
GSGM-18 Games 12

IIGS GRAPHICS (20 DISK SET \$60)

GSGX-01 Demo Disk A (2002)
GSGX-02 Slide Show I (2004)
GSGX-03 Slide Show 2 (2016)
GSGX-04 Slide Show 3 (2017)
GSGX-05 Nucleus Demo -ROM 3
GSGX-06 GIF Graphics 1
GSGX-07 Pics and Utilities 1
GSGX-08 Pics and Utilities 2
GSGX-09A Pics and Utilities 3
GSGX-10 Pics and Utilities 4
GSGX-11 Modulaa
GSGX-12 Paula Abdul demo
GSGX-13 Pics and Utilities 5
GSGX-14 Slide Show 4
GSGX-15 Slide Show 5
GSGX-16 Nucleus Demo -ROM 1
GSGX-17 PSGS Graphics 1 - Color
GSGX-18 PSGS Graphics 2 - Mono
GSGX19 PSGS Graphics 3 - Mono
GSGX-20 Marilyn Monroe Slide Show

IIGS HYPERSTUDIO (14 DISK SET \$42)

GSHS-01 HyperStudio System - Demo
GSHS-02 HS.Demo - Demo Version
GSHS-03 HS Sounds - Demo Version
GSHS-04 More Stacks - Demo Version
GSHS-05 More Stacks 2 - Demo Version
GSHS-06 Video Demo - Demo Version
GSHS-07 Com Stack - Demo Version
GSHS-08 MUG 087 - Demo Version

FOR YOUR REFERENCE - THE NUMBERS SHOWN IN PARENTHESES () AFTER THE DISK NAMES ARE THE OLD DISK NUMBERS

GSHS-09 USA - Demo Version
GSHS-10 Hs Art 2 - Demo Version
GSHS-11 Misc. HS stacks 1
GSHS-12 Misc. HS stacks 2
GSHS-13 Arizona Stack Disk 1
GSHS-14 Arizona Stack Disk 2

IIGS ICONS (8 DISK SET \$24)

GSIC-01 Finder Icons 1 (2022)
GSIC-02 Finder Icons 2 (2027)
GSIC-03 Finder Icons 3
GSIC-04 Finder Icons 4
GSIC-05 Finder Icons 5
GSIC-06 Finder Icons 6
GSIC-07 Finder Icons 7
GSIC-08 Finder Icons 8

IIGS MUSIC (10 DISK SET \$30)

GSMU-01 SoundSmith and Songs
GSMU-02 SoundSmith Songs 1
GSMU-03 SoundSmith Songs 2
GSMU-04 SoundSmith Songs 3
GSMU-05 SoundSmith Songs 4
GSMU-06 SoundSmith Songs 5
GSMU-07 Diversi Tune (C) Songs 1
GSMU-08 Music Studio Songs 1
GSMU-09 MS Songs 2
GSMU-10 Variety Pack of Songs

IIGS MISCELLANEOUS

GSMS-01 New Member's Disk (2000)
GSMS-02 Demo Source Code 1 (2005)
GSMS-03 Demo Source Code 2 (2006)

IIGS SOUNDS (10 DISK SET \$30)

GSSN-01A Sounds 1 (2014)
GSSN-02A Sounds 2 - Nostalgia (2015)
GSSN-03 Sounds 3
GSSN-04 Sounds 4
GSSN-05 Sounds 5 - Simpsons 1
GSSN-06 Sounds 6 - Simpsons 2
GSSN-07 Sounds 7
GSSN-08 Sounds 8
GSSN-09 Sounds 9
GSSN-10 Sounds 10

IIGS TUTOR TECH

GSTT-01 WAP Stack- REV. (2019)

IIGS UTILITIES (9 DISK SET \$27)

GSUT-01A Utilities 1 (2001)
GSUT-02 JumpStart Program Sel V. 3
GSUT-03 Utilities 2 (2028)
GSUT-04A Utilities 3 (2029)
GSUT-05 Utilities 4
GSUT-06 ZZ Copy - v 2.21 Disk copier
GSUT-07 Utilities 5
GSUT-08 UtilityWorks GS
GSUT-09 Utilities 6

APPLE /// DISKS

THESE ARE ALL 5.25" DISKS

/// ACCOUNTING

3ACT-01 Easy Accounting
3ACT-02 Easy System and Accounts Rec.
3ACT-03 Easy System and A/Cn. Ledger

/// 3EZP & AW TEMPLATES

3AWZ-01 AW - EZP Bus Templates
3AWZ-02 Checkbook Plus by Lomartire

/// BUSINESS BASIC

3BSB-01 Pohlman Disk 01 (1017)
3BSB-02 Pohlman Disk 02 (1018)
3BSB-03 Pohlman Disk 03 (1019)
3BSB-04 Pohlman Disk 04 (1020)
3BSB-05 Pohlman Disk 05 (1021)
3BSB-06 PPT Demo / BASIC Helps
3BSB-07 BASIC 1.23 & Utilities /
Auto BASIC Editor by Boston

3GAM-01 Games 01 (1001)
3GAM-02 Games for Kids (1007)
3GAM-03 Cap'n Magneto - Revised 1/89

/// INFORMATION

3GRX-01 Sketchpad and Slideshow
3GRX-02 Fig Factory Manual (1069)
3GRX-03 Fig Factory - Black and White
3GRX-04 Fig Factory - Color (1071)
3GRX-05 Raster Graphics Tool Kit (1072)
3GRX-06 3-D Modeling Tool Kit (1073)
3GRX-07 Chartmaker III (1074)
3GRX-08 Graphics Utilities (1075)
3GRX-09 Graphics Disk 01 (1062)
3GRX-10 Graphics Disk 02 (1076)
3GRX-11 Graphics Disk 03 (1077)
3GRX-12 Graphics Disk 04 (1078)
3GRX-13 Graphics Disk 05 (1079)
3GRX-14 Graphics Disk 06 (1080)
3GRX-15 Calendar by Bloom (1081)
3GRX-16 Typewriter Art Disk 01 (1082)
3GRX-17 Typewriter Art Disk 02 (1083)
3GRX-18 Poster by Bloom (1084)
3GRX-19 Raster Demo / Tmapio
3GRX-20 Icon Demo / Tfont
3GRX-21 Trixelmap Demo / Mask Demo
3GRX-22 Tmem Demo / Trexts Demo
3GRX-23 GIF Graphics 01
3GRX-24 GIF Graphics 02
3GRX-25 GIF Graphics 03
3GRX-26 GIF Graphics 04
3GRX-27 Grafixworks 1 and 2 (Shareware)
3GRX-28 Grafixworks 3 and 4 (Shareware)
3GRX-29 Sign by Bloom

/// MISCELLANEOUS

3INF-01 AWAP III SIG PD Catalog - 7/1/90
3INF-02 ANew Member's Disk - 7/8/90
3INF-03 Best of MAUG (1008)
3INF-04 Best of The Source (1009)
3INF-05 Best of TAU (1010)
3INF-06 Best of ATUNC (1055)
3INF-07 Best of Ill's Company - Disk 01
3INF-08 Best of Ill's Company - Disk 02
3INF-09 The Best of Bloom (1035)
3INF-10 Impert's Corner by Bloom (1096)
3INF-11 Phase III Conference Plus! (1047)
3INF-12 Best of Ottalini - Disk 01 (1040)
3INF-13 Best of Ottalini - Disk 02 (1058)
3INF-14 Best of Ottalini - Disk 03 (1059)
3INF-15 Best of Ottalini - Disk 04 (1087)
3INF-16 Best of Pair BBS
3INF-17 Reviews by Bloom
3INF-18 Ill Cheers (Boot and Program)
3INF-19 Ill Cheers (V 1 and 2)

/// REPAIRS

3MSC-01 File Cabinet / Sort Directory (1046)
3MSC-02 Contributions - Disk 01 (1053)
3MSC-03 Contributions - Disk 02 (1061)
3MSC-04 Contributions - Disk 03 (1086)
3MSC-05 Le Grayhaven Cookbook Plus!
3MSC-06 Double Boot - SOS and ProDOS
3MSC-07 Apple III Demo Disk 01
3MSC-08 Apple III Demo Disk 02
3MSC-09 Apple III Demo Disk 03
3MSC-10 Apple III Plus Demo - Pascal
3MSC-11 Best of Salerno
3MSC-12 Apple II Boot Disk

3REP-01 Apple 3 Diagnostics - Disk 01 (1013)
3REP-02 Apple 3 Diag - Disk 02/Block Edit
3REP-03 Repairing your Apple III (1088)
3REP-04 Brain Surgeon (1089)
3REP-05 Disk Map (1090)
3REP-06 Disk Check and Pro Health (1091)
3REP-07 Vindicator and Catalyst Fixer (1092)
3REP-08 Block Editor and Block Byter (1093)
3REP-09

/// TELECOMMUNICATIONS

3TEL-01 Telecom - Disk 01 (1063)
3TEL-02 Telecom - Disk 02 and Access III
3TEL-03 Telecom - Disk 03 (1065)
3TEL-04 Kermit III (1066)
3TEL-05 XModem III (1067)
3TEL-06A TerminALL Manual - 7/89 (1032)
3TEL-07A TerminALL Program - Revised 1/89
3TEL-08 WAP TCS Disk

/// UTILITIES

3UTL-01 System Utilities and Data (1004)
3UTL-02 Apple II Emulation - Disk 01 (1043)
3UTL-03 Apple II Emulation - Disk 02 (1044)
3UTL-04A SOS Drivers - revised 9/90 (1052)
3UTL-05 Basic Boot Disk (1014)
3UTL-06 Basic Utilities - Disk 01 (1002)
3UTL-07 Programmers Power Tools (1056)
3UTL-08 Applecon (1016)
3UTL-09 Diskmaker and Appleseeds (1045)
3UTL-10 Basic XT and Basic Utilities - Disk 02
3UTL-11 The Retriever (1023)
3UTL-12 Power Print III (1024)
3UTL-13A Disk Window III Plus - 2/89 (1025)
3UTL-14 Source Window and Data Window
3UTL-15 Powercat and Basic XRF (1027)
3UTL-16 Basic Extension (1031)
3UTL-17 Power Keys DM Plus (1034)
3UTL-18 RAM Plus III and Two-n-Fro III /128K
3UTL-19 Basic GTO (1051)
3UTL-20 Custom Font Manual (1037)
3UTL-21 Custom Font (1038)
3UTL-22 Fonts - Disk 01 (1039)
3UTL-23 Disk III Backup by Bloom (1011)
3UTL-24 Gucspar by Bloom (1042)
3UTL-25A ASCIIDIF by Bloom - 4/88 (1028)
3UTL-26 Mail List Manager Manual by Bloom
3UTL-27 MLM Utilities by Bloom - Disk 01
3UTL-28 MLM Utilities by Bloom - Disk 02
3UTL-29 MLM Utilities by Bloom - Disk 03
3UTL-30 AppleWriter to 3 EZP by Bloom
3UTL-31 Pascal Menu Maker (1054)
3UTL-32 Catalyst Release
3UTL-33 Reformatter III

/// WORD PROCESSING

3WDP-01 AppleWriter (1006)
3WDP-02 Footnote III (1003)
3WDP-03 Ink Well Manual (1029)
3WDP-04 Ink Well Program (1030)
3WDP-05 AppleWriter Demo
3WDP-06 Script III - Pascal Text Editor

APPLE II DISKS

THESE ARE ALL 3.5" DISKS

APPLE SYSTEM DISKS

2APS-01 System Disk - Utilities V. 3.1

COMMUNICATIONS

2COM-01 TCS Instructions 1.05
2COM-02 Appletnet V. 1.3

EDUCATION

2EDU-01 Newton's Apple / Cocaine & Teeth

TECH NOTES

2TEN-01 IIGS-GSOS-About-Index
2TEN-02 Ilc-Ile-IMWR — etc.
2TEN-03 FTNS-STDS-Tidbits

UTILITIES

2UTL-01 New Member Disk 2.01
2UTL-02 DB Master V.5 (Shareware)

MACINTOSH DISKS & WAP DISKETTERIA ORDER FORM

Anti-Virus Utilities	6.08 - LW 8	12.12 - S 12	14.24 - PH 24	HyperCard StackWare	HyperCard Externals
5 disk set; \$15	6.09 - LW 9	12.13 - S 13	14.25 - PH 25	44 disk set; \$132	5 disk set; \$15
1.01C - AV 1	6.10 - LW 10	12.14 - S 14		19.01A - SW 1	21.01 - HE 1
1.02C - AV 2	6.11 - LW 11	12.15 - S 15	Miscellaneous Utils	19.02A - SW 2	21.02 - HE 2
1.03C - AV 3	6.12 - LW 12	12.16 - S 16	11 disk set; \$33	19.03 - SW 3	21.03 - HE 3
1.04B - AV 4	6.13 - LW 13	12.17 - S 17	15.01A - MU 1	19.04 - SW 4	21.04 - HE 4
1.05 - AV 5	6.14 - LW 14	12.18 - S 18	15.02A - MU 2	19.05 - SW 5	21.05 - HE 5
	6.15 - LW 15	12.19 - S 19	15.03A - MU 3	19.06 - SW 6	
Desk Accessories	6.16 - LW 16	12.20 - S 20	15.04A - MU 4	19.07 - SW 7	System Software 6.0.5
16 disk set; \$48	6.17 - LW 17	12.21 - S 21	15.05A - MU 5	19.08 - SW 8	5 disk set; \$15
2.01B - DAs 1	6.18 - LW 18	12.22 - S 22	15.06A - MU 6	19.09 - SW 9	SS1.ST
2.02B - DAs 2		12.23 - S 23	15.07A - MU 7	19.10 - SW 10	SS2.PT
2.03B - DAs 3	INITs & cdevs	12.24 - S 24	15.08A - MU 8	19.11 - SW 11	SS3.U1
2.04B - DAs 4	17 disk set; \$51	12.25 - S 25	15.09A - MU 9	19.12 - SW 12	SS4.U2
2.05B - DAs 5	9.01 - I/C 1	12.26 - S 26	15.10A - MU 10	19.13 - SW 13	SS5.NI
2.06B - DAs 6	9.02 - I/C 2	12.27 - S 27	15.11A - MU 11	19.14 - SW 14	
2.07B - DAs 7	9.03 - I/C 3	12.28 - S 28		19.15 - SW 15	System Software 6.0.7
2.08B - DAs 8	9.04 - I/C 4	12.29 - S 29	System Utils	19.16 - SW 16	4 disk set; \$12
2.09B - DAs 9	9.05 - I/C 5	12.30 - S 30	13 disk set; \$39	19.17 - SW 17	SS1.ST
2.10B - DAs 10	9.06 - I/C 6	12.31 - S 31	16.01B - SU 1	19.18 - SW 18	SS2.PT
2.11B - DAs 11	9.07 - I/C 7		16.02B - SU 2	19.19 - SW 19	SS3.U1
2.12B - DAs 12	9.08 - I/C 8	Telecommunications	16.03B - SU 3	19.20 - SW 20	SS4.U2
2.13B - DAs 13	9.09 - I/C 9	9 disk set; \$27	16.04B - SU 4	19.21 - SW 21	
2.14B - DAs 14	9.10 - I/C 10	13.01A - T 1	16.05B - SU 5	19.22 - SW 22	TrueType Software
2.15B - DAs 15	9.11 - I/C 11	13.02A - T 2	16.06B - SU 6	19.23 - SW 23	2 disk set; \$6
2.16B - DAs 16	9.12 - I/C 12	13.03A - T 3	16.07B - SU 7	19.24 - SW 24	TT.FS
	9.13 - I/C 13	13.04A - T 4	16.08B - SU 8	19.25 - SW 25	TT.PT
FKeys (Function Keys)	9.14 - I/C 14	13.05A - T 5	16.09B - SU 9	19.26 - SW 26	
2 disk set	9.15 - I/C 15	13.06A - T 6	16.10B - SU 10	19.27 - SW 27	HyperCard Update 1.2.5
4.01A - FKs 1	9.16 - I/C 16	13.07A - T 7	16.11B - SU 11	19.28 - SW 28	HC & Stacks - HC.01
4.02A - FKs 2	9.17 - I/C 17	13.08A - T 8	16.12B - SU 12	19.29 - SW 29	HC Help - HC.02
		13.09 - T 9	16.13B - SU 13	19.30 - SW 30	HC Ideas - HC.03
ImageWriter Fonts	Miscellaneous		16.14B - SU 14	19.31 - SW 31	
15 disk set; \$45	3 disk set	Programmer/Hacker	16.15B - SU 15	19.32 - SW 32	HyperCard Update 2.0
5.01 - IW 1	10.01 - M 1	25 disk set; \$75		19.33 - SW 33	5 disk set; \$15
5.02 - IW 2	10.02 - M 2	14.01 - PH 1	Word Processing Utils	19.34 - SW 34	HC.01 - Program
5.03 - IW 3	10.03 - M 3	14.02 - PH 2	3 disk set	19.35 - SW 35 †	HC.02 - Help
5.04 - IW 4		14.03 - PH 3	17.01A - WP 1	19.36 - SW 36 †	HC.03 - Stacks
5.05 - IW 5	Paintings (MacPnt)	14.04 - PH 4	17.02A - WP 2	19.37 - SW 37	HC.04 - More Stks
5.06 - IW 6	5 disk set; \$15	14.05 - PH 5	17.03A - WP 3	19.38 - SW 38	HC.05 - Tutorial
5.07 - IW 7	11.01 - P 1	14.06 - PH 6			
5.08 - IW 8	11.02 - P 2	14.07 - PH 7	Adobe Screen Fonts	Mac II Series	Serially Numbered
5.09 - IW 9	11.03 - P 3	14.08 - PH 8	16 disk set; \$48	13 disk set; \$39	13 disk set; \$39
5.10 - IW 10	11.04 - P 4	14.09 - PH 9	18.01A - AF 1	20.01 A - M II 1	Disk 74/75
5.11 - IW 11	11.05 - P 5	14.10 - PH 10	18.02A - AF 2	20.02 A - M II 2	Disk 77/78
5.12 - IW 12		14.11 - PH 11	18.03A - AF 3	20.03 A - M II 3	Disk 80/84
5.13 - IW 13	Digitized Sounds	14.12 - PH 12	18.04A - AF 4	20.04 A - M II 4	Disk 85/89
5.14 - IW 14	31 disk set; \$93	14.13 - PH 13	18.05A - AF 5	20.05 A - M II 5	Disk 91/95
5.15 - IW 15	12.01 - S 1	14.14 - PH 14	18.06A - AF 6	20.06 A - M II 6	Disk 96/104
	12.02 - S 2	14.15 - PH 15	18.07A - AF 7	20.07 A - M II 7	Disk 105/106
LaserWriter Fonts	12.03 - S 3	14.16 - PH 16	18.08A - AF 8	20.08 B - M II 8	Disk 108/128
18 disk set; \$54	12.04 - S 4	14.17 - PH 17	18.09A - AF 9	20.09 B - M II 9	Disk 134/143
6.01 - LW 1	12.05 - S 5	14.18 - PH 18	18.10A - AF 10	20.10 A - M II 10	Disk 147
6.02 - LW 2	12.06 - S 6	14.19 - PH 19	18.11A - AF 11	20.11 A - M II 11	Disk 150/151
6.03 - LW 3	12.07 - S 7	14.20 - PH 20	18.12A - AF 12	20.12 A - M II 12	Disk 153
6.04 - LW 4	12.08 - S 8	14.21A - PH 21	18.13A - AF 13	20.13 A - M II 13	
6.05 - LW 5	12.09 - S 9	14.22A - PH 22	18.14A - AF 14		
6.06 - LW 6	12.10 - S 10	14.23 - PH 23	18.15A - AF 15	19.35† 6 disk set; \$15	
6.07 - LW 7	12.11 - S 11		18.16A - AF 16	19.36† 2 disk set; \$7	

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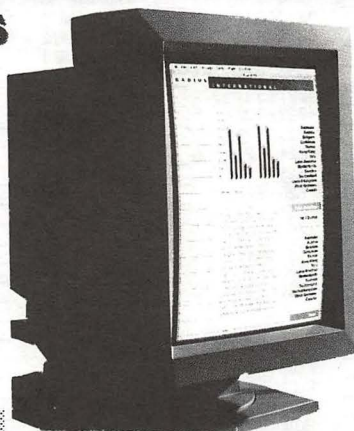


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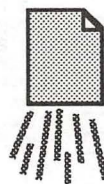
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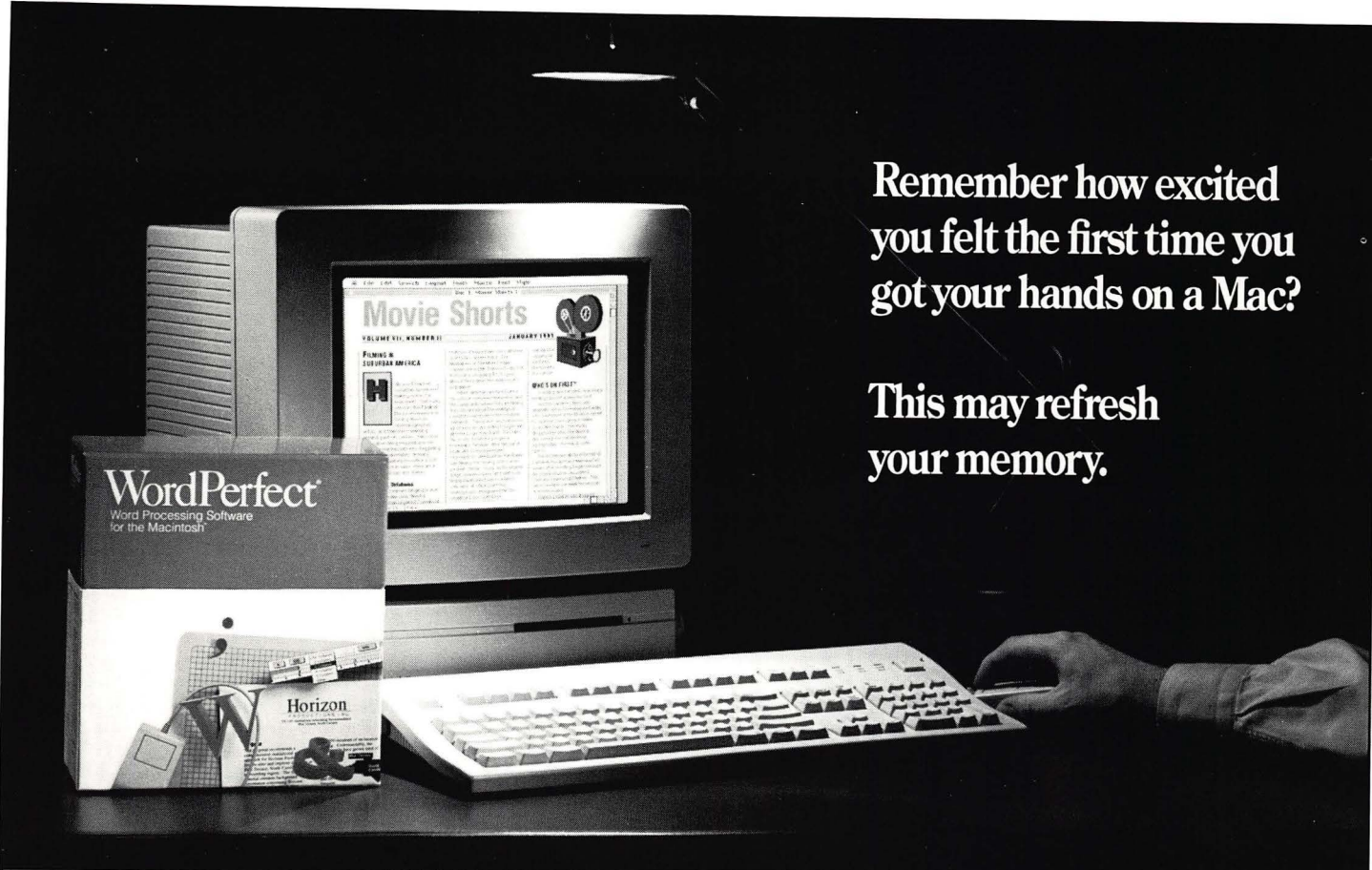
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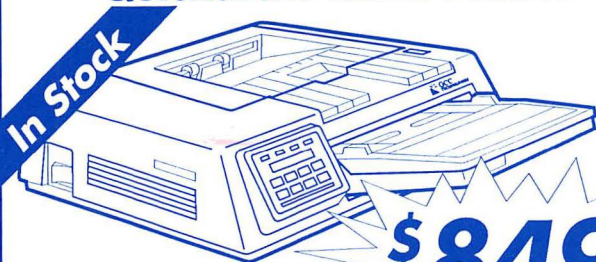
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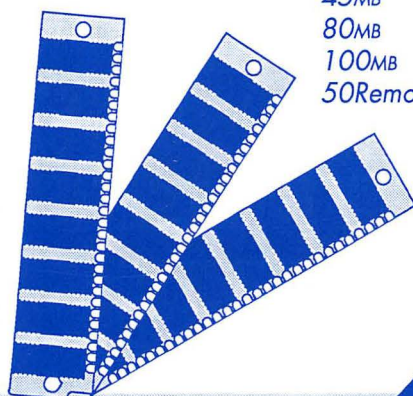


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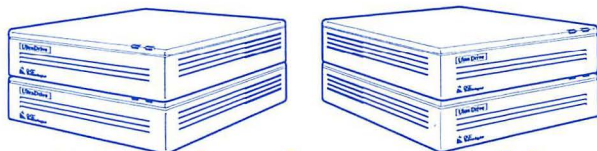
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