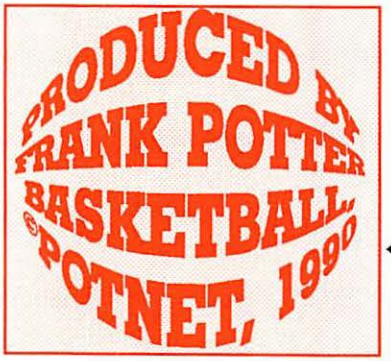
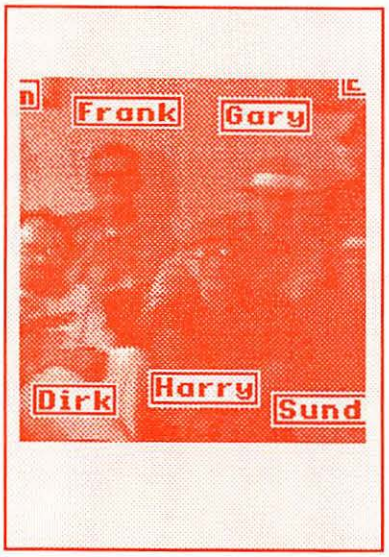
$2.95

washington apple pi

The Journal of Washington Apple Pi, Ltd.

Volume 12, Number 4 April 1990





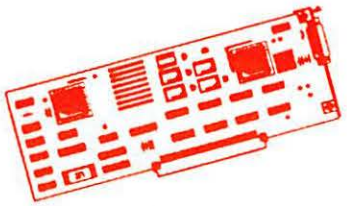
SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE

Mac Corner
The Macintosh Only Store

Macintosh is a ™ of Apple C.C.

MacCORNER's
MARCH SUPER SPECIALS

The Best Value on Mac Peripherals & Software Anywhere!

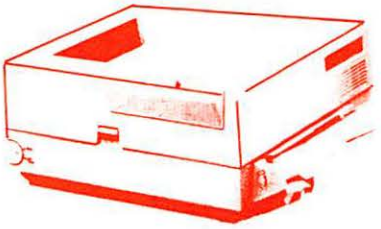


$579
24 Bit Card by Rasterops

$79
1 Megabyte SIMMS*

SUPER SAMPLER!

Sony Disks dsdd...	$12
Type Align (for ATM)...	$59
2 Meg. Upgrade	$158
4 Meg. Upgrade	$316
Abaton FAXmodem 9600bd	$419
WriteImpact 360dpi printer	$639
FlatBed Scanner 300 (d)	$799
45 meg PLI Infinity Cart. Drive	$899
Rasterops 2 Page Display	$1299



$64
MacinTax '89

$599
Ultradrive UD-45E

Business Laser Printer $2599
Very Fast PostScript Laser
W/ 39 typel. & SCSI Port
1 Year Warranty!

2sdd Box
$9.95!

TEFAX $989
9600bd Manual Fax
and FaxModem
Hi Res Scanner
200dpi printer

MARCH 15-31st
PI MEMBERS ONLY!

948-1538

Lowest Software Prices Anywhere!

Additional Parking In Rear

*100ns SIMMS; Also in stock 80ns SIMMS. Installation $35. All prices reflect cash discount. Call us with any questions!

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

Clearance Center Opens!

ComputerLand Mid-Atlantic proudly announces the Grand Opening of our Clearance Center at --

6443 Old Alex. Ferry Road (next to our Clinton Store)
Clinton, MD 20735
Call 856-2500 for hours of operation

The Apple® Macintosh® II is the most affordable 6-slot system. It gives you maximum expandability at a price that's hard to beat.

Just look at these fantastic savings!

Macintosh II Base Model Demo	**$1999.00**
Macintosh II Color Monitor Demo	**499.00**
Cricket Draw	**49.00**
Cricket Paint	**29.00**
Full Impact	**199.00**
Silicon Press	**29.00**
Sargon 4	**24.00**
Beyond Zork (Apple II)	**24.00**
Time Masters	**19.00**
American Discovery	**$ 24.00**
Master Juggler	**49.00**
Assorted Applied Engineering Boards	**CALL**
PC Transporter	**299.00**
Orange Micro Mac 86 board	**349.00**
CMS MacStak external 20	**349.00**
CMS MacStak external 100	**899.00**
Gravis Joystick (Apple II)	**35.00**

AND MORE, MORE, MORE!

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

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

Computerland®
Mid-Atlantic

Seven Business and Service Centers

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

Corporate Specialists

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

Authorized Dealer

Owned and Operated by Clinton Computer

Table of Contents

Volume 12 ..... April 1990 ..... Number 4

Club News

SIGs and Slices

General Information

Macintosh Articles

Apple II

Apple III

Games

TCS (Telecommunications)

Disk Library

washington Apple pi

This issue of the Washington Apple Pi Journal was created on a Macintosh IIcx, and printed on a LaserWriter IINTX.

The program used was PageMaker 3.02; the word processing program was Microsoft Word 4.0; the principal typeface is Adobe Garamond for the articles, and Helvetica and Condensed Helvetica for headlines, emphasis and here and there, where it seemed appropriate or like a good idea at the time, or we ran out of space, which also happens.

Now, what do you think of *this* type face? Compare it to Palatino, which is what we have been using until recently, and let us know how you feel about the whole thing. Or anything else that you feel like passing on, for that matter..

Editorial Staff

Managing Editor
Frank Potter (703) 620–8886
Graphics Editor
Nancy Seferian (202) 333–1260
Apple II Editor
Tim McGraw (301) 585–3289
Macintosh Editor
Marty Milrod (301) 464–5981
Copy Editor
David Harris (202) 966–6583
Calendar Editor
Andy Shaw (301) 595–2539

Deadlines

Writers' submissions
May ..... *March 26*
June ..... *April 24*
Editors' submissions
May ..... *April 2*
June ..... *May 1*
Ad space reservations
May ..... *March 22*
June ..... *April 23*
Camera-ready ad copy
May ..... *March 26*
June ..... *April 27*

Postal Information

Washington Apple Pi is published monthly by Washington Apple Pi, Ltd., 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814.

Annual membership dues for the year 1990 to Washington Apple Pi, Ltd. include $24.00 for a subscription to the Washington Apple Pi journal.

POSTMASTER: Send address changes to Washington Apple Pi, 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814.

WAP OFFICERS STAFF & VOLUNTEERS

Officers and Board of Directors

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

Office Staff

Office Manager	Nancy Pochepko
Office Assistants	Ambrose Liao
	Phil Shapiro

Volunteers

Group Purchases	Rich Wasserstrom	(202) 479-2516*
Head Reading Lib.	Walt Francis	(202) 966-5742
Apple Tea Coord.	Amy Billingsley	(301) 622-2203
Dealer Relations Comm.	John Alden	(202) 686-1656
	Harvey Kaye	(301) 493-6875
	Rich Wasserstrom	(202) 479-2516*
Legal Counsel	Richard Wohlstrom	
Membership	Dana Schwartz	(301) 654-8060
SIGs & Slices Coord.	Bob Shaffer	(301) 384-3724
Hotline Coordinator	Larry Feldman	(202) 546-9556
Telecom SYSOP	Leon Raesly	(301) 220-0717
Journal Store Distribution	Andy Wallo	(703) 430-1553
Publicity	Joe Chelena	
	Chuck Sicard	
	Curtis Lauret	774-6721
Tutorial Coordinators	Apple II	
	Peter Combes	(301) 251-6369
	Allen Beach	
	Macintosh	
	Rob Clark	(301) 428-9207
	Eileen O'Grady	(703) 532-0641
Community Affairs	Rick Gilmore	(301) 587-6928

Call only evenings 7:00-9:30, M-F

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

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

Library Volunteers

DOS 3.3 Librarian	Jim Little	(301) 762-3215
Macintosh Librarian	David Weikert	(301) 963-0063
	Martin Milrod	(301) 464-5981
Pascal Librarian	open	
ProDOS-CP/M Libr.	open	
IIgs Librarian	Sam Knutson	(301) 498-8411
	Richard Sanders	(703) 450-4371
Apple II Disks	John Ruffatto	
Apple III Disks	David Ottalini	(301) 681-6136
John Bell	Bob Houts	John Ruffatto
		Dave Harvey
Gary Hayman		
Mac Library		
Dave Benbennick	Rick Capman	David Condit
Hampton DeJarnette	John DeMarco	Garry Elliott
Ben Frank	Andy Gallant	Gary Grey
Mary Hockmeyer	William Jones	Ralph Mullendore
Fred Rodgers	Tony Salerno	Charles Sicard
Bob Soule	Joe Swick	Bob Vandegrift

SIG Chairs

Annapolis Slice		
President	Ray Settle	(301) 647-9192
V.P./Programs	Seth Mize	(301) 766-1154
Secretary	Kay Cave	(301) 266-9752
Treasurer/Membership	Bill Derouin	(301) 647-0802
AppleWorks	Gary Hayman	(301) 345-3230
Apple IIGS	Gary Hayman	(301) 345-3230
Apple III	David Ottalini	(301) 681-6136
	Jim Jutzin	(703) 790-1501
AVSIG	Nancy Seferian	(202) 333-0126
Columbia Slice		
Presidents	Ann MacKay	(301) 740-4482
	Paul Retz	(301) 596-2185
V. Presidents, Mac	Ann Knust	(301) 781-7587
	Pat Cappelaere	(301) 596-3989
V. Presidents, Apple	Tom Cook	(301) 995-0352
	Tom Crowley	(301) 730-2319
Treasurer	Neil Gordon	(301) 381-5877
Secretary	Steve Gaston	(301) 992-0480
Apple Ambassador	Tim Childers	(301) 997-9317
Database SIG	Eric Gutsche	(703) 379-1265
DisabledSIG	Jay Thal	(202) 244-3649
Desktop Publishing SIG	Tom Piwowar	(202) 223-6813
EDSIG	Phil Shapiro	(202) 686-5465
Excel SIG	Larry Feldman	(202) 546-9556
Federal SIG	Jim Manley	(703) 490-1034
Frederick Slice	Scott Galbraith	(301) 865-3035
GameSIG	Paul Moore	(703) 532-1029
HyperCard	Nancy Wallace	(301) 530-2881
	Mark Frazier	(202) 546-8325
HyperTalk	David Mudd	(703) 683-1746
Mac Programmers	Nancy Byrd	(703) 978-3440
	Bruce Jacobs	(301) 439-7812
New SIG	Chris Bastian	(301) 907-8187
NeXT SIG	Hugh O'Neill	(202) 328-9510
PI-SIG	Ted Meyer	(703) 893-6845
StockSIG	Peter Kasper	(703) 620-4071
Telecomm. SIG	Allan Levy	(301) 340-7839
Works	Chris Bastian	(301) 907-8187

FREE Microcomputer Training & Consulting Services from Gestalt Systems!

Two Students for the Price of One!*

When your company sends one person to a Gestalt Systems 6 hour training class at our facility, a second person can attend that class at no additional charge. Subjects include:

- Introductory Courses
- Word Processing
- Spreadsheets
- Graphics
- Desktop Presentations
- Desktop Publishing
- Database Management
- Network Administration

Free Hour of Technical Consulting! (No Obligation)*

A Gestalt technical consultant will visit your location to answer your questions and provide insight into the latest computer technology as it applies to your business. Topics include:

- Selecting a Computer System
- Macintosh & IBM Connectivity
- Local Area Networking
- Electronic Publishing/Presentations
- Database Development
- Computer Systems Administration
- Setting up On-line Information Systems
- Imaging/Scanning

Send us your questions in advance and get the most out of your free hour.
Fax (703) 471-6404

Call (703) 471-6842
to take advantage of these offers or for more information on Gestalt Systems' services.

Gestalt

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

Gestalt Systems is 1 of only 23 members nationwide of the Apple Training Alliance

Training Alliance

*Certain restrictions apply. Limit - one per company location. Gestalt Systems reserves the right to withdraw these offerings at any time.

"The Studio Series"

•Letraset

For Design with Masking & Four Color Process Seps

• ColorStudio™

For Object Drawing & Font Conversion

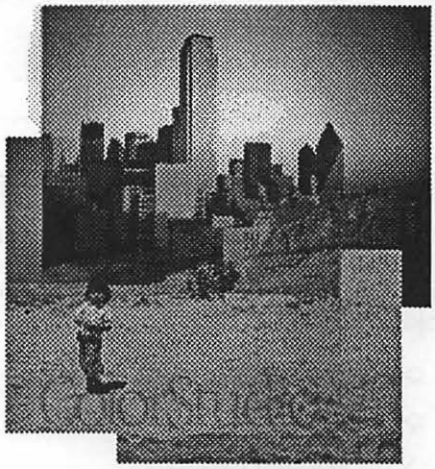
• FontStudio™

For Banner & Display Type

• LetraStudio®

For Commercial Page-Layout & Design

• DesignStudio™



YESTERDAY TODAY & TOMORROW WITH Letraset®

POWERED BY

50 MHz Mac II Accelerator IIx

System XCI Features

50 *MHz* NuBus By-Pass Offering These Options:

- 50*MHz* Cached **SCSI** Card
- 50*MHz* **RAM** Expansion Card
- 50*MHz* **24 Bit Color Video** Card

(500% faster screen redraw than any other video display made)

FREE!

Private demonstration with your own test files. Arrange for an appointment to experience the economics of flying as fast as you can.

Ringmasters INC.
601 Indiana Ave., N.W.
Washington, D.C. 20004

DAYSTAR DIGITAL & Macintosh®

Test Drive A Graphic Workstation Today!

CALL: (202) 347-7817

On warranties and bylaws

They did it...finally

Spurred on, no doubt, by our editorial of a few months back, Apple has announced that it is now honoring a one-year warranty on all equipment purchased this year, and what amounts to half-price on Apple Care for older machines. Which brings them, albeit somewhat grudgingly, into the mainstream.

Anyone who bought any Apple hardware this year in this country can have it repaired under warranty from any Apple reseller in the world. Apple products purchased here but serviced outside the U.S. need to pay for the repairs and then file a claim for reimbursement from Apple USA. apple systems made since 1978 qualify for the "promotional AppleCare price," if they were purchased in the United States.

It isn't exactly clear to us why this change in policy is restricted to purchases in the United States; it may be to deal with the "gray market," and it may simply take account of the fact that at least some Apple products purchased in other countries, like Canada, have been under one-year warranty coverage already. We hope that it isn't because Apple just figures that those owners are so small in number and demoralized that they can't make as many waves as us dyed-in-the-wool on-the-spot Amurrican grumblers.

It has been interesting to watch them dance around the issue, and in a way we are almost sad to see the entertainment disappear. Imagine being told, with a straight face (the straight face is Very Important, you see) that a longer warranty is unnecessary because the equipment is so reliable that the warranty protection is superfluous... No, seriously guys, that is what they were telling us at one point.

In any case, and not to beat a dead horse, Apple USA hs now seen the error of its ways and those of you who have been holding off can now rush down to your nearest dealer and buy a bunch of Macs, or even Apple IIs, if your interests run in that direction.

It will be interesting to see how, if at all, this affects sales.

Bylaw changes

Beginning on page 9, there is reprinted a set of bylaw changes that the Board of Directors has under consideration. They will be discussed, perhaps loudly, at the next membership meeting and they deserve your thoughtful consideration.

The changes that have occasioned the most comment are those that deal with tenure in office of people appointed by the Board. The proposal is, in effect, to "roll over" the holders of those offices triennially—allowing the infusion of new ideas and enthusiasm to offices that may have begun to fray a little bit around the edges. The idea is not without merit, although it needs some thought. Keep in mind, as you consider this knotty question, that the Board now has all the authority it needs to change these officers, and the the reasoning behind the proposed changes is to allow it to make changes without seeming to be arbitrary.

The three most visible offices that would be affected by these changes are those of Treasurer, Telecommunications System Operator (TCSO) and Editor of the Journal. Each of these is slightly (or significantly) different in character. The Treasurer is an elected officer, and it seems to us that, for that reason alone, that office should be exempted. If the members want someone else in that office, let them elect that person. If not, leave well enough alone.

The incumbent TCSO has been doing his job for some time and feels that he should be allowed to continue to do so without interference by the Board. Not to put too fine a point on it, he has responded to the proposal with his customary...vigor. We'll leave it at that. Those of you who have been frequenting the TCS will already be more familiar than you may wish with the debate. Those of you who have not—count your blessings.

The present Editor has not been in his job long enough to find the men's room, let alone get stuck in his ways. But we (editorial, not imperial) see some merit to the idea, assuming that suitable replacements can be found when they are needed. In fact, a specific effort is being made to bring people along so that the transition to the next editorial staff can be made with less trauma than has been the case in the past. But the peculiar nature of the position makes it one that probably would not be appropriate for an elective process, like the Treasurer.

Or perhaps like the TCSO. It might be worthwhile considering making that position elective, and dropping the golden apple of discord back on the table, to be resolved by the members in the annual elections process.

(Which, by the way, is coming upon us, so you should be thinking about the people you want guiding the club during the coming year, or even running for office yourself.)

fmp

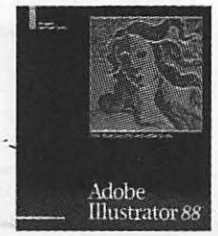
P.S. We just got roasted, not without reason, for the fact that the Journal has been the unwilling beneficiary of a fair amount of typographical errors in the last several issues. Although we naturally tend to bridle at such accusations, we were forced to concede when our very own words were thrown into our teeth, so to speak.

The January editorial said, among other things worth preserving for eternity, that "(favorable comments about the Journal) have bveen (sic) much appreciated..." Yup. It did. It might have been an affectionate cat jumping into the lap at an inopportune moment (which, Gentle Reader, just happened, so look out), or just plain last minute rushing to get the thing out. We are procrastinators, we are, and we are going to do something about it. But not yet.

We have excellent proofreading assistance, but it only extends to material that can be seen beforehand.

But you should know that we are chagrined, and we are working on it.

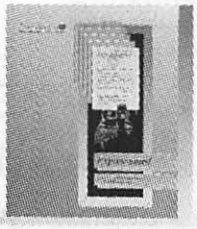
What Created

,


,


,

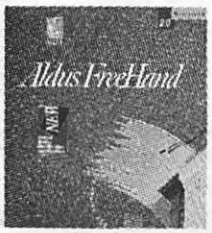

,


,

,

,


,


,

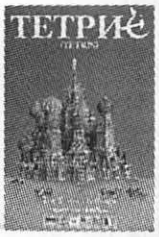
,


,


,


,


,


,


,

,


, and ?


Think.

All the Macintosh® applications above were developed in THINK C® or THINK Pascal®. Could it be coincidence? Think.

SYMANTEC.

Symantec Corporation, 10201 Torre Avenue, Cupertino, CA 95014. 800/228-4122 Ext. 351 Q. 408/253-9600.

For member review

Proposed Bylaw changes

Material added is shown in dotted underscore ; material deleted is ~~struck-through~~. Material in bold is explained in the commentary. Dates of WAP Journals with prior changes are indicated in brackets.

SECTION 1. DESIGNATION AND TENURE. The officers of the Corporation shall be the President, ~~two~~four Vice-Presidents, the Secretary, the Treasurer, one or more Editors of the Journal, one or more ~~Head~~ Librarians, the Telecommunications System Operator, ~~and~~ the Director of Group Purchases, and one or more Tutorial Director s. Only members of the Corporation are eligible to serve as officers, and an officer who ceases to be a member shall cease to be an officer. A member who has held an office for three consecutive years is not eligible to serve in that office for one year. (The preceding sentence shall be effective July 1, 1990, for all elected offices, after which this sentence shall cease to be a part of these Bylaws.) The President, the two Vice-Presidents for Programs, the Secretary and the Treasurer shall be elected annually by the members pursuant to Article IX of these bylaws. The Board of Directors has the power to appoint all other officers. An officer shall serve a term of one year and until his or her successor is elected. Other officers shall serve a term of one year, until the Board appoints someone else to that office, or until they are removed by the Board. The Board may by majority vote remove any officer of the Corporation if the Board finds in its judgment that the best interests of the corporation will be served by doing so. The removal of an officer does not prejudice any of his or her contract rights. An officer who is also a member of the Board of Directors does not cease to be a member of the Board if removed or replaced as an officer, but in the case of removal or replacement by the Board the member appointed to fill the resulting vacancy does not become a member of the Board of Directors by virtue of his or her appointment as an officer. If any office becomes vacant for any reason, the Board may appoint someone to fill that vacancy. Any officer appointed to fill a vacancy in an office elected pursuant to Article IX shall hold office until the term of office of his or her successor begins . [Amended June 1984 and June 1988.]

SECTION 2. PRESIDENT. The President shall, subject to the Bylaws and control of the Board of Directors, have general charge of the business, affairs and property of the Corporation with general supervision over its other officers and agents. Subject to the Bylaws and the control of the Board of Directors, the President shall oversee and coordinate such programs, activities and other duties as may be ~~designated~~delegated to the President by the Board of Directors. The President shall submit an annual report to the Board describing the past year's activities of the Corporation. [Amended August 1989.]

SECTION 3. VICE-PRESIDENTS. There shall be ~~two~~four Vice-Presidents; two Vice Presidents for Programs, a Vice President for Community Affairs, and a Vice President for Administration . The Vice-Presidents shall serve as assistants to the President and shall oversee and coordinate such programs, activities and other duties as may be ~~designated~~ delegated to them by the Board of Directors or the President. From time to time, the President shall designate one of the Vice Presidents who shall in the absence of the President or in the event of the President's disability perform the duties and exercise the powers of the President. [Amended June 1984 and July 1988.]

SECTION 4. SECRETARY. The Secretary shall give, or cause to be given, notice of Special Membership Meetings and of Special Board of Directors meetings. The Secretary shall keep the minutes of the meetings of the members and the Board of Directors. The Secretary shall send copies of the minutes of all meetings to the Board of Directors and shall also see that the books, reports, statements and all other documents required by law are properly kept and filed. The Secretary shall perform such other duties as may be ~~designated~~delegated by the President or the Board of Directors. The Secretary may appoint one or more assistants.

SECTION 5. TREASURER. The Treasurer shall have custody of the corporate funds and other valuable effects, shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all monies and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Treasurer shall have the authority to disburse checks as provided in Article XII hereof. The Treasurer shall maintain a system of internal fiscal control and shall report regularly to the Board of Directors on the expenses and financial condition of the Corporation. The Treasurer shall perform such other duties as may be ~~designated~~delegated by the President or the Board of Directors. The Treasurer may appoint one or more assistants.

CLUB NEWS

SECTION 6. EDITORS OF THE JOURNAL. The ~~Board of Directors shall appoint an~~ Editors of the WAP Journal, ~~who~~ shall, subject to the general policy direction of the Board of Directors, ~~shall~~ be responsible for the Journal's editorial and advertising content and its publication on a regular basis. The Editors may appoint one or more assistants. [Amended August 1989.]

SECTION 7. ~~HEAD~~ LIBRARIANS. The ~~Board of Directors shall appoint a Head~~ Librarians, ~~who~~ shall organize the Corporation's collection of computer programs, computer media, books and periodicals, subject to the general policy direction of the Board of Directors. The ~~Head~~ Librarians may appoint one or more assistants. [Amended August 1989.]

SECTION 8. DIRECTOR OF GROUP PURCHASES. The ~~Board of Directors shall appoint a~~ Director of Group Purchases ~~who~~ shall, ~~maintain a close and continuing interest in computer products and accessories. The Director of Group Purchases,~~ subject to the general policy direction of the Board of Directors, ~~shall~~ negotiate arrangements for the purchase of ~~such equipment~~computer products and accessories by members. The Director of Group Purchases may sign checks on behalf of the Corporation in amounts not in excess of $500. The Director of Group Purchases may appoint one or more assistants. [Amended August 1989.]

SECTION 9. TELECOMMUNICATIONS SYSTEM OPERATOR. The ~~Board of Directors shall appoint a~~ Telecommunications System Operator ~~who~~ shall chair the standing Telecommunications System Committee. [Amended June 1986.]

SECTION 10. ~~VACANCIES. If the offices of President, Vice-President, Secretary, Treasurer, Editor of the Journal, Head Librarian, Director of Group Purchases or Telecommunications System Operator become vacant for any reason, the vacancy shall be filled by the Board of Directors. Any officer elected or appointed to fill a vacancy shall hold office until the election and qualification or appointment of his successor. [Amended June 1984, July 1988 and August 1989.]~~ TUTORIAL DIRECTORS. The Tutorial Directors shall, subject to the general policy direction of the Board of Directors, arrange for and coordinate tutorials for the purpose of providing education and instruction in computer-related subjects. The Tutorial Director s may appoint one or more assistants.

ARTICLE VII - BOARD OF DIRECTORS

SECTION 2. COMPOSITION. The Board of Directors shall consist of 15 members: the President, the two Vice Presidents for Programs, the Secretary, the Treasurer and ten Directors-at-Large. The Directors-at-Large shall be elected annually pursuant to Article IX hereof. [Amended April 1984, February 1987, June 1988 and August 1989.]

ARTICLE IX - ELECTIONS

SECTION 1. NOMINATIONS. Nominations for President, the two Vice-Presidents for Programs, Secretary, Treasurer and Director-at-Large shall be submitted during the month of April. The nominations may be made at the April Regular Membership Meeting or sent by mail to the Secretary through the the Corporation's office.

Commentary on the Initial Proposal

The proposed changes were made in two parts, with the material shown in bold added to the initial proposal. The following comments apply to the initial proposal:

Organization: Article VIII has been reorganized to make it easier to add additional officers after section 10 without having to change section numbers or cross-references. The substance of the present section 10 has been consolidated with section 1.

Substance: Three additional officers would be added: a Vice President for Community Affairs, a Vice President for Administration and a Tutorial Director. It is contemplated that the Vice President for Community Affairs would be charged with coordinating community activities (such as assistance to schools and outside groups requesting help from WAP volunteers), publicity and public relations. The Vice President for Administration would be responsible for coordinating activities of the office staff and would free the President from having to be involved in the day-to-day supervision of the WAP office so that he or she could concentrate on matters of a more long-term or strategic nature. (This formalizes an arrangement that has been in place since June 1989.) The Tutorial Director is presently a volunteer position and would be elevated to the status of an officer of the Corporation. The precise duties of all of the Vice

Presidents are up to the Board of Directors or the President. These three officers would all be appointed by the Board and would not be *ex officio* members of the Board as are the present two Vice Presidents (whose positions are renamed to Vice Presidents for Programs because that's what they do now).

Section 1: The first completely new sentence ties service as an officer to continued membership in the Pi. The first sentence of the long block of "new" material ("The Board of Directors has the power to appoint all other officers") is a comprehensive statement to avoid the need to duplicate the same empowerment in each section, making the bylaws as a whole easier to amend in case more or fewer officers are elected or appointed. The following two new sentences prescribe the tenure of officers. The next two new sentences give the Board the power to remove officers, protecting any contract rights the officer may have with the Pi. This follows the language of Maryland corporation law, with the grammar improved over that of the statute. The next sentence provides that an officer who is an *ex officio* member of the Board (President, Vice President, etc.) who is removed as an officer continues to serve as a member of the Board of Directors. This reflects the understanding expressed by all Board members who spoke on this subject during the events of last June. The final two sentences are carryovers from the present section 10 on the filling of vacancies.

Section 3: This creates two additional Vice Presidencies, who would not be *ex officio* members of the Board. The duties of each of the Vice Presidencies are suggested by their titles, but their actual responsibilities will be those delegated to them by the Board or the President.

Sections 6-9: The phrase "The Board of Directors shall appoint" is redundant in light of the change to section 1.

Section 8: As presently worded, it sounds as though the foremost duty of the Director of Group Purchases is to maintain a close interest in computer products and accessories.

Section 10: The provisions concerning vacancies has been moved to section 1. The new section 10 makes the Tutorial Director an officer.

Article VII, section 2 and Article IX, section 1: Conforming changes.

Additional Commentary

Initial comments by several members led to the changes shown in bold in the text above. In order of most significant to least significant they are:

Limit service in one office to three consecutive years. On the one hand, this will ensure that the Pi will be infused with "new blood" rather than taking the easy course of relying on the same valiant stalwarts year after year. Other other hand, someone who serves the Pi well would not be available to serve in that capacity for more than three years until he or she sits out a year. (After a person "sits out" a year or holds another office, the person could run for or be appointed to the same office again.) Among those expressing a view on the length of tenure, three years seemed to be the consensus choice, particularly for WAP's more demanding jobs. This provision would not affect the term of current elected officers (only one, the Treasurer, would be ineligible to run for re-election), but would affect appointed officers as soon as their successors could be appointed (two officers would be affected, the Head Librarian and the Telecommunications System Operator). (An alternative would be to make it effective on July 1, 1990, for all offices.) This provision would not affect members of the Board of Directors, who would be eligible to serve for as long as the members want them to serve. Nor would it affect SIG chairs or committee positions such as the Telecommunications System Committee.

Require the Board to reappoint officers at least annually. Some felt that it would be useful to address squarely the problem the Pi has occasionally faced in the past where someone has volunteered to do something but has been unable to follow through because of other demands on their time or for other reasons. Removal of an officer, even someone who is not performing his or her duties, is currently an extraodinary act and one the Board does not like to do for fear that such extraordinary action would be seen as more harsh toward the officer than it is intended to be. Periodic appointment of officers would make voting on officer positions part of the Board's routine duties and would avoid stigmatizing someone who might not be able to serve as an officer but could serve in some other volunteer capacity.

Allow the Board to appoint more than one Journal Editor, more than one Librarian (renamed from "Head Librarian") ***or more than one Tutorial Director,*** should the Board wish to do so. For example, we could have an Apple II Tutorial Director and a Macintosh Tutorial Director.

Apples for the Students

Contributions to WAP's collection drive for Giant Food receipts are approaching $25,000, and will no doubt rise considerably above that figure, as the Apples for the Students program has now been extended through April 28. Several schools in the Washington (and Baltimore) region have been nominated as recipients, and the board has appointed Chris Bastian and Pat Kirby to make a selection. The letters of request are available for inspection at the Pi office, and will be posted at the March membership meeting. Any comments or suggestions are welcome.

Note: several thousand dollars of Safeway "Food For Thought" receipts (good for the acquisition of IBM computers) have also made their way to the Pi office. These may also be collected through April 28, and a good home will be found for any received.

Columbia Slice

by Tim Childers

Our 1 February meeting covered a mixed bag of topics. On the Mac side the topic was music, especially MIDI music. On the Apple II side was Ultra Macros for AppleWorks®, Income Tax templates for AppleWorks® and Photonix.

On the Mac side we had a special guest, Bob Brands, representing the nascent E-Space Mac Users Group. He not only brought his MIDI synthesizer and software but his new Sony Erasable Optical Disk Drive. Ann Knust and her son brought their MIDI keyboard and I brought mine as well. Thanks also to Ann MacKay who provided her SE30 to complement my trusty Plus.

Bob led a discussion of Mac music software and explained what MIDI means. MIDI stands for Musical Instrument Digital Interface and is a standard that defines how the notes you play shall be converted into a message that can be captured by a computer and then these messages can be manipulated and played back into the instrument. He then demonstrated ConcertWare + MIDI by Great Wave Software. This package lets you use either Mac-generated sounds or MIDI data. It seemed to have dozens of capabilities which I didn't understand but I caught the basics. When working with MIDI you could play notes and the software would create a staff of sheet music as you played! You could then cut, copy and paste the notes just like a word processor to create your own music and then command the software to play your edited music using your MIDI keyboards. You could do the same thing using up to 4 of the synthesized 'instruments' that came with the software but they played through your Mac's own internal sound chip. After the demo Bob Brands donated to our club a new copy of Virex anti-viral software by HCJ. We will use it to check and protect our club software library.

Ann Knust brought her copy of Studio Session which seemed to have the same capabilities as ConcertWare but without the MIDI capabilities. Her son entertained the group with some of his playing. Last but not least our own club treasurer, Neil Gordon, entertained us with some classical music which we captured and edited. I also gave away a copy of some public domain MIDI software I received when I bought my Altech Systems MIDI interface.

On the Apple II side Tom Cowley brought his IIGS and arranged for one of our members, Andy Waksul, to demonstrate Ultra Macros for AppleWorks® by Beagle Bros. This package allows you to easily record macros of up to 4000 keystrokes. You can also nest macros within each other. It comes complete with a prerecorded library of useful macros.

Bill Campbell demonstrated a shareware income tax return template for AppleWorks® built by a WAP club member, Paul Koskos. This is the third year Paul has published a Tax Return template and it covers the Federal 1040 and schedules A, B, C, D, E, SE, and 6251. The program is available from the WAP library and if you pay your $15 shareware Paul will send you a template for the MD state tax return as well! This program does not print directly on an IRS form but you can easily copy the results to the proper spaces on the forms. You start by entering all your income and then keep entering your deductible expenses and it recalculates your tax when you press Open Apple - K. It works with the current version of AppleWorks as well as many of the older versions.

Tom Cook helped with several questions on the program TimeOut.

The meeting concluded with a short demo of Photonix for the IIGS. This is a super fast copy program that has many other features such as detecting viruses, formatting and verifying disks. It was done by the same group of French programmers who did the graphics program Nucleus.

Next month the Apple II program will consist of a presentation of the program HyperStudio. It is like HyperCard but for the II.

Frederick Apple Core

The January meeting started off with a little bit of confusion. It seems the library has changed their hours of operation and has had a few personnel changes. These changes resulted in: 1) members standing outside the building enjoying the nice cold air of winter awaiting its' opening and, 2) the club losing the meeting room due to a failure of the staff to mark their calendar appropriately. We were able however to utilize one of the other cubicles and managed to squeeze most of the attendees inside. The Frederick Apple Core (FAC) will therefore be changing the meetings to 10:00 AM on Saturdays.

Scott relayed a bit of distressing news for the Apple II user, it seems that CALL APPLE vol. 13 no. 1 will be the last issue. This magazine was aimed at the Apple II programmers. It was the source of information to those who learned how to first program the Apple II and contained a wealth of knowledge. No reason was given for its' demise, but back issues are still available from the publisher: TechAlliance (206) 251-5222. The Apple II owner may also find this latest rumor from Mr. Robert Cringley of InfoWorld to be most interesting. According to Mr. Cringley it seems that IBM is considering a release of their PS/2 Model 25 and Model 30 286 base computers bundled with an Apple II emulator card. I wonder what affect that would have on Apple Computer....hmm, food for thought. But on the positive side, Mr. Cringley reports that Apple has finally shipped beta test sites the new Apple II CPU that John Sculley promised for September

'89, this could mean that the reports of the Apple II's death have been greatly exaggerated. Look for the new II to appear this September. The new Apple IIgs (currently designated "ROM 04") is not radically different from the current IIgs — just faster. We're talking 7 MHz, and an improved graphics resolution of 640 x 480. The major compatibility problem for the new machine seems to be with copy-protected Apple II software crashes (since the "defanged" versions run, it's the protection schemes that are the source of the problem.

Also in the works (rumored) are a IIgs card for the Mac SE and a Mac Plus card for the IIgs.

The 3rd Issue of Softdisk for the IIgs contains a whole substitution of playing boards for Arkanoids II as well as JUKEBOX, a program which will play songs created by Music Studio. Considering that very few individuals actually create their own songs, this program will do most nicely. Scott considers a subscription to Softdisk to be a very good buy for the Apple IIgs owner. Another program available for approximately $30 via mail order is GRAPHIC DISK LABELER (GDL) for the IIgs. This program has the ability to capture either whole or part of Graphics for editing upon which you can reduce to fit a 3.5" diskette label; front, edge or back. It will print in full color or in text mode only.

For the technical aspect, a little bit of light was shed on modems and a few misnomers. Normal telephone lines used for voice are actually only capable of handling a maximum baud rate of approximately 600 baud. Now you say, "Wait a minute, my modem is 2400 baud, how can this be?". It seems that baud and bit per second (bps) is incorrectly assumed to mean the same thing; it is not. Modems are designed using different encoding schemes which compress the data being transmitted to obtain higher levels of bps per baud. The receiving modem decompress' the data to its' original form. Therefore your 2400 'baud' modem is not 2400 baud, but in reality a 2400 bps.

EdSIG

by Phil Shapiro

A small but enthusiastic crowd of people showed up for the February 22 meeting of EdSIG, the educational special interest group. Two people brought Apple IIc's with them, so we had three computers to play with. (The office has an Apple IIGS for public use.)

The meeting started out with a short demo of Math Invaders, a fun arcade-style math drill. The object of the game is to shoot down the correct answers before the aliens reach the bottom of the screen. You can get a copy of Math Invaders by sending $10 to the author: Alan Needham, 1121 Las Palmas, Sacramento, CA 95815. (A few months back, Math Invaders was reviewed in the Pi Journal.) This program runs on any of the Apple II line of computers.

Following this demonstration, André Webb, a teacher of the visually impaired, discussed how computers were being used by the visually impaired in the District of Columbia schools. André is using an Apple IIc, with various large-font programs. He also informed us about a word processor he uses which sends output to a Braille printer.

Unfortunately, software publishers do not put a lot of effort into creating "special needs" software, so the selection is slim, and the prices tend to be high.

Next, Bill Wydro demonstrated a geography game, named States and Traits, produced by DesignWare. The program does a pretty good job of drilling students as to the location of the various states. The program keeps track of the mistakes you make, and subtly gives you extra practice on your weaknesses.

Bill, a middle school science and math teacher, also showed us a tutorial program titled "Electricity and Magnetism," by Activity Records, Inc. The program presents the subject in a simple fashion, using straight text-screens, with some simple animation to liven things up.

After that, Rosemarie Anthony gave the group a short talk on software for young children. Among the programs she talked about, Early Games and Facemaker appeared to be the all-time favorites of the pre-school crowd.

Rosemarie works as an independent computer consultant, teaching classes, training teachers, and advising schools as to appropriate software. She is working towards opening her own computer learning center at some point in the near future.

Bernie Benson, a long-time member of the Pi, was able to give us a perspective on how far educational software has improved since the early days of the Apple II computers. When Bernie joined the Pi in 1979 you practically had to write your own programs if you wanted your computer to do anything. These days, a knowledge of the on-off switch is all you really need to get started.

Our discussion was enhanced by Robert Gamble Jr., who recently purchased an Apple IIe for his two daughters. Robert was able to get a good deal on his IIe from a local school, which was upgrading its computer lab to Apple IIGS's.

The next meetings of EdSIG will be on Thursday, March 22, and Thursday, April 27. One possibility for a future meeting would be to have a meeting on a Sunday afternoon, so that kids could join us at the computers. Perhaps a weekend in early June might be suitable.

Another possible EdSIG event would be to have a meeting at one of the local schools, where we could make use of the computers in a computer lab. Any teachers out there interested in sponsoring such an event?

For further information about EdSIG, please feel free to call me at (202) 686-5465. Please remember to bring blank floppies to the meetings, so we can swap public domain software.

The EdSIG meetings take place on the fourth Thursday of each month, starting at 7:30 p.m., at the Pi office.

Apple IIGS SIG

by Paul Tarantino

With Gary Hayman off in Europe, or some other feeble excuse for not discharging his duties as SIG chairperson at our February meeting, it was incumbent upon your faithful scribe to serve as Genial Host for an evening of demos by a host of eager presenters. Kim Brennan began the festivities, hoping to demonstrate how to format a SCSI hard disk, using as a test case the 150 megabyte CDC disk he had recently acquired from a Mac IIcx owner. Sadly, a demon wiring glitch (probably in his SCSI card or cable) prevented his computer from recognizing the HD's existence. During several attempts to make his new toy go, however, Kim tossed off several Handy Hints for those of us with aspirations toward SCSI HD ownership. Like, for instance, SCSI drives on Apple II systems seem much more sensitive than their Mac counterparts to the length of the SCSI cable connecting the HD to the card in your CPU. Shorter cables (eighteen inches?) are better. Also, fooling around with SCSI cable connections while the disk drive is powered up (never a good idea for any computer hardware) can blow a microswitch on a SCSI drive which will not affect HD performance with a Mac, but will render the same drive inoperable with an Apple II. (Caveat emptor!)

Kim also demonstrated several recent shareware acquisitions, including Bouncing Bluster, a Breakout/Arkanoid deriviative from France ($15 shareware fee) with its own construction set and lots of other bells and whistles. This game runs under system 4.0 and requires two 3.5" drives. It can be downloaded from America Online, but the process takes a very long time, even at 2400 baud; better to copy the disks directly. He also showed us Orbizone and Senseless Violence, five dollar shareware games by the authors of the commercial game Xenocide. Orbizone is an Asteroids variant with great GS Graphics and Sounds and its own editor/construction set. It needs a joystick. Senseless Violence, based on Frogger of ancient memory, appeals to the latent baby-killer in each of us. Both games run under system 5.0, and include resumes for the authors, a new approach to self-marketing for recreational software writers.

Last in Kim's bag of tricks was version 0.9 of Soundsmith, the Spanish shareware ($20) synthesized music program, for which an extensive library of songs (four disks worth) is also available.

Jay Sorrels booted up WordPerfect 2.0, a full-featured and powerful word processor for the IIgs (versions also exist for Mac and MS-DOS machines). WordPerfect has a full range of editing tools, a dictionary, a thesaurus, and comprehensive file and disk management capabilities accessible from within the program, but does not handle graphics or GS fonts. Version 2.0 runs under system 4.0 only; version 2.1 can run under system 5.0. A newer version of WordPerfect for the IIgs is rumored.

Jay also showed off Taito's Arkanoid II, and many of the screens he had designed with the game's editor.

Sam Upton afforded us a brief look at a great bargain from Roger Wagner Publishing, for those of us who may be considering the purchase of HyperStudio. For ten dollars, RW will send you a HyperStudio demo version which won't save work to disk, and can only access the demo stacks he sends you, but the demo and associated stacks come on TEN 3.5" disks, and the stacks can be used by the full-up version of HyperStudio. Hard to go wrong for the price, and HyperStudio is gaining a lot of attention in schools, as well as from people like the publishers of A2-Central, who have begun to offer stackware by subscription. The demo package is available from Roger Wagner Publishing, 1050 Pioneer Way, Suite P, El Cajon, CA 92020, or by phone (619–442–0522). Such a deal!

Chairman Emeritus Ted Meyer put in a plug for participation at the next AppleFest, in Somerset, N.J. on 4, 5 and 6 May. The Pi will have a booth, and is looking for volunteer staffers (who may save the price of admission by helping out). Call or see Ted if you are interested in helping, or in sharing rides or lodging.

Ted also had this month's Hot Rumors, about the as yet unconfirmed system 6.0 for the IIgs, and the even more captivating speculation that the longed-for Cheap Mac will turn out to be an Apple IIgs with an operating system (6.0?) capable of reading Mac files and a HyperCard variant which can access Mac stacks. Sounded good to us!

HyperCard SIG

Although the HyperCard SIG monthly meeting on January 27 as usual followed the Apple Pi general meeting, the dozens of members participating came away impressed by the unusual: clearer insights into the workings of at least one Federal bureaucracy.

Joe Anderson, a principal of the Macintosh underground at the Environmental Protection Agency (EPA), showed an integrated cluster of HyperCard stacks designed to illuminate the who, what, where, and why of the myriad units within the agency. Using Macs originally purchased for desktop publishing, Anderson and his allies undertook the project as a vehicle to help incoming top EPA managers more readily get up to speed.

The resulting HyperCard stack, "The Source," integrates organization charts, job descriptions, personnel directories, and key issue tracking systems into a seamless interactive resource. Joe showed ways in which the HyperCard environment runs circles around traditional linear media. He also went behind the point and click interface to show the workings of Find functions and "free search" capabilities for managers making queries on the fly.

Following opening remarks by HyperCard SIG cochair Nancy Wallace, J. David Mudd of the HyperTalk sub-SIG fielded technical questions from members regarding scripting and troubleshooting stacks. Participants agreed on the value of such a "nuts and bolts" question and answer session at regular intervals in the future.

The February 24 meeting of the HyperCard SIG featured Karen Rall, principal author and product manager of Language Systems Corporation. An audience of 20 Pi members saw Karen present and discuss Wild Things, a highly-regarded package of XCMDs that provides new animation, mathematical, and statistical capabilities for HyperCard stacks in a readily accessible form. After describing her company and the Wild Things project, Karen demonstrated a number of one-line XCMDs for insertion into HyperTalk scripts that were programs for generating popup menus, 3-D effects, ellipses, sine waves, and trigonometric functions. In a wide-

ranging question and answer session, Karen and the Pi members present explored ways the XCMDs could be used in a variety of business applications.

The upcoming March 24 HyperCard SIG meeting will respond to the evident interest of members in general meetings devoted to HyperCard problem-solving. SIG members are encouraged to bring specific questions for the opening question and answer session, and disks for subsequent small group problem-solving. Given that room will be available only for a limited number of members' Pluses and/or SE's please contact SIG co-chair Nancy Wallace (530–2881) if you propose to bring your Mac to the March meeting.

April's meeting, scheduled for April 28 following the general meeting (call Apple Pi office for location), is tentatively planned to feature HyperCard SIG co-chair Mark Frazier, who will demonstrate Brightstar Technologies' new Interface program. This new software package allows HyperCard to include animated, lip-synchronized talking people as "agents" to assist users in navigating stacks.

WorksSIG

by Chris Bastian

Phweeeee! The February meeting was a time for celebration as WorksSIG passed its first anniversary. Some oldtime members have gone, and newcomers have arrived, but the Works community continues to meet to review program applications and enhancements.

The first half of February's get-together was an in-depth look at the uses of TypeAlign, and its comparison to the Works "Spread Text" function. TypeAlign, designed to be used with Adobe's ATM and fonts, lets the user create exotic headlines and banners along straight lines, arcs and curves. Lettering can be stretched, twisted, and accented with various shading options, and then saved as a PICT file for insertion into Works or other

programs. The "Spread Text" option tries to do the same thing, but limits output to one size of text, with all letters vertically aligned. Once a "Spread Text" image is created, or a TypeAlign image imported, they are no longer editable, except for rectangular sizing.

Following a celebratory interlude (ed. note: this means cake and soft drinks), and a brief visit to the adjacent Excel SIG for a report on the recent Microsoft Developers Conference, the meeting concluded with a review of Paul Koskos' latest income tax template. Originally written in AppleWorks format and imported with the Works-to-Works Transporter, the spreadsheet template covers the most popular Federal tax forms, and gives a running tally of current income and tax liability. The tax template is currently available on the TCS and through the Pi disketeria (shareware: $15).

The office staff reports that the Cobb Group has thoughtfully accepted WAP's check for a subscription to "Inside Microsoft Works," so the issues should be forthcoming shortly. Keep an eye peeled on the magazine rack.

WorksSIG meets the third Wednesday of each month at 7:00 PM in the Pi office. All are welcome.

Artists on exhibit

by Nancy Seferian

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

Art: *Typhoon Class* (right) and *Space Station* (opposite).

Artist: The art this month was created by WAP artist Brent Heatherington. Brent works for A. T. Carney, a management consulting firm where he is the senior graphic artist in charge of a shop of 3 people. These illustrations will be part of a new clip art package of Federal Clip Art that will be offered to the general public this spring.

How they were done: Brent says, "I began to create Typhoon Class, a Soviet submarine, by scanning an illustration from the instructions in a model kit to get the outline and proportions correct. It was a very odd shape to keep in perspective in addition to all details. After this first step I referred to books about submarines to get the details, and proceeded entirely by eye from there on.

"Everything in this illustration was drawn on one layer. With respect to the organizational aspect of this drawing, I grouped things that go together where there are symmetrical objects. For instance, all the torpedo tubes and hatches are grouped.

"One of the main areas for which I used a special treatment was the propeller. After it was drawn I selected a 30-step blend from 20% grey to white to get that particular effect that you see.

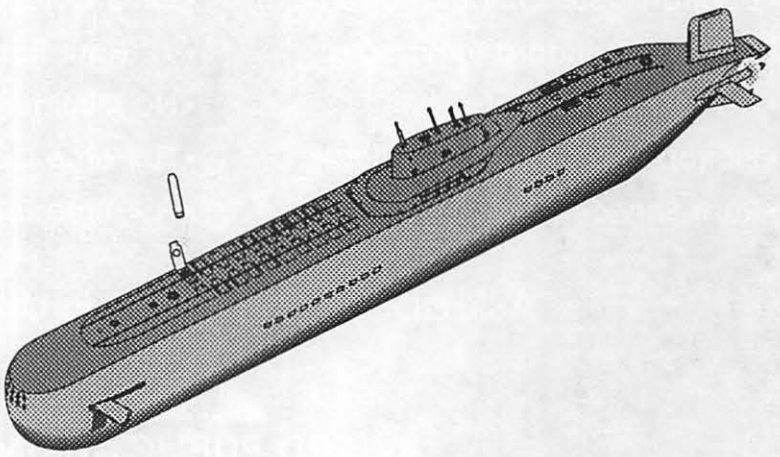
"Another area which received special treatment was the shading on the bottom of the submarine. For this area I duplicated the hull which I had already created and used the scissors tool to cut it in half and used only the bottom half.

"Then using this separate piece, I selected an 80-90% grey blending to 30 %. The 30% grey was the actual shade of the hull. Then I shrunk the whole shadow 1% and used no stroke so that the shadow would fit just inside the outline. This procedure ended up appearing like an air-brush effect.

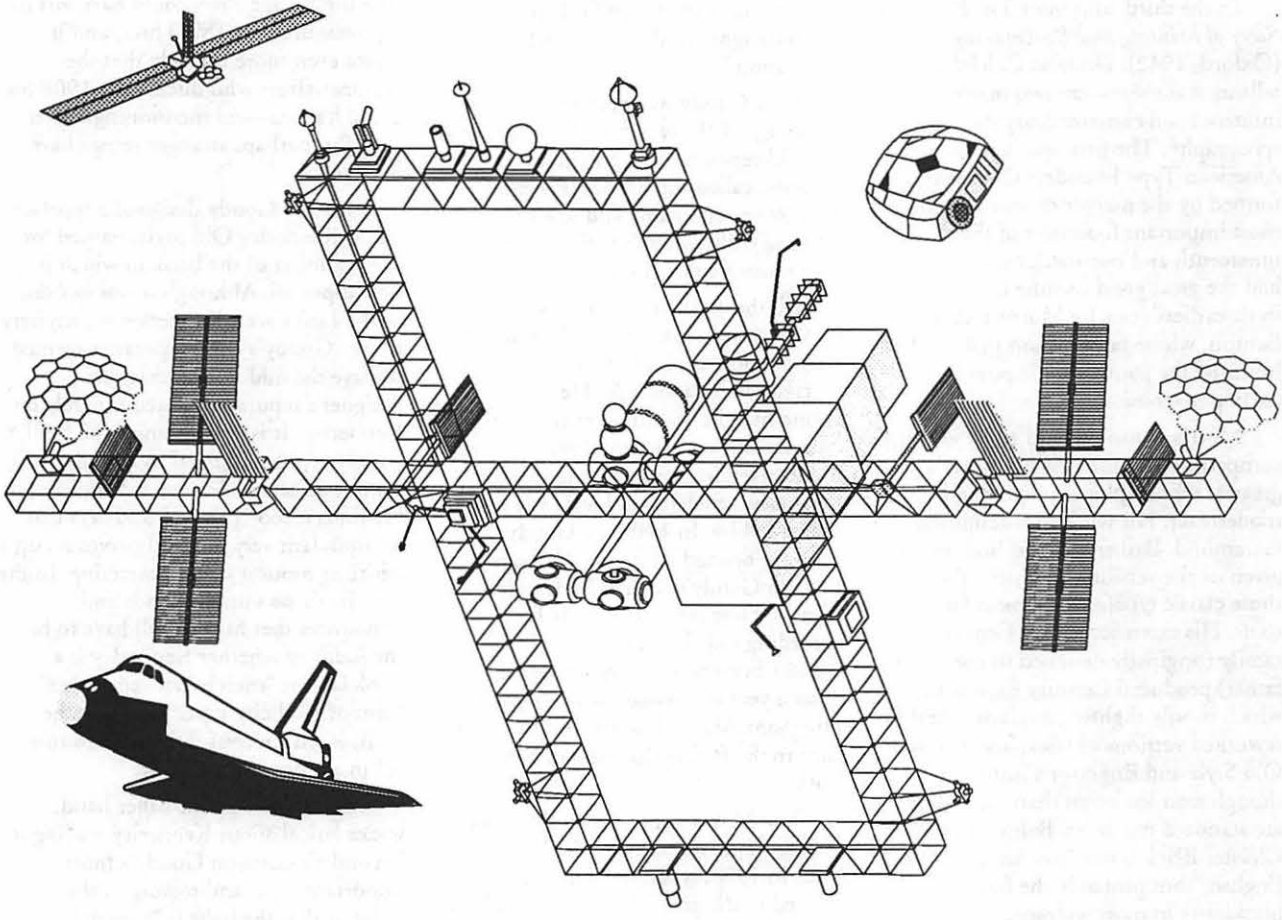
"Space Station was entirely a freehand project in that nothing was scanned. I used posters and illustrations for the concept. I began with a big square creating one of the main upright beams and then duplicated it, adding details using the main area as a frame of reference. Size was the major problem because of the amount of details. When there are so many objects some come to the front that don't belong there. To help with this difficulty I preview frequently and leave some objects free so they can be manipulated. This is often like a box of pickup sticks trying to move an object to the front without moving something else.

"When the main space station was completed I added the space shuttle and orbiter and satellite so users would also have those available as separate objects."

I asked Brent if he had any tips for some of us who are novices when we're beginning with a program like Illustrator '88. He said, "Well, I suggest you start off with something uncomplicated like an invitation or magazine ad to practice on. Make a lot of use of the freehand tool. When I



Typhoon Class



Space Station

started I used the pen tool too much. Curves and circles come with experience. Practice with the blends. With these tools you can do graphic design as well as illustrations. The computer or the software doesn't make you an artist, it's a tool that makes your job easier. This is a new creative medium, and it's a 'feel' thing. Everyone does it differently. "

Tools: Mac IIcx, AppleScanner, Illustrator '88 v. 1.9.

To submit art by mail, send it to Nancy Seferian
1425 Foxhall Road, NW
Washington, DC 20007.

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

Typefaces explained...

I Like Your Face—Part 5

by Jim Donnelly

In the third edition of *The Book: The Story of Printing and Bookmaking* (Oxford, 1942), Douglas C. McMurtrie tells us that there were two major influences on contemporary American typography. The first was the the American Type Founders Company, formed by the merger of several of the most important foundries of the nineteenth and twentieth centuries. ATF had the great good fortune to be guided in its earliest years by Morris Fuller Benton, whose father, Linn Benton, had invented the pantographic punch-cutting machine.

Morris Benton would easily win any competition for the title of history's greatest typographical adapter and modernizer. His work in redesigning Garamond, Baskerville and Bodoni has given us the versions in which all of those classic typefaces are most familiar to us. His extension of the Century family (originally designed in part by his father) produced Century Expanded, which is only slightly less classic. And his reworked versions of Clearface, Cloister Old Style and Engraver's Roman, though seen less often than the others, are standard typefaces. Benton's own Cloister Black is not "just another Old English," but probably the form of blackletter in most widespread use today.

In a book called *Designing with Type: A Basic Course in Typography,* James Craig discusses a grand total of five faces: Garamond, Baskerville, Bodoni, Century Expanded and Helvetica. I think it's interesting that four of them were first seen by twentieth-century readers through the eyes of Morris Benton. Benton, in fact, is the least sung of unsung heroes, and deserves separate treatment if not a full-length biography.

"The other important influence in American type design," McMurtrie goes on, "has been exerted by a remarkable native genius in the person of Frederic W. Goudy, a Chicago bookkeeper, whose tastes and talents led him inevitably into typefounding. Goudy has a gift for drawing beautiful letters second to no designer in this or any other generation."

Fred Goudy was born in 1865, and at the age of thirty, while still working as a bookkeeper, he set up a private press in Chicago called the Booklet Press—a modest enough name and one in keeping with Goudy's lifelong refusal to take himself too seriously.

All the work of the press was done by Goudy and his wife Bertha until Will Ransom appeared on the scene, eager to be taken on as a disciple. He was a young man of boundless energy and enthusiasm, and Goudy allowed himself to be talked into taking a more ambitious view of what had been little more than a hobby. In 1903 the Goudys and Ransom opened the famous Village Press in Goudy's barn at Park Ridge, Illinois. Here is where Goudy became, according to J. Ben Lieberman, the world's first full-time type designer. After a year the operation was moved to Hingham, Massachusetts, and two years later to the Parker Building in New York.

The New York move set the scene for the tragedy that befell the Village Press in 1908, when the Parker Building burned to the ground, destroying a large percentage of Goudy's punches and matrices, and adding at least one chapter to the lore of typography by depriving us of the fabled "Lost Goudy Faces."

Some of these "Lost Faces" were truly lost, while others had been sold in great enough quantities to have appeared widely in print before the fire. Of course, supplies of these types could not easily be replenished before the introduction of photocomposition, but it is at least true that not all of the Lost Faces fell into a black hole. Still, the expression has a romantic sort of ring to it—"The Lost Goudy Faces" sounds like a vehicle for Harrison Ford—and there are in fact some mysteries connected with them that are still surfacing today.

As a devoted Goudy fan, I've been noticing occasional ads placed in MacUser by a Vancouver type house called Giampa. Several Goudy faces are available in PostScript format from Giampa, and one of them, unfamiliar to me, is called Kaatskill. This font, according to Giampa, was used in print only twice—by Goudy himself—before being destroyed in a fire "in the late twenties." I can't solve the riddle that this statement poses. It seems doubtful that the Village Press could have lost its type resources in TWO fires, and it seems even more unlikely that the commentators who discuss the 1908 fire could have resisted mentioning a later one. But perhaps stranger things have happened.

In 1911 Goudy designed a typeface called Kennerley Old Style, named for the publisher of the book in which it first appeared. Although it was not one of the Lost Faces, Kennerley is a mystery to me. Goudy's contemporaries seemed to have the odd notion that the designer's reputation rested squarely on Kennerley. It is, for instance, the ONLY Goudy type mentioned by Updike, who cannot quite decide what he thinks of it. He finds it too "rolling," and says that its abundant very graceful curves set up a whirling motion that's distracting. In the end, he throws up his hands and announces that history will have to be the judge of whether Kennerley is a book face or "merely" an "ennobled" form of publicity type. The italic, he adds, is less successful than the roman. All in all, not a rave review.

McMurtrie, on the other hand, waxes lyrical about Kennerley, calling it beyond all question Goudy's most important type, and tossing in the opinion that the italic is "superb."

Goudy himself may have considered Kennerley his chef-d'oeuvre. He's not above quoting a British critic (unidentified) who wrote: "Besides being beautiful in detail, it is beautiful in the mass... Since Caslon first began casting type in 1724, no such excellent letter has been put within reach of English printers."

I'm afraid that I tend to support Updike here. Though it may simply be an indication of changing fashions, to me Kennerley seems little more than a dress rehearsal, or beta version, of Goudy Oldstyle, which followed it in 1915 and to which I find it much inferior. I should add, though, that this opinion may not be worth very much, because I don't think I've ever seen Kennerley composed into extended

passages of text. Perhaps I would find that it holds up very well. There isn't much room for doubt about Goudy Oldstyle, however, because it is fairly often used for the text of books and magazines. The text of *Harper's*, for example, is set almost completely in Goudy Oldstyle.

Figure 1 illustrates two faces that have influenced American printing much more profoundly than Kennerley. The first of them is most definitely more than a "publicity type," as well as being one of the loveliest typefaces in existence. The second of them was for decades an obligatory fixture in virtually every American job-printing shop. Hardly an agency of government, local or national, and very few persons with professional practices would have considered having their stationery set in anything other than one of the several weights and widths of Copperplate Gothic. Even today, Copperplate used for the return address on an envelope fairly shouts "Official! Important stuff in here!"

It's not surprising, however, that the critics insist unanimously on two points about Goudy's work. First, it's beautiful. Second, it's at its best in the world of advertising.

Does It Look Nice?

It's quite commonly held that a typical Goudy typeface may look TOO nice. Here is McMurtrie, reacting in the standard way: "Perhaps because of Goudy's irresistible urge to draw beautiful letters, the emphasis on beauty has prejudiced their complete legibility."

I think there's a small irony in the notion that such a reputation should be attached to the designer who was, of all the masters, the one least interested in smoothing out the irregularities of his more ancient sources. Hadriano, for example, is a fairly slavish copy of the letters inscribed on a first- or second-century Roman tablet that Goudy found in the Louvre, and from which he took pencil rubbings. He did precious little, if anything, to make it less crude—but whatever it was that he did has convinced McMurtrie that Hadriano, too, is beautiful.

HADRIANO
Goudy Mediaeval

Goudy Oldstyle
COPPERPLATE GOTHIC HEAVY EXTENDED

Figure 1
Possibly Goudy's two most significant typefaces

Goudy Mediaeval, one of the Lost Faces, preserves all the inconsistencies of the 12th-century German manuscript hand upon which it's modeled. But I think I can see traces of that grotesque M in the N of Kennerley (and Goudy Oldstyle). And nobody can miss the resemblance between the lowercase e of the Mediaeval and that of Goudy Newstyle:

Goudy Newstyle

This reverence for his originals, along with the willingness to find his inspiration in seemingly primitive materials, is typical of Fred Goudy, who once said, "Those old fellows stole all of our best ideas."

Goudy designed a typeface in 1938 called Californian, which served as a private face of the University of California Press until 1958, when it became generally available. Californian is the type used in my paperback copy of Goudy's own book *The Alphabet and Elements of Lettering*. My reaction to this book is a bit like McMurtrie's reaction to Goudy's work in general: it stops me cold a couple of times per page. I don't believe, however, that it's because of the innate beauty of the type (except perhaps for the capital C, which slays me), but rather because Goudy used the tied forms of ct and st at every opportunity. I think we're so well accustomed to the fi, ffi, fl, ffl ligatures that we don't even see them any more; but the tied ct and st characters are just a bit too antique for me to skip over them easily. It's something like the old "long s," which makes us all stop and try to pronounce it like an f, even though we all KNOW that it isn't really an f.

Will It Play in Peoria?

It's true that the majority of the 150 or so faces designed by Goudy have been enormously successful in advertising. Lieberman tells us that on any given day during the twenties and thirties, more than half of the advertisements appearing in the United States were set in some Goudy typeface. That's quite possibly an exaggeration, not unthinkable for Lieberman. It's hard to imagine who might have done the research that yielded such a figure, or how long it must have taken to assemble the facts before ADP. Lieberman contends that this proves how well Fred Goudy was attuned to his times, but he finds that after Goudy's death in 1946 the times passed him by. (He does note that there may currently be promising indications of a revival.) I did a quick scan through a recent issue of MacUser and found Goudy faces used on 23 pages. This figure does not, of course, compare with the totals for Garamond and Helvetica, but it's hardly a sign either of obsolescence or of a nascent revival; it strikes me as a mainstream kind of statistic.

But the reaction of the critics is interesting: it's almost as if they feel that when a typeface that has been successfully used in books happens to appeal to ad agency personnel as well, it's an "advertising type." One is reminded of the button-down jazz buffs of the fifties who scorned Ella for "going commercial," or the sports fans who feigned shock when DiMaggio struck his deal with Mr. Coffee. Purity, it seems, means that a typeface is suitable for "fine printing" and for nothing else. Naturally, such a typeface would be pretty hard to find. It's true that Goudy Oldstyle is used extensively in advertising, but I consider it, like Miss Fitzgerald and Joe D, too good to be tainted by the association.

Incidentally, Frederic Goudy drew only the roman and italic versions; the complementary styles, such as the bold and the handtooled variants, were derivative faces drawn by others in the employ of the foundries. Of these variants, Goudy Bold, drawn (of course)

by Morris Benton, is routinely used in book work as the bold version of the Oldstyle and, standing on its own, it has been equally successful in advertising. As an indication of Benton's talent as an adapter, compare these letterforms drawn by Goudy with Benton's Goudy Bold:

E M N Q
E M N Q

Despite Goudy's association with commerce, Bruce Rogers designed several books using Goudy's Italian Old Style for the text. He also experimented first with Goudy Newstyle for the text of the great Oxford Bible before settling on his own Centaur type. He was profuse in his praise of Goudy's Forum Titling, calling this the most useful alphabet for chapter initials. (Chapter initials are not commonly found in advertisements.) Interestingly, the Dover reprint of *Paragraphs on Printing*, by Bruce Rogers, uses Goudy Oldstyle on the cover.

Again, Californian, as redrawn by ITC and issued under the name of Berkeley, is available from Adobe, and Adobe describes it as "perfectly suited for text applications—including newsletters, directories, books and virtually any application that requires an elegant, easy-to-read type."

So, finally, how do Goudy's types fare in the Macintosh world? Without consulting any lists, I'd say they're holding their own. The Oldstyle is available from Adobe and Altsys; Copperplate Gothic from Adobe and others, though the example shown above was drawn by me; Kennerley and Newstyle from Altsys; Berkeley from Adobe; and Forum, Hadriano and (evidently) Kaatskill from Giampa.

I could wish for Macintosh versions of Village No. 2 (the house face of the Village Press that replaced Village No. 1 in 1932), and of Deepdene, two unjustifiably and incomprehensibly neglected book faces; and of Cloister Initials—my own candidate for best chapter initials, ever, even though I admit that the Forum initials are appropriate in more contexts. I would also like to see a PostScript version of Goudy Text—the sleekest, most legible form of blackletter I know of that can be called a traditional text alphabet rather than a watered-down modern gimmick. Caxton Initials would be of limited usefulness, but could be cold-blooded killers in the right situation.

I don't object too strongly to McMurtrie's final assessment, because it shows that his heart was in the right place: "Many Goudy types have been and will be used in privately printed books set in relatively large point sizes, and his types work successfully in magazine heads, advertising display lines, and so forth. But there are few six-hundred page novels set in Goudy's types and no dictionaries or encyclopedias. All this simply indicates that Goudy's genius is great but not universal."

Authors' Guide—Part 2

by Tim McGraw

Hardware

New and fascinating peripherals are being introduced at a rapid pace by hardware manufacturers. The drawback is that hardware is generally expensive, and you'll want a good personal reason to shell out your dollars to buy such equipment. Some of the more expensive items, such as hard disks, are becoming more common (and necessary!) all the time.

An area in which the Journal has been lacking is in reviews of new computers; neither the Apple //c+ nor the II GS "ROM 3" upgrade were mentioned in the Journal. Reviewing such a computer doesn't really require you to even buy it (though it would be best if you did, to put it through rigorous testing). Download the new specifications from the TCS or other BBS, go down to your local Apple dealer and ask to spend some time with the machine. If you explain to the dealer that you'd like to write about it for the Washington Apple Pi Journal, they will probably let you spend some time with it and look over the documentation and tutorials just to get the publicity for the new, upgraded machine.

While such innovative products such as internal hard disks for the Apple II from Applied Engineering and Applied Ingenuity call for individual reviews, watch out for repetitive products. If you just read about an Acme computer in the Journal which uses a Seagate drive, it's probably unnecessary to write about the same drive in a different housing from another "manufacturer" in another review. An exception might be a drive bundled with Apple II-specific utility software, in which case it becomes a hybrid review and crosses over into the next category.

Software

If a program is no more than, say, a year old, it's fair game. If you've just come across a program that has solved one of your life's great problems and it's not in the Journal index for the past two or three years, it could be an undiscovered gem deserving a concise treatment. Programs that have been upgraded MAY call for a review, but it should be a MAJOR upgrade. There is no rhyme or reason to how software publishers number their versions, but a rule of thumb is that version 2.0 to 2.1 does not require a full-blown review, but version 2.0 to 3.0 might introduce new features, and readers may be looking to the Journal for timely information on whether to take up vendor's offers of special upgrade pricing.

The following applies to both hardware and software reviews: be specific. If a product doesn't function as promised, say not only *What* was wrong with it, but explain *Why* in plainest terms. The most informative and valuable reviews are the most rigorous.

Tipware

There are programs that have been around for eons—such as Appleworks—that users and programmers continue to modify and find new tricks for. Journal editors are often asked whether a two or three-paragraph "tip" article would be suitable for the Journal. While there often is good information in these articles, trying to place several short articles attractively is very difficult to do, and a page with five headlines is confusing to the reader. Such tips often find their way into well-edited "Best of the TCS" articles. If you come across such tips regularly, you may want to consider a column.

The Pi Journal has some excellent columnists, so if you are considering one, make it a point to talk to one of them before committing to it. It's a lot of work to come up with article-length tip columns month after month. Even folks who get paid to do so find it a great task. Columns are welcomed, but please stick with it, and talk to the appropriate Journal editor before embarking on such a path. If you have devised techniques or work-arounds for existing programs, write a step-by-step "guide" that will walk the reader through your process. Ask a "disinterested party" to read it before submitting it, to make sure you didn't overlook a step or leave something essential out that will only be obvious to an outsider.

Program Listings

Article-length program listings were a popular feature of the Pi Journal for a decade. This is the 1990s. We have telecommunications. The Pi Disk Library, with disks priced less than a new paperback novel, is a great way to obtain and distribute code. The Pi TCS costs users about the cost of a paperback for one whole year. If you can't get code, source code and all the other code accouterments through other means, where do you get your current information in prose form? Personally, A+ was a loss for me because it remained packed with well-written, up-to-date information. I prefer to fill the pages of the Journal with good, well-read prose with a pinch of jargon and a smattering of short type-in listings when necessary.

People

People are the most often overlooked subject in computer literature. The soul of a new machine is the people behind them. The beauty of writing people stories is that it doesn't require the purchase of expensive hardware and software. It just requires an imagination, a list of questions, an ability to take good notes and a couple of long distance calls. Who are these people behind "Applied Ingenuity" P ahem P "Ingenuity." What kind of grade did Andy Nicholas get for writing ShrinkIt!? Is there really a college kid somewhere that has designed a 20Mhz 65816? There are personalities behind our machines that, if you find them intriguing, chances others will too. If you don't have Woz's home number, try the PR department.

Events

Any Pi event is an excuse for an article. If you want to see your SIG grow, get consistent Journal "coverage" for it. A recent WAP Saturday "tea" produced the Hyperstudio "Tea Stack" and an interesting discussion of exploring sound and video with a

cutting-edge product whose interest is especially sustained.

What do I say about these things?

Be specific. Be concise. Don't be too stuffy. Writing is thinking. Nurture inspiration: Think first, write later. The best and shortest book on writing well is Stunk & White's "Elements of Style." And most of all, have a good time.

STYLE GUIDE

ACRONYMS. There are some acronyms that don't require explanations; they will be pointed out here. Don't assume that people know what a GUI or an ADB is (graphical user interface; Apple Desktop Bus).

APPLE CPUs. Apple II, Apple IIe, Apple II+, Apple IIc, Apple IIc+, Apple IIGS. Context may determine (for either you or the reader) whether you mean the Apple II in general, or the specific model. Other models were the Apple III and the Lisa. Lesser-known computers include the Macintosh 128k, Macintosh 512k, Macintosh 512ke, Macintosh Plus, Macintosh SE, Macintosh SE/30, Macintosh II, IIx, IIcx, IIci.

DISK DRIVES. Most Apple IIs have a Disk II or Apple 3.5" disk drive connected to them. Refer to floppy sizes as a 3.5" disk or 5.25" disk.

NUMBERS. Spell out at the beginning of a sentence. In general, write the words for 1-10, and numerals for higher numbers.

MEGABYTE. The number followed directly by a capital 'M' is acceptable in all references to "megabyte," as in "a 20M hard disk." Spelling out megabyte in the first reference also is acceptable.

PUNCTUATION. If you can break yourself of the habit, leave only one space after periods. "Speaking" of "quotations," use quotation marks sparingly. Use them to introduce potentially "new terms" once at their introduction. Follow this long-established printer's rule: periods and commas inside quotations; semicolons, colons, question marks and exclamation marks inside only if they apply to the quoted material.

RAM is acceptable in all references to Random Access Memory. ROM is acceptable in all references to Read-Only Memory. These terms are clearly explained in most Apple owner's manuals. That's BASIC.

WASHINGTON APPLE PI. Washington Apple Pi, the Pi and WAP are all acceptable references to our user group. The Washington Apple Pi Journal. The TCS or Telecommunications System.

The Cuckoo's Egg

by Bernadette McMahon

The February issue of *Smithsonian* magazine first introduced me to Clifford Stoll, and now that I've been absorbed by his words for several days, I'm glad I made his acquaintance. Stoll is author of *The Cuckoo's Egg*, a combination detective adventure, high tech instruction manual, love story, and coming-of-age tale of an archetypical Berkeley astronomer who learns to stop worrying and trust the feds.

The Cuckoo's Egg details events that began in Fall, 1986, when Stoll first detects the presence of an intruder in the Lawrence Berkeley Laboratory's (LBL) Unix computer. The hacker acquires system manager privileges by taking advantage of a hole in the Unix operating system, planting a substitute program that "hatches" within five minutes, just as a cuckoo's egg is hatched by the bird in whose nest she laid it. Rather than just close the hole, Stoll chooses to track the intruder's moves and see where they lead.

Where they lead is through a maze of computers, tied together by the networks set up for the convenience of scientists, researchers and developers throughout the world. Stoll watches the hacker use his system manager position in the LBL computer as entry port into a wide variety of other computers, with a special fondness for those located on military bases. It soon dawns on him that national security may be jeopardized by the skill and persistence of the hacker and that he should contact government authorities.

Herein lies one of the fascinating personal aspects of the story. Stoll's mindset is typical of what he calls the "People's Republic of Berkeley," and the very idea of assisting the FBI causes him mental anguish and generates antagonism between him, his "sweetheart" Martha and other friends. Not to worry. The FBI has scant interest in a case that to date has caused a documented loss of $.75 of computer time.

Only persistence on Stoll's part eventually brings authorities into the case. By knocking successively on the doors of other affected computer operators, the local police, the telephone company, the FBI, CIA, and NSA, he finally generates enough interest to make things happen. None of this occurs easily, however, and Stoll gains a new appreciation for the term "bailiwick" as used by government agencies.

While attempting to alert authorities, Stoll continues to track and record the hacker's every move through the nation's computer networks on a printer inserted between the incoming phone line and the system. He programs the computer to signal his beeper when the line is activated, and frequently pedals his bicycle from home to the lab (no car owner he) in response to the beeper's alert.

Meanwhile, life in Berkeley goes on, and Stoll's ability to incorporate his personal story into the tale of computer burglary provides all of the charm in this book. His picture of scientist as real person is reminiscent of James Watson's *The Double Helix*, but not even Watson included in his story a scene like Hallowe'en on San Francisco's Castro Street or a recipe for cookies. Stoll and Martha piece quilts for relaxation, entertain friends, garden, and, yes, eventually even marry. Despite her misgivings about cooperating with federal agents and the interruptions the search introduces into their life, it is law student Martha who eventually suggests the "sting" operation that helps them keep the hacker on-line long enough to be traced.

Astronomy Ph.D. Stoll denigrates his own skills, claiming that astronomers think he's a good computer programmer and programmers think he's a good astronomer, but the story belies this modesty. He's also extraordinarily good, in his own quirky way, at explaining the operations of computer systems in terms that can be understood by a reader only distantly familiar with them. My personal favorite is his explanation of the irreversibility of passwords entered using "trap door" encryption software—"if you turn the crank of a sausage machine backwards, pigs won't come out the other end."

The story starts to drag about three-quarters of the way through, but then so did the search for the hacker. For months, Stoll continues to track the hacker's moves, but once the federal and international authorities become involved, he is provided with essentially no feedback on the progress of the search. (NSA stands for "never say anything.") His summary of the disposition of the case is based on information obtained from journalists and other non-official sources. Far be it from me to give away the ending, though you can guess part of it from the network map printed inside the covers of the book. The outcome is not that important, anyway: as with most good detective stories, the chase is the thing.

Stoll's book provides him a forum for publicizing the need for greater computer security. Again and again, the book describes scenes of the hacker's taking advantage of an opening that could have been prevented by a simple action on the part of the system operator. He grapples repeatedly with the conflicting need of the computer user for a friendly, easy-to-use system and the importance of providing barriers to those who would steal from or damage the system. Stoll sees computer networks as communities set up for mutual benefit. In fact, it is his outrage at those whose would violate the trust on which such a community is built that prompts him to overcome his unease at working with government agents.

According to the book jacket, Stoll has now delivered more lectures on computer security than he cares to admit, and the *Smithsonian* interview makes note of his appearance on *Good Morning America* in December. A future as a computer security expert seems to be there for the asking, but he still prefers astronomy and now works at the Harvard-Smithsonian Center for Astrophysics in Cambridge, MA.

The recent appearance of *The Cuckoo's Egg* on *The Washington Post*'s best seller list is easily understandable, not entirely or even mostly because of the expertise it imparts to the computer security world. Stoll has told an entertaining story that can be enjoyed by anyone with an interest in computers, and I recommend it highly.

The Cuckoo's Egg, by Clifford Stoll, Doubleday, New York, 1989.

Software Ventures presents the all new 1990 model:

MicroPhone II version 3.0

A "Stunning" Achievement in Software Engineering

The software that takes the hassle out of telecommunications. Like a finely crafted European touring sedan, MicroPhone II offers you unsurpassed power and allows you to communicate with style and agility.

Here are seven reasons why, if you're serious about telecommunications, you should consider owning MicroPhone II:

POWER TRAIN. MicroPhone II is charged by the most powerful scripting engine for telecommunications, offering variables, string and math functions, arrays and file manipulation. You develop scripts with either the program's learn mode or its point-and-click script editor.

DESIGN. Surprisingly, with all its unparalleled power, MicroPhone II is simple to use. Menus, dialog boxes and on-screen controls are well organized and pleasant to look at. Its "outstanding" manual is easy to read, clearly laid out and contains a thorough index.

SPEED. Routinely clocked at 18,000 bits per second over ordinary telephone lines, MicroPhone II is the fastest telecom software around. Its file transfer protocols — XMODEM, 1K XMODEM, YMODEM, YMODEM-G, Kermit and ZMODEM — are all optimized to make your files fly across the country or around the world. The intelligent ZMODEM negotiates the most treacherous channels of a packet-switched network and resumes broken transfers with no loss of data.

COLOR OPTIONS. MicroPhone II lets you assign color icons to your scripts, thus turning the *icon bar,* shown here, into your control panel. The icon bar can be scrolled, resized and placed vertically or horizontally anywhere on the screen, awaiting your next click. Choose icons from the large collection provided with the software, or create your own.

CRUISE CONTROL. Flexible scripting means that MicroPhone II can run on *automatic* while you're taking care of other important business. Whether collecting your electronic mail in the background, or calling Paris at midnight to transmit the daily sales report in French, the program is always at your service, saving you time and money.

RELIABILITY. Because Software Ventures' engineers value your time on-line, they spend countless hours applying the most rigorous testing procedures to ensure that the program is crash-resistant. In the words of *The Macintosh Buyer's Guide,* MicroPhone II is "the most reliable of all the telecom programs we tested."

TEST DRIVE. Software Ventures so firmly believes in its superior technology that it gives you an unprecedented chance to *test drive MicroPhone II for 30 days risk free.* If for any reason you wish to return the program, you may do so for a full refund of your purchase price directly from Software Ventures — no questions asked.

But enough talk. Start using MicroPhone II today and find out for yourself why Jim Seymour and John Dvorak are the great communicators. After all, having invested all this money in the best hardware in the world, don't you deserve the best software?

Jim Seymour:
"... arguably the best communications software ever written."

John C. Dvorak:
"... stunning. Fast, slick; it does everything except slice bread."

SOFTWARE VENTURES™

2907 Claremont Avenue Berkeley California 94705 (415) 644-3232

Buying A Hard Disk Drive

by Ralph J. Begleiter

Among the most intelligent purchases you can make for your Macintosh computer system is a large-capacity hard disk drive. A hard disk offers virtually unlimited data and program storage space, and significantly speeds up your computing.

But buying a hard drive shouldn't be a hasty decision, especially because the costs involved can run from a few hundred to more than a thousand dollars. And it isn't an easy chore. It's worthwhile doing some research and protecting yourself against a less-than-helpful retailer.

I'm not going to attempt to make recommendations in this column about which disk drives you should consider, but I'll offer some guidelines about how to do your shopping and what to consider.

First, decide on your needs. From experience with the Macintosh over the past six years, many users have discovered that hard disk storage space is like money: you can never seem to get enough. In 1984, when the Mac was first sold, a 20 MB (20 megabyte, or 20,000K) hard disk drive seemed extravagant. At that time, 20MB drives sold for more than a thousand dollars. Today, for less than a thousand, you can buy an 800-100 MB hard disk drive of better quality.

If you use your Mac heavily with pictures and digitized sounds, or for heavy-duty desktop publishing, you'll need the largest disk drive you can get (larger than 80MB). Graphic and sound files use lots of space. If you use your Mac largely for word processing, light-duty desktop publishing and accounting or budgeting, you can get away with a hard disk drive smaller than 80MB.

As a general rule, it's a good idea to buy the largest capacity disk drive your budget can afford. You won't regret it a year later.

The next most important factor is the style of hard disk drive: mounted internally inside your Macintosh, or externally outside the computer.

Internally mounted drives are very convenient. You don't see them. You often don't hear them. You don't have to remember to turn them on, or off. They're always ready for work. And they're generally slightly less expensive than external drives. But, when an internally mounted disk drive fails for some reason, your entire computer must be taken out of service to go to the shop for repairs.

An external drive comes mounted in a separate box, often designed to sit right under your Macintosh. It plugs into a "port" on the back of the computer. The big advantage of an external drive is that when it fails, it may be repaired without taking the computer out of service. Likewise, when your computer needs repair, your disk drive (with all its valuable and confidential data) doesn't have to accompany the computer to the shop.

External drives are simple to install yourself. Internal drives bought by a MacNovice should always be installed by a qualified technician. Because an external drive transfers its data through a cable and a connector at the back of your computer, it's data transfer rates are usually somewhat slower.

Another key factor is noise. Keep in mind how you'll use your drive. Will it be mounted right under your Mac, where its fan will add to the sounds of your computer right under your nose? Will it be mounted elsewhere, some distance from the computer (under the desk, for instance) where noise won't be so noticible? Will it be mounted inside your computer?

Other factors are less important. Speed, for instance. Unless you're handling multi-megabyte graphics or accounting spreadsheets, I don't think you'll notice the difference between data access speeds by your hard disk drive of 18ms (milisecond) vs. 25ms. Unless you need speed, it's fine to buy a slower, lower-priced drive.

Software accompanyig your hard drive is another consideration. All hard disk drives require some software to make them identify themselves to your Mac, and to make them partition and find your data. As is always the case, good software is better, bad software is worse. But you can always buy better software separately if the programs which come with your hard drive are cumbersome. ("SilverLining™" by LaCie, Ltd. is one of the best software packages I've found for managing a hard disk drive. The software provided by PCPC with its "MacBottom™" hard disk drives is also very good.)

Other factors you may want to consider include

- Does the drive offer a "print spooler," which allows your to continue working while your printer is handling your last job?
- Does your drive have an indicator light? (Who cares, really, unless you want to know that your drive is actually operating. Some drives offer an indicator on your Mac screen, instead of on the drive itself.)
- Do the read/write heads of the drive "park" themselves safely and automatically when you shut down? (This is a safety feature to protect your data from errant heads.)

Once you've settled on several drive models to choose from, you'll want to decide how to buy. From a local dealer? By mail from a mail-order Macintosh firm? My mail or phone directly from a manufacturer? Or even perhaps a used disk drive from another Macintosh user who's outgrown her disk drive?

Here's where factors such as reputation and convenience come into play. Buying from a local dealer will almost always be more expensive. And a local dealer is likely to sell you the drives he stocks, rather than the one you have picked out. Buying a used drive comes with the same disadvantages of buying a used car, but with the advantage of low price. Buying from a mail-order house comes with the reputation of the firm, but with recourse only by phone or mail. Buying from a manufacturer comes with the reputation of the firm, sometimes a very low price and, often, a longer warranty.

If you buy by mail, or by telephone using a credit card, you are entitled to certain well-specified protections under federal law (the "Fair Credit Billing Act"). You also can get help from consumer agencies such as the Better Business Bureau (1515 Wilson Boule-

vard, Arlington, VA 22209) and the Direct Marketing Association (6 E. 43rd Street, New York, N.Y. 10017).

Since buying a hard disk drive involves spending anywhere from about $400 to almost $2000, you'd be well advised to read thoroughly the excellent reports (including drive-by-drive comparisons) in the February, 1990 MacUser Magazine, or in other publications such as MacWorld.

Finally, to end on a note of caution, learn from the experience I had last year with a hard disk drive manufacturer, by reading the sidebar called "Driving Up the Wall," which accompanies this column.

Driving Up the Wall

Learn from my experience...

by Ralph J. Begleiter

Diary of a hard disk drive purchase, 1989:

- June 7, 1989 Telephone order placed with LaCie, Ltd. of Tigard, OR, for one Cirrus™ 84MB internal hard disk drive for installation in a Macintosh IIcx computer. Advertised bundle (confirmed during telephone order) includes mounting bracket, "SilverLining™" & "SilverServer™" software and 2-year warranty. Payment by credit card. (Charges include $18 shipping, $30 "service" fee for credit card use.)
- June 13, 1989 Merchant ships drive. Bundle includes incorrect mounting bracket (for Macintosh II), outdated software, one-year warranty.
- June 27, 1989 Charge for transaction appears on credit card bill. Letter to merchant requesting replacement of bracket and software with current version, and written statement of 2-year warranty as sold.
- July 19, 1989 No response yet from merchant. Letter to credit card company (bank) formally requesting "chargeback" under "Fair Credit Billing Act," summarizing problem, reporting attempt to resolve with merchant.
- July 28, 1989 Initiate telephone call to merchant "customer service" department. Promises to ship up-to-date software, correct bracket when available, and statement of warranty.
- August 1, 1989 Letter to merchant confirming details of telephone conversation, including merchant promise to send bracket when available, current software and 2-year warranty statement.
- August 3, 1989 Merchant ships correct software and correct bracket.
- August 7, 1989Software & bracket arrive. Handwritten note from customer service representative says "Hope this does the trick. Sorry for any inconvenience." No warranty statement included.
- September 5, 1989 Drive fails. First attempts to reach "technical support" at merchant. Messages left on 9/5,8,11,12/89
- September 8, 1989 Merchant claims attempt to reach customer by phone.
- September 10, 1989 Letter to bank remininding that dispute with merchant remains unresolved and continuing to withold authorization for payment to merchant.
- September 11, 1989 Letter to merchant calling attention to still-missing warranty statement, to now-failed drive, and to inability to connect with tech support.
- September 13, 1989 First contact with tech support regarding drive failure. Tech support diagnoses "serious problems" and immediately authorizes return of drive for repair/replacement.
- September 18, 1989 Merchant receives failed drive.

  Unaware of this, tech support calls again, offering to help.
- September 24, 1989 Tech support completes replacement of hard drive.
- September 25, 1989 Merchant ships replacement drive.
- September 30, 1989 Replacement drive arrives, missing power cord (rendering drive uninstallable). Still no warranty statement included.
- October 2, 1989 Telephone call to tech support requesting power cord. Merchant apologizes and promises to ship cord overnight express.
- October 3, 1989 Wrong power cord arrives (designed for external disk drive). Replacement drive still not installable.
- October 4, 1989 Telephone call to request correct power cord. Tech support promises to ship overnight express.
- October 5, 1989 Correct power cord arrives. Drive now installable. Still no warranty statement included.
- November 4, 1989 Letter to bank remininding that dispute with merchant

remains unresolved and continuing to withhold authorization for payment to merchant. Also reminding bank of its obligation to respond in writing under "Fair Credit Billing Act" rules.

- December 10, 1989 Letter to merchant informing that I will return drive and cancel transaction unless I receive warranty statement by December 23, 1989. Similar letter addressed to merchant's President & CEO.
- December 14, 1989 Letter sent by merchant (first letterhead correspondence) enclosing two-year warranty statement.
- December 20, 1989 Letter and warranty statement received by customer, thereby completing the transaction more than six months after date of order.
- January 7, 1990 Letter to merchant acknowledging receipt of warranty and completion of transaction. Letter to bank informing of resolution of dispute with merchant and authorizing payment.

"Our attention to details makes us better."

(Quotation from LaCie advertisement in Mac Week Magazine, November 14, 1989.)

Avoiding Mail Order Fraud

Following are tips offered by Consumers Union, publishers of Consumer Reports, for avoiding being "taken" in a mail or telephone transactions, such as the purchase of computer products.

(From The CU Letter, July/August, 1989)

Read advertisements carefully., especially the fine print. Don't rely on pictures and headlines.

Always pay by check, money order or credit card, so you have a receipt of payment.

Don't order from an unfamiliar company if an advertisement lists only a post office box; the company may not want to disclose its exact location.

Don't order from companies that *require* the use of toll-free "800" numbers and charge cards. They may be trying to avoid use of the mails to get around federal postal laws.

Beware of high-pressure tactics – "can't miss" deals, "last time" offers, "once-in-a-lifetime" opportunities, and "limited supply" sales.

Keep all advertisements, envelopes and correspondence with a company in case you have complaints about your order. (Some firms require that you send in the original ad with your order. Copy the ad before sending it in.) If you order by phone, make a record of the order – price, time, and date of your conversation, and the name of the person you talked with.

Most mail order companies will act quickly to rectify problems, but some may not. If you run into trouble, *write* to the company. If you *telephone* to complain, write a follow-up letter. If you don't hear within 30-days, write to other agencies:

- Better Business Bureau (1515 Wilson Boulevard, Arlington, VA 22209)
- Direct Marketing Association (6 E. 43rd Street, New York, N.Y. 10017).

State and local consumer-protection agencies may also be able to help resolve your problem.

Help us get our act (and Journal) together!

In May, we are going to ask any of you who may have ideas, critiques or suggestions about ways of improving the WAP Journal to get together with us for a few hours.

Exactly when this is going to happen is not yet clear, so watch this space (and all the rest of them, need we add?) for further details.

In the meantime, store up your comments and concepts like squirrels getting ready for the winter...

MACINTOSH

Hard Disk Hygiene:
Defragging and Optimizing

by Robb Wolov

When we addressed the basic care and feeding of your hard disk, we started to discuss the problem of fragmentation of disks. Fragmentation results in a gradual, insidious loss of speed in retrieving and writing files. This is a problem in possibly all operating systems regardless of size or complexity. VMS does it to DEC VAX systems, Unix does it to everything from mainframes down to the smallest systems running this OS.

Simply put, as you work with files, their sizes change. Databases, letters, spreadsheets all get bigger as you add to them and of course shrink as you delete. This obvious fact of life would not be a problem if only operating systems did not store data in the manner they do—by placing it in the first available sector of the disk.

Say you copy onto your new disk two letters each 15,000 bytes in length. Each is stored on a portion of the disk in contiguous sectors. Where the storage of the first letter ends, the second letter begins, since the computer looks for the first available sector. A third file starts out at the tail end of the second and so forth. Now, say you go back to your first letter to edit or add to it. Just for illustration, your original 15K letter is now 20K. Where does the extra 5K go? It can't be added to the original since your second file is butted up against the first. Simply, the computer places the extra 5K of data at the end of the second file or third or wherever it finds an empty sector. The point is that your original file is now in two pieces and all we had on our disk were two files. It is easy to see that with hundreds of files all in flux, your data and applications can eventually be scattered over the surface of the disk.

Each fragment is dutifully recorded by the Finder so that your Mac can recover them when you make a call for a file, but it also means that the magnetic head has to do a dance over the disk to recover all the pieces! The more complex this dance, the longer it takes to gather up the pieces, and the slower your disk seems to perform.

Other then speeding up disk access another reason to "defrag" (defragment) your disk is that some feel all that extra head motion increases mechanical wear and tear, though I have never seen any objective evidence to support this. Also, having all the sectors of a file together may improve a file recovery program's chances for success in the event of a disk crash.

One way to collect all the pieces, though hardly a simple chore, is to back up your hard disk, erase and reformat it, then restore its contents. Each file will then be recopied back in continuous blocks. However, a number of disk utilities, Symantec's SUM, PC Tools for the MAC and Silver Lining for example have defrag capabilities that will do a fair job defragging your disk, but they combine only the biggest pieces, not necessarily all the pieces.

Ironically the first commercial program on the market to address this matter was and still is the best, Alsoft's Disk Express (version 1.5). Not only does it defrag all the pieces of your files, but also "optimizes" them. This optimization step so far is unique to Alsoft. As it collects all the pieces to the puzzle, it reads the file's Type resource and places it in the most optimal portion of the disk. Since a hard disk is read from the outside inward (the magnetic head's resting position is usually to the outside) Disk Express places the operating system files on the outer tracks first, followed in the order they are usually used by the computer...INIT files, cdevs, applications and finally data files. Since data files are the ones most likely to be changed, therefore fragmenting, they are placed at the end with the most room for expansion. Each file is defragged first before it is erased from its old locations as a safety precaution in the rare event of a power outage in mid cycle, though it is best to back up your disk before using any defrag utility.

In addition, Disk Express 1.5 can optionally erase and overwrite blank space on your disk with 1's and 0's. This prevents unauthorized recovery of previously erased files, thus complying with certain government security requirements. Disk Express's activity also compresses your Desktop file removing extraneous icons and file information for files previously erased, though I have been told by Alsoft's programmers that the problem of the growing Desktop file is now under control with System 6.04.

It is obvious that Alsoft takes the matter of disk defragmentation quite seriously. They could have left well enough alone, but...

Disk Express II

The theory behind Alsoft's Disk Express II (DE II) version 2.04 is intriguing. Where Disk Express 1.5 was a stand-alone application to be run periodically after a backup, DE II is now a memory resident cdev. The program now continually monitors your disk activity recording its results in a hidden file. During times of user inactivity, DE II defrags your disk, file by file. Where DE 1.5 optimized your disk to a predetermined sequence, DE II places your files in the order that you use them.

Through the Control Panel, you can graphically monitor the state of your disk's fragmentation along with such statistics as size of contiguous free space, number of files, percentage of fragmentation and date of last defragmentation. You can also switch DE II off, choose to only monitor your disk but not defrag it or force a complete defragmentation on the spot. DE II can also be configured to run and forget on an Appleshare file server.

The theory on paper was neat, but the execution at first left much to be desired. I won't retell all the horror stories. Needless to say that version 2.0 was followed in very rapid succession by versions 2.01, 2.03 and 2.04. The first versions basically decided to defrag your disk when IT wanted to, not when YOU wanted it to. And, during a defrag you had to fight to regain control of your system. Not an auspicious start for a program evolved from a predecessor with such a great pedigree. I can report that version 2.04 does the trick and behaves as advertised.

Your first experience with the now well-behaved DE II will at first put you

off. The program goes right to work moving files about, even if you have just defragged with the older version. Even before DE II has a chance to monitor and record your work habits, it obviously has different ideas as to where your files belong compared to its older sibling. For the next week DE II continues to have periods of furious activity. My reaction to this was obvious. I defrag my disks to reduce disk activity; what gives?

However, as DE II tunes its data file on you (Geez, that sounds sinister!) and moves things about, after about 5 days things quiet down. Now, when I turn on my system for the first time that day, DE II spends about 2 minutes tidying things up and an occasional 30 to 60 second burst of activity over the course of the day.

Do I recommend DE II? Well, let me say for now that it remains in my System folder on full automatic. It has not interfered with the operation of any of my applications nor corrupted any files. The Control Panel graph seems to show that all my files except for the ones I am currently working on are all contiguous.

For those that feel uncomfortable with this "auto pilot" aboard, Disk Express 1.5 continues to be available from Alsoft and continues to outperform any and all such defrag modules from combination packages. However, if you like the idea of optimizing your disk based on your own work habits but are uncomfortable with anything "automatic," merely set DE II to monitor your disk but not defrag it on the fly. When you do a manual defrag, DE II will utilize the personalized report created.

While an automatic background defragmentation program is new to personal computers and the Mac in particular (to the best of my knowledge there is no equivalent in the MS-DOS world) such programs have existed for awhile for big iron systems like the VAX. It is an interesting utility and a recommended one.

Until next time...

Software review

Sticky Business

by Marty Milrod

One of the first Mac programs that impressed me was Silicon Press1.1, produced some five years ago by Silicon Beach Software, a company recently bought out by Aldus. Silicon Press ($52 through mail order houses) had the then unique feature of being able to "nudge" a text block up or down a pixel at a time, and was the first of the "template/label-making" pieces of software. It was quite effective and I liked it.

Now another company, Williams & Macias, has produced Sticky Business, a program which represents a significant evolution of the original Silicon Beach concept. Costing $79 at mail order houses, Sticky Business (SB) places great reliance upon die cut adhesive label stocks produced by companies such as Avery and Dennison, and many prepared templates for these commercial products are included with the program. Here is a sample of the basic contents of the SB disk.

As you can see, there is a broad range of ImageWriter (pin) and LaserWriter forms. They are obviously more expensive than plain paper and therein is the cost rub. But for those of you who have the need for specialized labels—such as nameplates for meetings or large numbers of mailing labels for your organizations—this is a cost effective way of doing them.

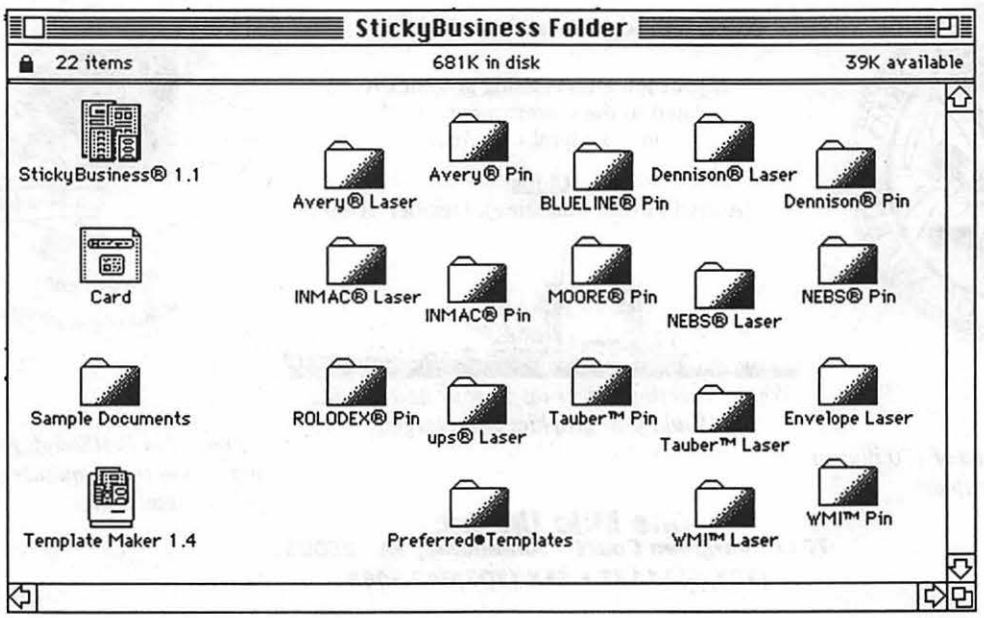
Want a look at a brief sample of the kinds of label stock templates provided? Here—limited by space considerations—are a few.

The William and Macias stock labels (WMI) in 2.75 x 2.75 inch sizes, and the Avery (AV) 5196 stock label are just right for the 3.5 inch Mac disks. I use the AV 5160 (1 x 2.6 inch) address labels (30 to a page) extensively both for return mailing address labels and for producing organizational membership mailing labels.

One of the nicest features of SB is in its MailMerge function in that almost any database listing names, addresses, etc., which is capable of producing delimited forms of its data base—that is delimited by commas, tabs, spaces and so on—can be fed directly into the label stock you have selected. In my experience only database programs really are adequate for maintaining membership rosters. [One of the great myths of "functionality" is that MS Word is capable of producing mailing lists in a meaningful way. Sure, it can produce such lists in limited instances, but for most users it is a nightmare, and I recommend that no one use Word or like programs for mailing database listings.] By using the international quote symbols [« »] (Option-\ and Shift-Option-\), you can designate where you want database entries to be placed on your printed form. Then, by accessing your delimited database, i.e., naming it as the first line of your MailMerge effort, SB automatically assigns each record to a separate label.

You can also designate the number of "copies" if you are using label forms or "labels" you want printed, and can incorporate EPSF and other graphics into your label.

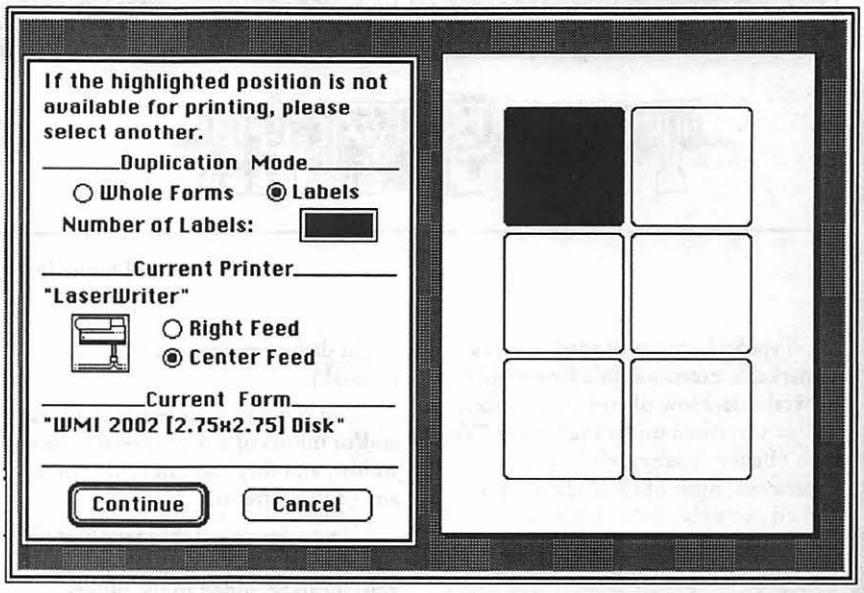
This program is not the be-all and end-all of programs. It is a functional, useful program for specialized uses. Please note that while I have emphasized

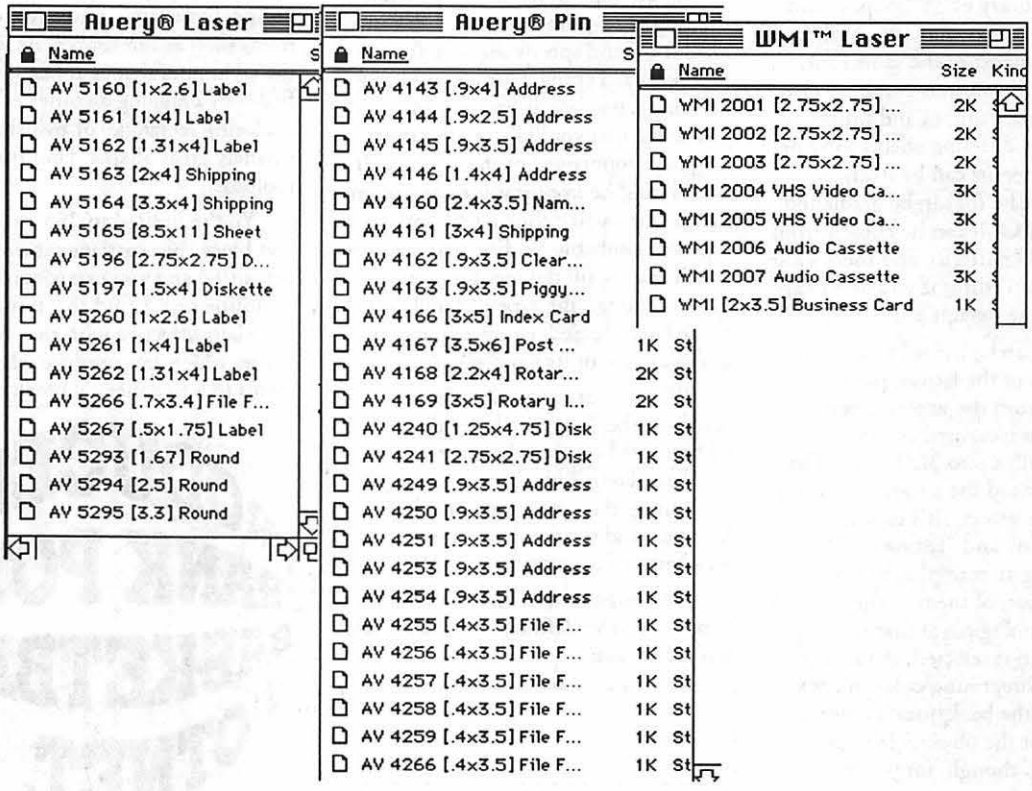


the use of pre-designed labels, you can really create your own template designs fairly easily and can make easy adjustment for automatic alignment of text and "closing up" blank spaces and lines on missing data—say when there are only three lines of an address instead of the more common four lines. You can also adjust font size and style, as everyone nowadays expects to be able to do, and can rotate text and graphics (but only in 90-degree increments).

I have numerous wishes for improvements, of course. Why can't we get a simple full-page display of a to-be-printed form or page and let us fill in the data to be used? I know, I know, that demand isn't high on anyone's list but there have been times when I would have preferred it. How about continuous rotation ability, better kerning, tracking, leading and full color capabilities?

Despite these and other suggestions for improvements, it is still one great program for dazzling your friends and colleagues by producing a handsome set of labels or envelopes in the "wink of an eye." I've sold my copy of Silicon Press.





Software review

TYPESTYLER

by Jim Donnelly

TypeStyler from Brøderbund is a remarkable exception to a lamentably general rule. How often have you seen things advertised under the banner "You won't believe your eyes"? In my experience, most of those claims have turned out to be, let us say, overstatements. With TypeStyler, which makes the same claim in some of its ads, you definitely, positively, flat-out will not believe your eyes. This is world-class stuff, a type-manipulation tool that seems capable of doing just about anything that you might ask of it.

The number of options that you'll find upon first opening TypeStyler is staggering. But this wealth of possibilities is deceptive and tends to mask the basic simplicity of the program.

For example, once you've chosen a font (more about fonts later) you can scroll through a library of 35 "styles" and another library of 35 "shapes" and apply one of each to your text. Styles are different treatments of the same font, relying chiefly on various combinations of fills, shadows, outlines and inlines to produce wildly differing effects. Any or all of these elements can be freely manipulated. The fill can be graduated, radial or solid. Or it can be chosen from a palette of 189 patterns, and there's also a fat bits pattern editor if you don't care for any from the default set.

Shadows can be moved to any angle with reference to the letters, placed at any distance from the letters, given their own fills if you like, used as drop shadows or built up to 3D blocks. They can fade in toward the letters or fade out away from the letters. (It's easy to see what "fading in" and "fading out" mean just by looking at examples, but the prose description of them in the manual is not easily intelligible at first reading: "When Fade In is selected, the shadow fills with the foreground color in back, graduating to the background color that appears nearest the object." It's about the only thing, though, for which I might deduct any points from the manual.)

You can give your letters outlines and/or inlines of any of several different widths, and they too can be drawn in any of the patterns.

If you devise a combination of fill and shadow that particularly pleases you, it can be added to the library.

The Shape Library also starts off with a collection of 35 items. but before discussing them it may be useful to describe the ways in which text blocks are produced.

You will always begin by choosing the Text Tool from the toolbox. If you click and drag this tool diagonally you define a rectangular area called a "text box" into which the text you enter will be placed. If you click the Text Tool without defining such an area, TypeStyler will attempt by default to generate the text at 72-point size, but you can head it off and specify any size from 6 to 200 points. Typing your text without defining a text box is one way to guarantee that you'll be getting the original proportions of the typeface, if that should be important; on the other hand, when you define a text box your type will probably be distorted, because it will exactly fill the text box you've drawn (though the type rectangle can be resized, condensed, elongated, etc. by dragging one of its handles).

Whether or not you've defined a text box, the Text Attributes dialog will be presented to you whenever you use the Text Tool. This is the dialog containing the font menu and the libraries, and it's the dialog into which you enter your text.

To return now to the Shape Library, suppose you've defined a text box that looks like this:

If you choose shape #1, called "straight," from the library, the words you type will fill the text box, possibly distorting the letters to some degree in doing so; thus:

looks pretty good, but making the text longer doesn't increase the area available to it; it still fills the text box you originally drew:

If you select a shape other than #1, the shape will be applied to the text, and the text AS SHAPED will be put into that same area:

The library offers several different kinds of circular shapes, arcs of many kinds, wavy shapes, text pinched in the middle or bloated, twisted text (half upright, half upside-down), all kinds of perspective shapes, and a few oddball items such as fish shapes. As is true of the styles, the shapes are easily modified—by dragging a corner of the enclosing rectangle, or by using the insanely great Shaper Tool from the toolbox.

You're limited to 255 characters per text block, but carriage returns are permitted and you can generally produce multiline text. I find this feature especially effective with the "balloon" shape, which can produce what almost seems to be a spherical block of type:

Multiline text is not permitted with text fitted to circles and arcs, but it's quite easy to align concentric arcs and circles to produce multiline effects.

Kerning and leading are both tweakable in increments of a hundredth of an em, and the display, while it falls short of WYSIWYG, is at least accurate enough to indicate which pairs of letters will need to be kerned.

There are also six geometric forms, called "panels," available. These can be used for backgrounds, for accents, or for putting borders around text items. The panels can also be subjected to choices from the Style and Shape Libraries, though since they are themselves shapes, their behavior when given additional shaping is often hard to predict. Try some—you may like them. Panels include rectangle, diamond, oval, half-circle, polygon and star. The polygon can be given from 3 to 18 sides, and the star can have from 3 to 60 peaks. You can also, within limits, modify the length of the star's peaks, depending on how many peaks you've chosen.

I said earlier that the program is deceptively simple. I think that if it seems overwhelming at first, it's the libraries that are at fault. You'll discover before long that most, if not all, of the items in the libraries can be generated from style #1 (plain) and shape #1 (straight). It may be helpful to think of the libraries as merely convenient collections of suggestions, and as ways to access frequently used items without going to the trouble of building them from scratch (see the sidebar "Rolling Your Own").

Work done in TypeStyler can be exported to other programs as PICT with or without embedded PostScript, or as EPSF, and can also be exported in Illustrator format (and thus read and reworked by both Illustrator and FreeHand). This last capability is very interesting, because TypeStyler text arrives in Illustrator not as a text object, but as outline drawings of the individual letters. Thus the letters can be individually modified—given curlicues and swashes, resized, tilted, bounced, etc.—and all of it can come back to TypeStyler or be sent to a page layout program.

The Font Situation

This modestly priced package ($199.95 list, about $119 by mail order) comes with ten fonts from AGFA Compugraphic bundled along. Inside the box there's an offer of ten more fonts, from five different suppliers, for $6.95.

Q. In other words, if you buy TypeStyler plus the additional fonts, you're getting 20 new fonts for $126; is it worth buying TypeStyler JUST for that reason?

A. Well... maybe. I think so, and my order for the additional ten fonts went out by return mail, but there's a small hitch: this program uses its own proprietary font format, called SmoothFonts. The bundled fonts and the additional fonts available from Brøderbund have already been converted to SmoothFonts. They will not show up in the font menus of other applications. Conversely, unless a font is converted to SmoothFont format, it can't be used by TypeStyler.

There are, however, several bits of good news. First, most of the fonts supplied are principally useful as display faces, so there's not much to be gained by making them available to other programs: a headline that's been given a TypeStyler treatment is extremely easy to import into a page layout program.

Second, there are an enormous number of fonts in use throughout the Macintosh world that can be converted to SmoothFonts—from Bitstream, T/Maker, Dubl-Click, Casady & Green, and many other suppliers. Certainly any font produced by Fontographer can be so converted, which means, in practice, just about all freeware and shareware fonts and a very large percentage of commercially available PostScript fonts other than Adobe's. And, perhaps taking advantage of Adobe's recent openness about its own proprietary formats, the Brøderbund people were hard at work even as TypeStyler was released, preparing an update that will deal with Adobe fonts. The update is expected momentarily, but as I write this I haven't yet received it.

Third, conversion to the SmoothFont format is nondestructive. The original font remains untouched and a new SmoothFont is generated for the exclusive use of TypeStyler.

Fourth, the font conversion process is not arduous. You simply select a PostScript font, push a button marked "Convert," and wait a few seconds.

Q. Okay, so you like the program. Is there anything about it that you don't like?

A. There is indeed. TypeStyler is slow. I've seen some slow programs, but TypeStyler is *slow.* It's slow in refreshing the screen, and it's slow in printing (though, to be fair, it can produce some pretty intricate stuff, and when its text objects are imported into PageMaker, PageMaker becomes equally dilatory about printing them). It's possible to accelerate things somewhat by trying to avoid the use of graduated and radial fills, and by not using too many deep shadows built up of several layers. It's also possible to disable the full redrawing of the screen temporarily and rely on one of two levels of less elaborate representation: one of them will show you only the basic forms of the letters, and the other will show nothing but little rectangles to indicate the positions of all of the letters. Resorting to these measures does speed up the screen refresh rate, but it takes away much of the fun of watching what this program can do. (While you're in one of these simplified modes you can ask at any time to have the screen fully redrawn, but you're moving in a pretty drab world during the intervals.)

In other environments it might even be said that the slowness of the program is sufficiently serious in itself to cost a mouse. Perhaps we could award slices of pie.

The program supports color, for text objects and panel objects. It is limited to 1-bit and 8-bit color (not 2, 4 or 24). TypeStyler can print color separations.

Brøderbund says that TypeStyler requires a Mac Plus to operate and that it can be used on a system of two floppy disks. The program, however, asks MultiFinder for 1.5 megabytes of elbow room.

Running PageMaker in one megabyte, I had trouble printing a page that included two imported TypeStyler objects; one of them was lavishly styled but only one word long, and the other was perhaps six or seven words long but was just straight text with a simple drop shadow and a bit of an italic slant. PageMaker printed both of these objects beautifully but left the rest of the page blank—it didn't include any of its own text and consistently refused to do so until I upped its memory allocation.

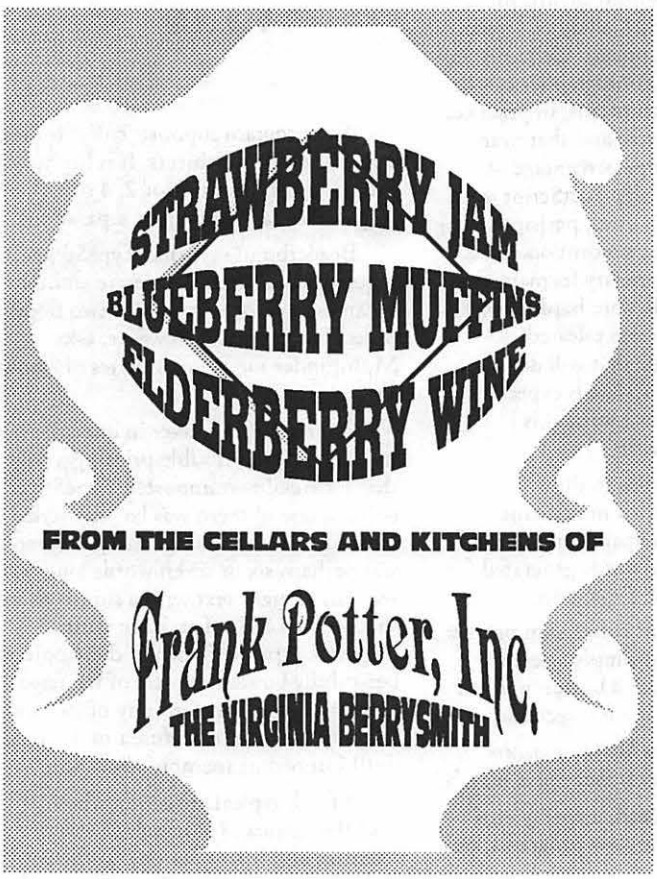
A final, typical anecdote: when I read the manual, I skipped Chapter 1, "Startup and Introduction," and went

right to Chapter 2, "TypeStyler Basics." After about five days of working with the program I made a short list of things that I thought might have been included in this first release. The first item on my list concerned shadows—I couldn't find any library style that included shadows slanted at an angle independent of the slant of the shadowed object. (Smart Art routinely offers this feature in all of its shadowed effects.)

I should have known better. Instructions on how to produce such shadows are right there in the Chapter 1 that I had skipped. I was going to include my list of missing features here, but I suspect they're not really missing at all.

All right, here's one anyway: I don't believe it's possible to have the ruler markings come up by default as picas rather than inches. What do you say to that, Brøderbund?

To sum up, TypeStyler is numbingly slow and moderately memory-hungry. It is also incredibly great and you should rush out and buy it.



Rolling Your Own

To produce one of the effects from the Shape Library from scratch, first set the text you want to manipulate, like this:

LEON H. RAESLY

Select that text and then choose the Shaper Tool. Go to the Shape Menu and choose "Mirror Top and Bottom," "Curve Top" and "Curve Bottom."

Lines appear above and below your text. They show shaping handles at either end, and two Bezier control points along their lengths (because you specified curved top and bottom.)

By playing with the handles and the control points, you can easily produce this shape, which is just about the same as what you'd get by choosing shape #32 from the Shape Library.

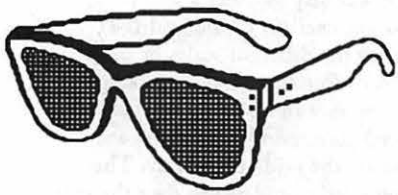
WOODMONT AVENUE SALOON

Likewise, you could take the line above, select "Mirror Left and Right" and "Curve Bottom," and produce this (which is about the same as choosing shape #16 from the Library).

COME JOIN US AT THE

Washington Apple Pi

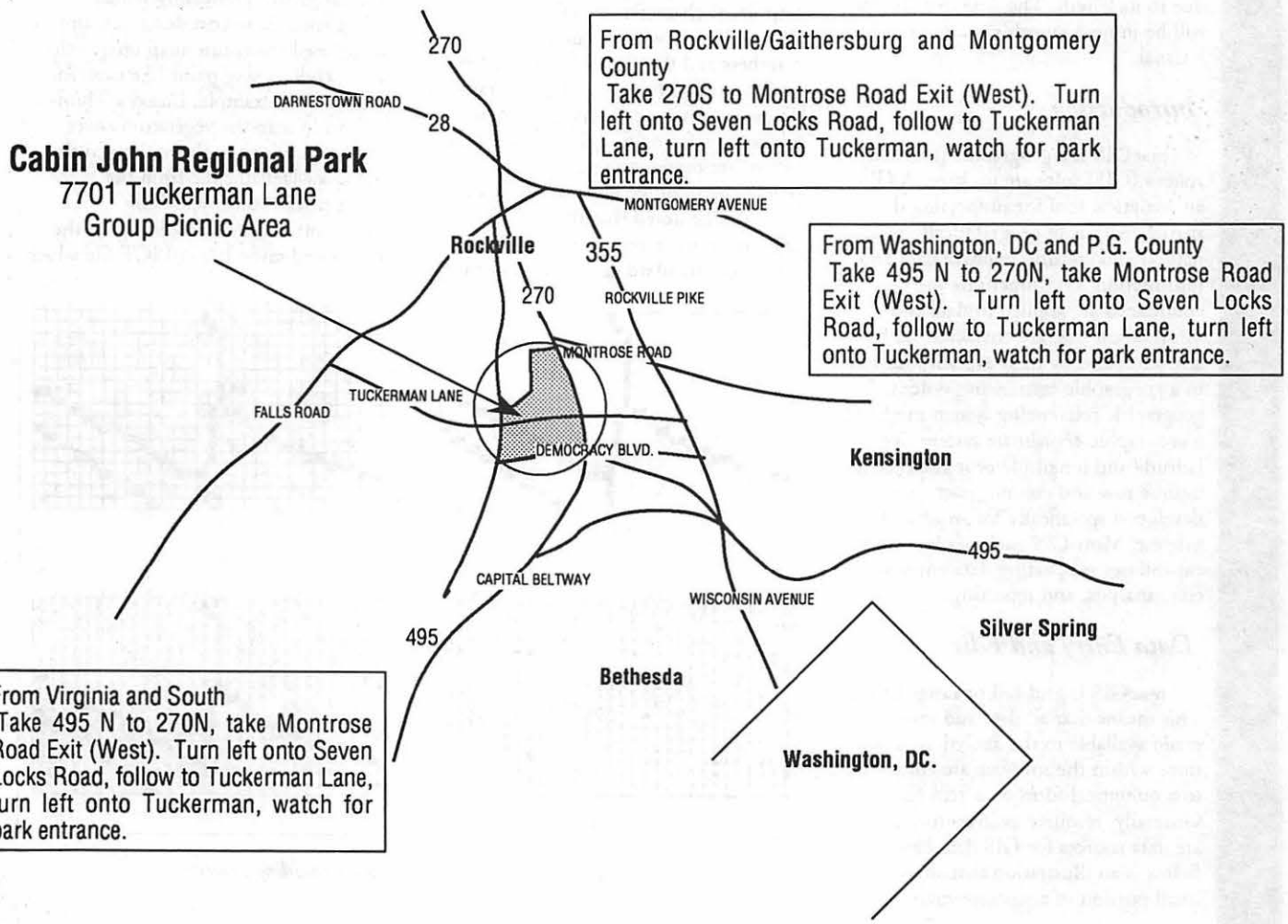
PICNIC



Sunday, May 23
12 noon - 6 p.m.

Cabin John Regional Park
7701 Tuckerman Lane
Rockville, MD

Leave your computers at home, come enjoy the springtime weather and meet your fellow WAP members. Join in a game of volleyball or softball, forget about megabytes and baud rates and nanoseconds. Bring some chips (the edible kind), a picnic lunch and something to share with the group.....and let's have some FUN!!! Montgomery County says that beer must be dispensed from kegs and wine must be served from 1 Liter or larger containers in paper or plastic cups....and sorry, but moonbounces and pony rides are not allowed.



macGIS Review

by Kim Cimmery

Geographic Information System software first became available for the Macintosh about a year ago. Most readers of the Washington Apple Pi Journal are probably not familiar with this type of computer program. Although this article is primarily a software review of macGIS, I have also interjected background information where appropriate so that you might better understand the GIS application area. I hope you will find this approach of benefit and that you will feel that not only did you find out about an excellent Macintosh program, but you also have a better understanding about a developing Macintosh application area. macGIS will be presented to you in two installments due to its length. The next installment will be in next month's issue of the Journal.

Introduction

macGIS is a geographic information system (GIS) software package. A GIS is an analytical tool for supporting the spatial analysis of geographically related natural and cultural resource data and information. GIS functions and commands are applied to data and information that are characterized by attributes and by their explicit location in a geographic referencing system. A geographic referencing system might be a geographic coordinate system like latitude and longitude or it could be a unique row and column reference developed specifically for an area of interest. Most GIS packages incorporate capabilities supporting data entry and edit, analysis, and reporting.

Data Entry and Edit

macGIS is grid-cell or raster based. This means that all data and information made available to the analytical functions within the software are converted to a numerical form on a grid-cell basis. Generally, resource or inventory maps are data sources for GIS data bases. Below is an illustration that shows how a small portion of a resource map, in this case a vegetation cover map, is converted to a digital representation using a grid-cell or raster encoding approach.

A portion of a vegetation cover map is illustrated in Figure 1a showing five cover types: Maple, Pine, Oak, Birch, and Grass. Imagine that a grid of cells is overlaid on the original map (Figure 1b). Cells that fall on the Maple cover type are coded with a 3, on the Pine type with a 4, and so on. Figure 1c displays the data resulting from the encoding process. Figure 1d shows the "vector" boundaries of the data in 1a superimposed on the grid-cell coded map to illustrate how they relate to each other. The numbers are the data stored in a raster GIS data base. This is a very important characteristic of raster GIS systems as you will see later. Notice the numbers and the tic marks on the left and top sides of three of the illustrations. These are row and column numbers explicitly referencing grid-cells containing values representing attributes describing resource data or information. It should be noted that the row and column coordinate may or may not relate to a standard geographic coordinate system. macGIS uses an internal referencing system which is not a standard geographic coordinate system. Coding maps for use with early GIS packages was an extremely time-consuming process. One of the first steps in the implementation of a GIS data base was to select a grid-cell size appropriate for the project and the level of analysis and decisions. Once this was done, it was easy to build a set of transparent overlays of the grid-cell matrix for the different scales of data maps. A coding form was then designed where one row and column (or field of columns) corresponded to a row and column on the grid-cell overlay. The grid-cell overlay was placed over the map and the attribute for each cell was recorded on the coding form. Each cell within the project area had to be assigned a value (or left blank in the case of no attribute or no information). If you are thinking that this process could take a long time, you are correct. macGIS takes advantage of tools available for the Macintosh as well as features we associate with Macintosh technology to significantly reduce coding time. Low-cost desktop scanners can be used to capture map images that can be coded using paint-like tools in macGIS. For example, I used a ThunderScan to scan the vegetation cover map in the example above. I saved the scan as a MacPaint file from the ThunderScan software. Using SuperPaint, I did some editing on the bitmap and saved it as a PICT file which

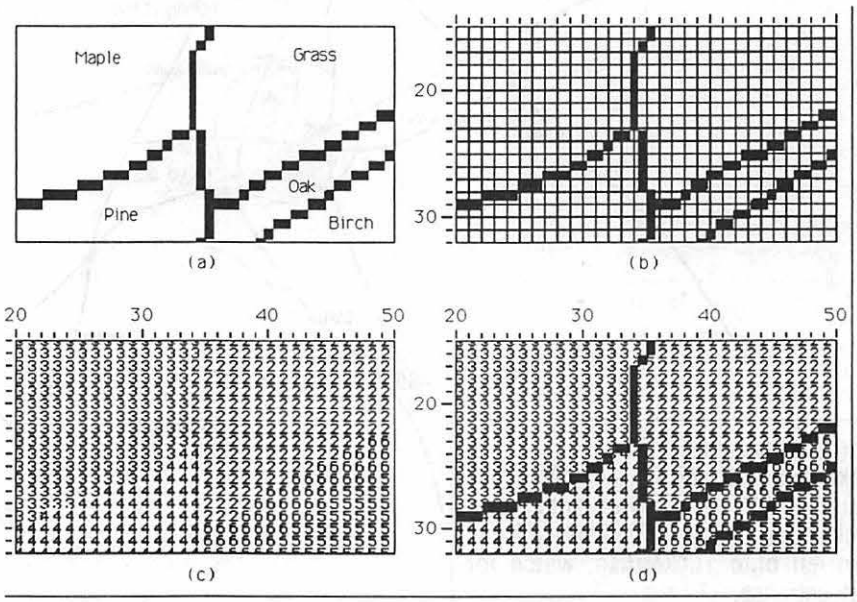


Figure 1. Grid-cell or raster data encoding process

macGIS can directly import. The first step after importing the PICT file to macGIS is to register it to the grid-cell base. macGIS has commands and functions making this process relatively easy (see Figure 2).

The result of the registration process is an on-screen display of the PICT line data on the grid-cell matrix in such a manner that grid-cells correspond to their correct location on the PICT display. Basically, in concept, it is a Macintosh version of Figure 1b except the row and column lines are transparent to the user. If the operator moves the cursor on the screen and clicks, the row and column location of the cursor is displayed in the lower left corner of the window. Figure 3 shows this capability.

Note in the illustration that in addition to the cursor row and column values, macGIS displays the category number and attribute (or label), if available. This figure also shows that macGIS uses the standard Macintosh tools such as the scroll bars, size box, title bar, etc.

The next step is encoding the map information. First, some explanation on macGIS display characteristics. macGIS will generate a screen display or printer output showing up to 100 categories of data using 33 patterns. Data may have values ranging from –32,768 to +32,767. If the data is to be displayed it must be converted to a category or value between 0 and 97 (categories 98 and 99 are reserved) using existing macGIS analysis or recoding functions. To code a map, the operator selects one of the categories (0 to 97) and its associated display pattern. Next, the cursor is moved to the cell which is to be encoded and clicks the mouse button. If a group of contiguous cells is to be assigned the same attribute, you can continue moving the mouse with the button depressed and the cells the cursor passes through are automatically assigned the current attribute. The user receives feedback from this process because the cells assigned the pattern are displayed with the pattern as the process proceeds.

The category will not change until a new one is selected. The example map I have been using is made up of 120,000 grid-cells (400 rows by 300 columns). Using the macGIS process it took about eight hours to code and edit. Using the manual process described earlier would have taken two people (one interpreting and one recording) several weeks.

Analysis

macGIS and other grid-cell GIS packages have very powerful analytical capabilities that can be used for constructing complex spatial models to support spatial analysis. This powerful modeling capability is possible because of the numerical basis of macGIS and grid-cell GIS packages. Data layer values in a macGIS data base are numbers; more specifically, as discussed earlier, they are integer values in the range from –32,768 to +32,767. macGIS functions and commands are used to create new maps by manipulating these numbers. Depending on the analysis or manipulation task being executed, one or more data layers may be involved. In order to effectively use macGIS (as well as other grid-cell or raster based GIS's), the user must understand this basic operational concept. Figure 4 shows a simple illustration for adding two small data layers to create a composite.

macGIS has three categories of commands or functions that can be applied for spatial analysis. These are: point, arithmetic, and neighborhood. Point commands are applied to a single map. These commands calculate new values for grid-cells on an output map based on existing values of corresponding cells on an input map. For example, you might have a vegetation cover map which includes category values of 12 and 13 representing old growth Ponderosa Pine and Douglas Fir. You want to create a map in which all cells having a value of 12 and 13 are changed to 50. On the new map, category 50 is going to represent Abert Squirrel wildlife habitat. A point command would be used to generate this new map.

There are three point commands: Isolate, Recode, and Slice. The Isolate command will isolate a single value on an existing map and convert all other values to zero. Recode reassigns integer values of an existing map to a new map. The Slice command divides a range of values on an existing map into equal intervals. The second category of macGIS commands are in the Arithmetic Menu. They are: Add, Average, Cover, Divide, Maximize, Minimize, Multiply, and Subtract. These commands process map data by calculating new values on an output map by applying an arithmetic function to the values of corresponding grid cells on more than one input map. Here is an example of a typical situation involving four data layers that are to be added together to create a composite map. The objective is to generate a single map showing the spatial distribution of high quality habitat for Abert Squirrel, Merriam Turkey, goshawk, and deer. Data maps already exist for high quality habitat for each species in a data base.

After visually reviewing each of those

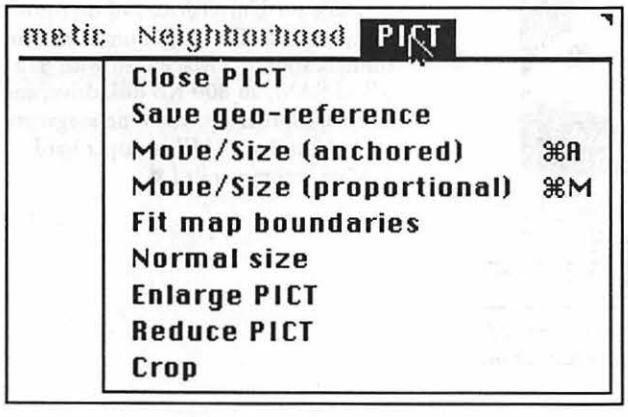


Figure 2. The PICT Menu

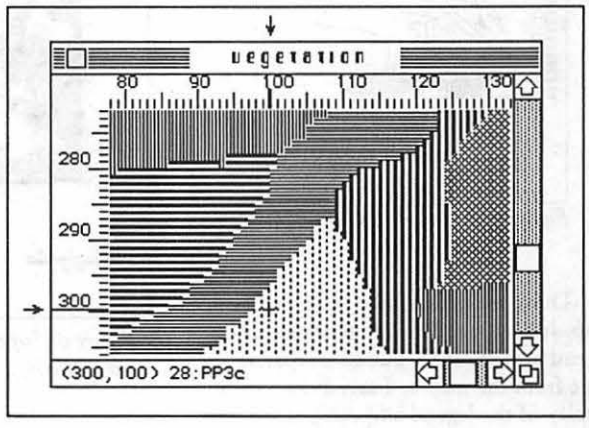


Figure 3. Row and column display of cursor location

maps, it was determined that the composite map will have between four and ten categories because several pairs of habitat areas overlap. The goal is to apply macGIS functions so that the resulting map correctly shows the distribution of the habitats. The macGIS Add command will be used to add the four data maps together for the composite. This means that the category (remember the category is the value stored in the grid-cell) used for each of the input maps must be unique, i.e., the category in each data layer must differ. They must differ in order to end up with separate, unique categories on the composite map. In addition, the numbering system for the categories must allow overlapping habitat areas to be tracked. A matrix was developed (Table 1) to determine a numbering scheme. This matrix takes into consideration the potential overlap of pairs of habitat areas.

The numbers in parentheses are the category values to be used in each of the four data maps. The numbers in the matrix represent the various category values that could be created on the composite map. This scheme could result with up to ten map categories on the composite map (Table 2).

The next step was to execute the macGIS RECODE command on each data layer needing a category change. Figure 5 shows the resulting macGIS maps.

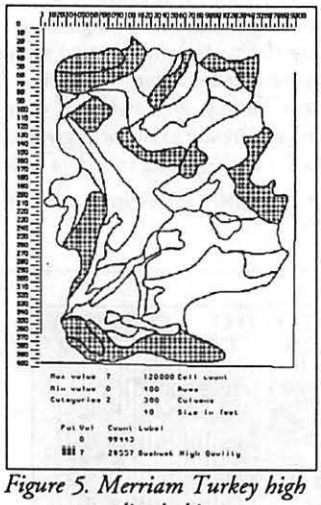


Figure 5. Merriam Turkey high quality habitat

These are examples of the type of map display macGIS can generate. The legend always comes out on a separate page from the map so I saved the screen display of the legend and merged the two using SuperPaint. The Add command was used with these four data layers to generate the composite map. The final map, after being modified with SuperPaint, is shown in Figure 6. The acre values were calculated outside of macGIS by multiplying the number of cells in each category by the appropriate coefficient.

Table 1

RECODE/ADD Matrix

	Abert Squirrel (1)	Merriam Turkey (3)	goshawk (7)	deer (11)	
Abert Squirrel (1)	1	4	8	12	
Merriam Turkey (3)	4	3	10	14	
goshawk (7)	8	10	7	18	
deer (11)	12	14	8	1	

Table 2.

Potential Map Categories

Category	Name
1	Abert Squirrel
3	Merriam Turkey
4	Abert Squirrel - Merriam Turkey
7	goshawk
8	goshawk - Abert Squirrel
10	goshawk - Merriam Turkey
11	deer
12	deer - Abert Squirrel
14	deer - Merriam Turkey
18	deer - goshawk

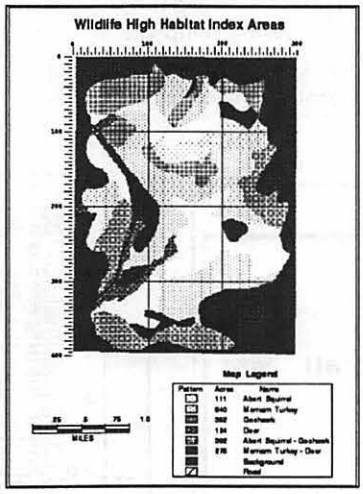


Figure 6. SuperPaint version of final wildlife high quality habitat map

Next month I will continue explaining the analysis commands in acGIS.

Availability

macGIS is available from the Department of Landscape Architecture, School of Architecture and Allied Arts, University of Oregon, Eugene, Oregon 97403 or contact David Hulse at (503) 686-3634. The program sells for $300 which includes a program/data diskette and manual. A sample data base is provided consisting of a 3600-cell (one cell equals one hectare) data base with fifteen data layers. Reduced prices are available for Universities and non-profit organizations. The minimum hardware configuration is a Macintosh with 512 KB of RAM, an 800 KB disk drive, and an ImageWriter printer. One megabyte of RAM and a 20 MB or larger hard disk are recommended.

Bits and Bytes

by Lynn R. Trusal

Mac Link Plus Translators Upgraded

In the past, I discussed Mac Link Plus (MLP) as a good method for transferring MS-DOS files to the Mac and vice versa. Now, DataViz, Inc. has released a much needed update to this excellent program.

Support has been added for Microsoft Word 4.0, Word Perfect 5.0, Sun (SunWrite), and NeXT (WriteNow). Other new translators include OfficeWriter, WPS-Plus, XYWrite III, WriteNow (Mac), PC Paintbrush and MacBinary. Keep in mind that MLP translators work very well with Apple File Exchange (AFE) or should I say that Apple File Exchange works well with Mac Link Plus. AFE provides the "vehicle" and MLP supplies the "means" to make many "binary" translations painless. Although these binary transfers are generally pretty faithful in maintaining formatting they are not perfect as I previously discussed in the case of Microsoft Word and Word Perfect.

Mac Link Plus comes with MS-DOS and Mac disks and a direct connect cable but you can also use the Apple 5.25 inch external drive with its PC drive card for translating 5.25 inch MS-DOS single density disks (360K). It does not support high density 720K disks. This problem is addressed by using MLP and AFE with the "super drive" now built into all SE, Mac IIcx and ci computers.

The upgrade price is $45 for registered users. If you have a need for binary Mac to DOS or DOS to Mac file transfers, check out this solution. DataViz, Inc. of Trumbull, CT can be reached at 203–268–0030.

Canvas 2.1 Upgrade

Deneba Software of Miami, FL recently offered Canvas version 2.1 to registered users for $30. I feel Canvas is better than SuperPaint 2.0 and I have largely replaced use of MacDraw II with it also.

One of the best improvements in version 2.1 is the ability to open native MacDraw files without using a PICT save format. This will make it easier for users to phase out MacDraw if they are not happy with its performance.

Other additions include changes in the alignment manager, better editing of Bezier curves, dashed lines, a spell checker, color separation, better support for Encapsulated PostScript output, more preference settings, higher resolution printing, and support for fractional character widths.

Motorola 68040

Motorola has officially announced its next generation microprocessor called the "68040." It performs at a speed of 25 MHz and Motorola is claiming a 20 MIPS (millions of instructions per second) performance which is 5 MIPS higher than the new Intel 80486 CPU. Some writers caution that depending on how the CPUs are benchmarked, this 5 MIPS difference may not be as large as it seems.

Within a year Motorola promises a 50 MHz version with 33 and 40 MHz ones likely to be available first. The initial price is expected to be $795 which is about $150 cheaper than the 80486 and $900 cheaper than the Sun Sparc RISC (reduced instruction set chip) CPU which has a performance of about 18 MIPS.

Already 35 computer manufacturers have endorsed the chip and you can bet that Apple already has model CPUs being tested which incorporate the newest and fastest Motorola CPU. It is interesting that Apple Computer was not yet listed as a company that was supporting the 68040 when this was written. How long will it be before the slowest CPU Apple uses is the 25 MHz 68030? After all the 68020 is no longer used in any Apple computers. (Source - InfoWorld, Investors Daily)

MultiFinder Tips

1. If you are using a 12 or 13 inch monitor with MultiFinder, I find it useful to leave 3/4 inch of the desktop visible on the right side of the monitor. It is not necessary to have word processing documents fill the entire screen to see an entire page width. This permits quick clicking on desktop icons or use of the trash can without having to use the DA menu or cycle through the programs already open in MultiFinder. I believe one of the changes in System 7.0 will be a listing of programs open under MultiFinder appearing at the top of the DA menu list rather than at the bottom. That will be an improvement for users with a lot of desk accessories.

2. If you make use of MultiFinder don't forget the Print Monitor can spool your LaserWriter print jobs and return the Mac for better pursuits than waiting for the screen to be free. It works in conjunction with Backgrounder and the Spool Folder to queue print jobs in the background. It is also necessary to choose "Background Printing" from within the Chooser. Many programs will spool under MultiFinder including Word, Excel, and Double Helix among others. PageMaker is one exception. Once a print job is spooled the Print Monitor icon becomes accessible under the Apple as one of the open programs. By bringing the Print Monitor window to the front, you are presented with menu bar options including "stop and resume printing," "manual print job options," "display options for the Print Monitor window" and "options when a printing error occurs." This permits some customization of the background printing process.

Other Tips

1. For Excel users who made use of the "Resume Excel" command to open multiple related files with one click, Excel 2.2 uses a different method. First open all related files and then choose "Save Workspace" under the File menu. Give the file a name and quit Excel. You will see a new icon that functions like the old "Resume Excel" icon.

2. I often get asked Macintosh questions and encounter frustration when I ask a number of specific questions in return. Many users expect you to be able to come up with an instant answer or solution without giving any real details. Remember the

Macintosh is not as simple as it once was and if you are not sitting in front of the screen it is not always easy to diagnose a problem without asking very specific questions. If you need help make sure you tell the person what software and hardware you are using and answer their questions as accurately and specifically as possible. Don't leave out steps when you are describing a process and most of all be patient. Remember you are asking for help. It isn't the other way around!

3. If you have trouble dialing a computer company support line put your modem to use. Use your telecommunication software and set it to keep redialing the support line telephone number. This overcomes the constant busy signal problem and even repeated use of a "redial button" on your telephone. In essence, let your "modem do the walking so you can do the talking."

4. Many software applications permit multiple open documents at the same time. Word, Excel, and Cricket Graph are several examples. Other programs such as PageMaker, Double Helix and Pixel Paint do not. Here is an easy solution for users who make regular use of MultiFinder, have at least 2–4 MB of RAM and excess hard disk space. For example with PageMaker click on the PageMaker icon once and duplicate it with "Command D." This will name it "Copy of" but you can rename either icon anything you want as long as they are different names. For instance, "PageMaker 1" and "PageMaker 2." Now open both PM 1 and PM 2 under MultiFinder and open a different file within each one. You now have two different files open under PageMaker and you can cut and paste between them using MultiFinder.

Real Bits

1. When two programs are installed under MultiFinder and one of them does automatic saves and is running in the background, the "auto save" feature continues to save the program running in the background although it may appear it is saving the program in the foreground. This is not the case!

2. Apple Computer's Board of Directors has approved a buy back of up to 2.5 million shares of its own stock valued at about $100 million. That represents about 2.5% of the 129 million outstanding shares. (Source - *Investors Daily*)

3. The importance of "self responsibility" for BBS systems was recently brought to home in a Gaithersburg, MD case when the System Operator (SYSOP) received a 20 year jail sentence (17 years suspended) for putting instructions on how to build explosive devices including pipe bombs on his BBS which was called "Pyromaniac Production Systems." His jail term was for actually exploding a pipe bomb outside the Germantown, MD home of a friend's ex-girlfriend. Information on the BBS was also linked to four teenagers who were killed in a Bethesda pipe bomb explosion in Dec. 1988. Although freedom of the press is very important, it is also important that BBS users and SYSOPS realize and accept responsibility for comments or instructions they place on any BBS system. Publishing others' credit card numbers, information on building explosives, and slanderous or libelous comments are at the very least a lack of "self responsibility" and perhaps illegal. (Source - *Washington Post*)

4. PageMaker is now or soon will be available in Kanji and Cyrillic versions for the Japanese and Soviet markets respectively. In 1989, Apple also released KanjiTalk LaserWriter which is capable of producing the necessary characters of the Japanese alphabet. In reality, it is a LaserWriter NTX-J with a special board and 40 MB external hard disk capable of generating the 6,000–7,000 characters of the Japanese language in PostScript.

5. I recently returned from a scientific meeting in Mexico and couldn't help note the number of scientists from the U.S. and abroad that were using the Macintosh computer to prepare either their scientific abstracts or poster presentations. They stuck out like a "sore thumb" in the best use of the word. Even a Mexico City hotel used the Macintosh for one of its magazines as did a West German restaurant to prepare its menu.

6. Remember that membership in WAP or the Boston Computer Society entitles members to free shipping from MacConnection. Have your membership number ready when asked. This is a savings of $3 per order.

7. Motorola and TRW have developed a credit-card-sized computer chip which packs the power of a room-sized supercomputer. It is called CPUAX for Central Processing Unit-Arithmetic Extended and will initially be used in defense systems. The chip contains 4 million transistors compared to 2 million for the Motorola 68040 chip that is not yet incorporated into any personal computer. The chip is capable of 200 MIPS. Another new feature is the ability to use an accompanying chip to by-pass faulty transistors so that only 1.7 million out of the 4 million are necessary for functionality. (Source - *Washington Post*)

8. America's computer manufacturers have suddenly discovered women and it's about time! Too often in the past I have seen women standing beside a computer as a "pretty face" but not a user. Computer advertising in women's magazines is increasing significantly. Apple has joined the trend with its recent advertising and is donating $25,000 worth of computer equipment to a reader of Working Woman magazine who is the winner of an essay contest on how they would use a computer. Personally, I would like to see more women join WAP. I know you are out there! How about it! (Source - *Business Week*)

9. Word Perfect has come up with an excellent idea! Word Perfect (MS-DOS) users who upgrade to version 5.1 can donate their old software to elementary and secondary schools in what would normally be against licensing agreements. Already some large corporate customers are interested and Word Perfect isn't dumb either. If they can get those "little suckers" mainlining its software at a young age they are apt to become "addicted" consumers as adults! I can see "Computer Free Zone" signs going up on every school block. (Source - *Business Week*)

10. If you have a Mac IIci you need version 2.00b of Microsoft Works (call 800–426–9400) and version 1.3.2 of Cricket Graph (call 800–531–5236). The Cricket Graph upgrade is free but I don't know about Microsoft Works. [Ed. note: the Works upgrade/patch is free and is available on the TCS.]

11. Falcon Microsystems appears ready to take on MacConnection and other mail order houses by offering Macintosh software to the general public. Falcon is the GSA supplier of Apple computer equipment to the Federal Government and is estimated to have grossed over $140 million in 1989. In a recent mailing they offered over 380 different software packages and accessories at competitive prices. They promise

overnight delivery for $3, similar to MacConnection and other mail order companies. Falcon orders can be placed by calling 800–284–1367. A sample of their offerings compared to MacConnection is as follows: Microsoft Excel - MC = $249, Falcon = $249; Claris CAD - MC = $595, Falcon = $606; Aldus Persuasion - MC = $339, Falcon $310; Aldus PageMaker - MC = $ 385, Falcon = $370 and OmniPage - MC = $ 549 , Falcon $553. As you can see, they are essentially competitive but do not offer the variety that MacConnection offers. In the past, when it came to hardware orders, I found Falcon to be undependable because of poor shipping and record keeping. By now, they may have cleaned up their act. MacConnection may be willing to match Falcon's advertised prices now that they have been advertised. Again, the buyer beware until Falcon has established a reputation of dependability in this new venture.

12. The January WAP garage sale seemed to be a rousing success. I didn't have much time to look around since I was trying to sell a number of things myself. The most amusing aspect of such sales to me is someone buying an item from one person for $25 and then selling it at their own table for $75 a few minutes later. Free enterprise is alive and well in America!

13. The price I listed for the 100 MB Conner Peripherals 3.5 inch internal hard disk from Club Mac fluctuates from month to month. It originally listed for $675, then $625 and most recently was $649. Call Club Mac at 714–768–1490 for the current price.

14. With Rodime, Imprimis, and Miniscribe having financial problems and Quantum having reliability problems it is difficult to decide which make of hard disk to buy. After all, you generally buy from a VAR (value added reseller) who takes one of the major hard disk brands and puts it into their own box with a power supply and software. Crate Technology is apparently having problems and many owners of Jasmine products have gotten caught up in the dispute between Jasmine and Rodime. Make sure you know the make of hard disk in the particular product you purchase from a VAR such as Crate Technology, CMS or Jasmine among others. It may be best to stay away from manufacturers who are having either financial or managerial problems. If you have a problem with a VAR's product and need repair, you may get caught in the middle between the VAR and the hard disk manufacturer. Again, the buyer beware, and deal with well established companies if possible.

15. Mitch Kapor, the founder of Lotus, has just released his first software product under the banner of his new firm "On Technology." The application is for the Macintosh and is called "ON Location." It is basically a "find file" type of program that promises to quickly locate any files on your hard disk regardless of where they are buried; it lists for $130. I have to wonder how much better it will do than "Find File" or "Locate" which are free. It apparently has more features that may make it worth the extra money. Time will tell!

16. Hewlett Packard (HP) recently brought the affordability of laser printing to Macintosh owners by release of the LaserJet IIP model which has a street price of about $950 and is rated at 4 ppm. Now, HP is announcing a new upper level printer called the LaserJet Series III. It uses the Canon SX engine and PCL 5 (printer control language). It is not PostScript but comes with 1 MB RAM (9 MB maximum) and 8 scalable fonts in ROM. The list price is $2,395 and it will be available by the time this article appears. (Source - InfoWorld)

17. For users of Cricket Software applications, such as Cricket Graph and Cricket Draw, note that Cricket Software was acquired by Computer Associates in San Jose, California. They may be reached at 800–531–5236, 7:00 AM until 5:00 PM PST Monday through Friday if you have questions about Cricket Software products. Their product support line is a different, non-800 number. I had a difficult time getting through until I put my modem to work redialing the number. If you don't have a modem, call early (10:00 AM EST) or late (7:30 PM EST) to try and avoid the dreaded busy signal.

18. Adobe is upgrading (version 1.2) Adobe Type Manager (ATM). It includes compatibility with any manufacturer's Type 1 fonts such as Bitstream and improves 10 and 12 point sizes on the ImageWriter. (Source - InfoWorld)

19. Symantec is upgrading MORE II to version 3.0 to better compete with Aldus Persuasion and Microsoft Powerpoint which are currently the leaders in the "desktop presentation" market. MORE has always suffered from an identity crisis since its inception as an "outliner" and later reincarnation as a "desktop presentation" application. (Source - PC Week)

Tidbits from Apple's Annual Report

1. The 1989 Apple Annual Report was produced entirely on the Macintosh.

2. Earnings per common share for 1989 = $3.53

3. Total revenue for 1989 = $5.3 billion.

4. International sales account for 36% of total revenues.

5. Gross margins were 49%, down from 51.1% in 1988.

6. Gross margins for the 1st Qtr. of 1990 rose to 52%.

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

Address Book Plus...
...don't leave home without it

by Douglas Bloomfield

Throw away all your address list, rotary file, and phone book programs. This is the best there is. It makes all the others obsolete.

In a city where phone lines are umbilicals to the rest of the world, nothing is more valuable than one's rolodex. A really good personal directory is worth its weight in gold. No, platinum. And so is the program which contains it. That's because a quality rolodex contains more than just numbers available from the C&P phone book.

The Power Set need to know private numbers, fax lines, spouse's name, birthdates, and useful idiosyncracies. It is one of the basic tools for playing the Power Game. Even if you are not into power tripping but you rely on your little black book, that personalized Who's Who and How to Find Them, this is a program you won't be able to live without. Phone lists were probably the first simple data base ever written for computers. Every bulletin board and user group offers at least one and usually several. A variety of more sophisticated ones are available that boast differing arrays of bells and whistles.

The latest to arrive is Address Book Plus from Power Up! of San Mateo, Calif. I've used it for the past several weeks, creating and compiling, experimenting and exploring. It is as close to flawless and indispensible as anything I've seen.

I have used a variety of such programs on the Apple IIe, on MS-DOS and on the Mac. For a long time I worked in an office with PC clones and purchased a program called Pocket Address Book by Power Up! of San Mateo, CA. All the documentation was on the disk; the program was simple and comprehensive. It produced, as the name states, a pocket-sized (3 7/8 x 6) address book page on blank, pin-feed forms provided with the program along with wire spirals and a leather cover. (It also printed standard rotary file cards, phone lists, and mailing labels.) The leather cover also holds an appointment calendar like Day-Timer®. Printing is on one side of each sheet, with the back reserved for handwritten additions. The matrix was simple but utilitarian.

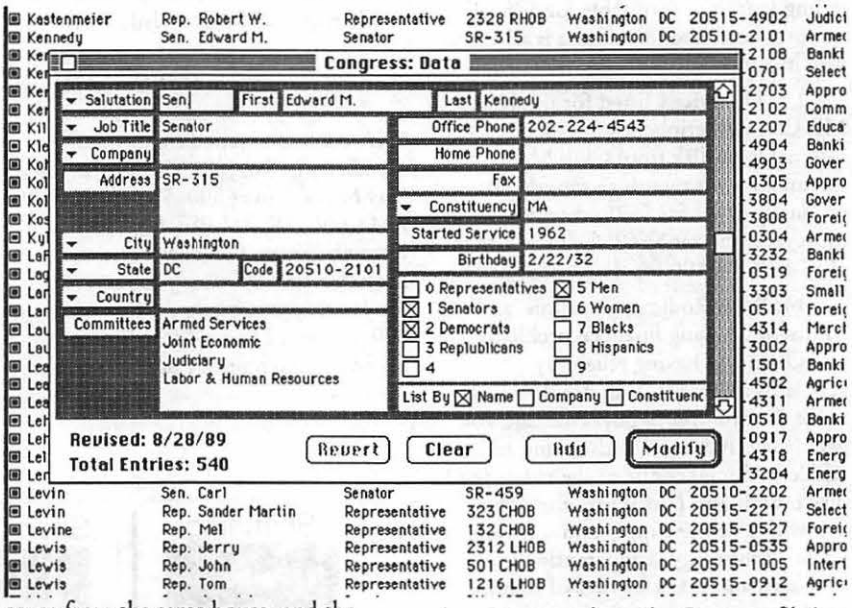
It would have been sufficient had two things not occurred:

- I switched to an all-Mac environment, and
- I saw Address Book Plus

Address Book Plus is not a Mac-ified version of the PC program. It is elegant, utilitarian and about as user friendly as software can get. It has an entirely new look and interface. It is genuinely Mac, from the bottom up. The only resemblance to its antecedent is familial. They come from the same house, and the transition is smooth and seamless for transferring the old files.

The first step was to export my old MS-DOS files, after preparing them on the PC according to brief and simple directions. Next, I copied them from a 5.25-inch to a 3.5-inch disk which I then put in an FDHD disk drive in a Mac to convert the files to Mac using Apple File Exchange. I opened Address Book Plus, clicked on "import," identified the new file, and everything appeared exactly where it should be. Files can also be imported from other existing comma- or tab-delineated text file lists, and your data can be exported to other applications, including mail merge programs.

The program comes with two files already prepared. One is a simple and useful list of 800 numbers of airlines, rental car companies and the like. It can be integrated, selectively or fully, into your own files. But the other is ideal for Washingtonians—a compilation of all Members of Congress, including all the information available in many commercial handbooks. All lists, including these two, can be customized virtually any way you want. For example, on the Congressional list, there are fields to identify the constituency, the year the Member entered Congress, home and office plus fax phones, birthday, committee assignments, and specialized information such as party, chamber, gender and the like.



The data entry screen for Sen. Ted Kennedy in the foreground and the browse screen from the Congress file in the background. Arrangement and size of the Browse columns are user adjustable.

In customizing any list, you can, for example, designate those to whom you wish to send Christmas cards, another list for other religious holidays, identify customers and suppliers, and so on. You can set up nine separate categories, and a name can appear on none, only one or as

many as you wish. There is also a field for birthdates, so you can sort your list according to that item and print out a chronological list of those to whom you wish to send birthday greetings throughout the year.

A well-written manual makes getting started quick and easy. Nearly every question is answered, if you take the time to look for it. The data entry screen is so clear and simple to understand and use that you may be tempted to go right to work without reading the 68-page manual. If you have a problem the book can't solve, just call the company's Mac support line at 415/345–5900.

The data entry screen. Triangles designate categories which can have pop-up menus or smart lists, which can automatically appear, if you wish, for entries most often used, such as city or state. It is necessary to type only the first few letters.

Product support is excellent. I made a comment on the registration card about a problem I experienced, and about a week later I got a phone call from the product manager, who was also one of the program's designers. He answered all my questions and later called back to make sure everything was working all right. It turned out my problem was not the fault of the program but my failure to read the instructions carefully. The manual is full of ideas, hints and short-cuts to save time, customize usage and get maximum benefit.

The disk comes with a desk accessory called The Dialer that lets the user access and dial phone numbers stored in Address Book Plus files. It also provides quick search and access to files without starting the Address Book Plus program.

The input and the output can be customized in an almost endless variety of very personalized printouts. Six basic formats are available:

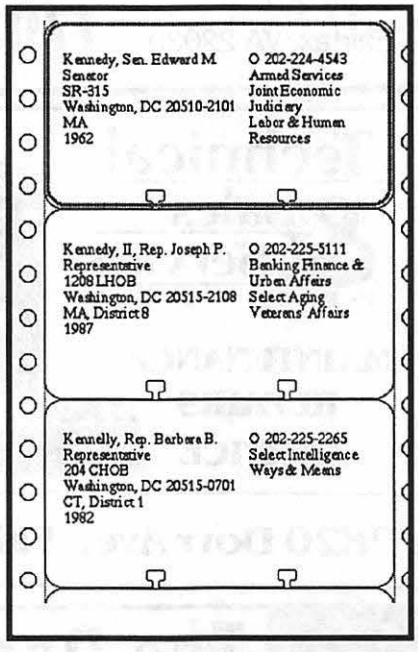
• Browse. This is the default and field columns can be adjusted to produce a personalized display. It is the only one you can't print, but that should change in the next version.

• Address Book. It can print on dot matrix or laser printers, on forms available from Power Up!. The fields and arrangement can be customized and a variety of page sizes are available.

• Phone list. This is an abbreviated version of the Address Book format.

• Rotary File. It prints on prepared forms and like all the others can be customized. Each card can be dated to show when it was last revised, so individual cards can be replaced and your rolodex updated.

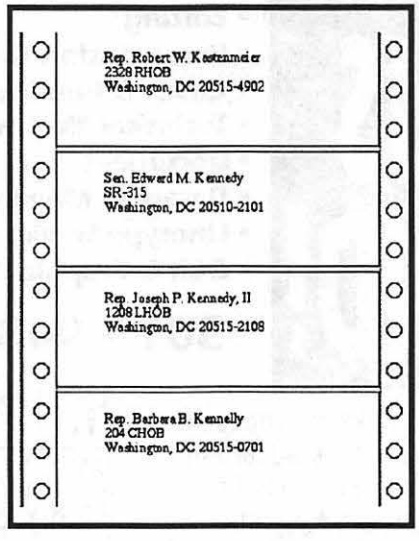
This is the way rotary file cards appear on screen; the size of the card (and therefore the display) is adjustable as is the selection of items listed and the layout.



• Label. Peelable labels can be used to print your mailing list.

Although the appearance on the screen is of pin-feed labels, they are also available in laser format for sheet feeding.

• Envelope. Business and letter size are supported.



Each format offers a variety of sub-formats, page sizes, modifications, category options and other choices. For all these lists and formats, data is entered only once and can be manipulated in a multitude of ways to suit your individual needs. For example, you can print your basic phone list in one format for a pocket address book for your home and, using a different format, produce an 8 1/2 x 11 book on rotary file cards for your office.

Each time you select and customize a format, it appears on the screen exactly as it will appear on paper, allowing you to preview your work in progress. One thing missing is page numbering. Before printing, I would like to be able to know exactly how long a document is. In addition, when printing out additions or corrections, it is essential to know the numbers of the changed pages in order to avoid waste. Another improvement I would like to see is the ability to quickly find and print out only those names which have been added or changed since the last printing.

I have, so far, set up five separate files for my own use, making printouts in a variety of styles.

• Business — All the numbers I use or think I will need for my business—I run a small consulting and lobbying firm and write a regular column for a number of newspapers—are kept in the main file.

• Pocket — These are the best numbers from the above list, the ones I carry in my pocket or briefcase because I need them most often.

• Overseas — I frequently call or travel abroad on business, so I keep a separate file of names, numbers and data for those occasions. I do not need them daily at home, and this is a quick, simple way to find the information I need.

• Family — This directory is for the whole family, and it includes friends, relatives and other personal numbers. Copies can be made for each family member and for different telephone locations.

• Services — No home should be without it. Here is the number of the guy who installed the new roof that is now losing shingles, the plumber, the TV repair shop, our favorite carryouts and restaurants, and the newspaper delivery person.

My first project was the Services directory just to learn the program. It went quickly and easily, so I plunged

into what I purchased the program for. I needed a new business directory. I imported my old files from the PC and then entered all the scraps of paper, business cards and notes I've been collecting for the past year. The result is 657 separate entries (some printed in more than one category, e.g., sorted by name, firm, profession) spread over 79 8.5 x 11-inch pages in a three-ring notebook. It is indispensible.

A companion program sold separately permits Address Book Plus owners to use those files as a data base for mailing lists to merge with their correspondence. That program is a desk accessory called Letter Writer Plus and will be reviewed soon.

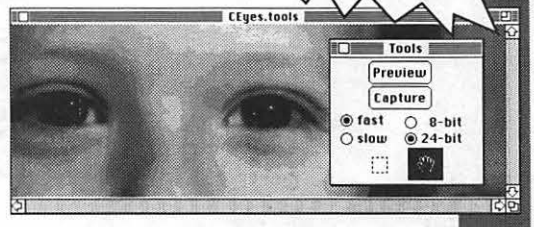
Power Up! Software Corp., San Mateo, CA, $89.95 suggested retail price; $129.95 with leather address book cover. Street price: $53 and $99 from MacWarehouse.

Here's The Difference

ONE YEAR WARRANTY

Free Overnight Delivery on These Items

Hot New Product



$335 Computer Eyes

Professional Series Video Capture Board

Single board accepts color video input from any standard video source! Captures and displays 256 colors in 8-bit mode, and **16.7 million colors** in 24-bit mode. 32-bit QuickDraw compatible.

The Maya Guarantee

Satisfaction is guaranteed. Maya Computer offers a one year parts & labor warranty on both new and used Macintosh computers. Return any product in saleable condition within 30 days of purchase for a cheerful refund or credit.

One Meg SIMMS

$77 80ns, Lifetime Warranty

Océ Model 5232 Color PostScript Thermal Transfer Printer

Prints bright permanent Adobe PostScript images on paper or overhead transparencies. And Pantone-certified colors at 300 DPI assure accurate image reproduction. This combination of a precision printer and Océ's unique plastic based ink sheet give unsurpassed color vibrancy, sharp line definition and exceptional media durability.

$13,650

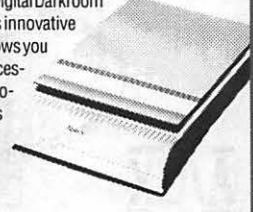
Diconix M150 Plus Printer

Introducing the Kodak Diconix Portable Printer for Apple Macintosh Computers. So small and light it can be carried in a briefcase. So powerful it prints crisp text using Adobe Type Manager software (included) and striking graphics. And the Kodak Diconix M150 Plus printer includes MacPrint M150 Plus driver and ATM w/13 typefaces and cable.

$549

Abaton Scan 300/GS 8 bit Gray-Scale Flatbed Scanner

Abaton's Scan 300/GS is a 300 DPI 8 bit, flatbed scanner that offers superb clarity of 256 levels of tru gray-scale scanning. Includes your choice of Digital Darkroom or Image Studio and Abaton's innovative Pane Scan software which allows you to scan images from a desk accessory without exiting your program. Compatible with Caere's Omni Page OCR software.



$1425

Abaton InterFax 24/96

Fax power is now as close as your Macintosh with the Abaton InterFax 24/96 fax modem. The InterFax is a Hayes compatible 2400 bps data modem that also sends and receives faxes at 9600 bps for indispensible communications capabilities. Sends and receives in the background with or without MultiFinder.

$449

SPECIAL PRICES

Delivered Overnight Free

Keytronics MacPro ADB Extended Keyboard w/Tempo II:	$135
PLI Turbo Floppy:	$325
Micron XCEED 8 bit video card for Mac II or SE/30 13 inch:	$395
Micron XCEED 8 bit video card for Mac II or SE/30 19 inch:	$649
Raster Ops 264 24 bit color for Mac II:	$725
Raster Ops 264 24 bit color for SE/30:	$979
Caere OmniPage OCR software:	$569

Maya Computer

Waitsfield, Vermont
802-496-8882; FAX: 802-496-8110

1-800-541-2318

MacInOffice®

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

What do you get when you buy a Macintosh® for the "best price?"

Needs Analysis?

System Design & Integration?

Custom Training & Support?

Application Development?

On-site Maintenance?

Want the real "best price?"

Call us!

532-7400

Competitive Pricing!

Now!

Training Center
Apple Authorized
Training Center

MacInOffice®

The Leaders in Macintosh Technology!

Hotline Coordinator

Larry Feldman (202) 546-9556

Apple II

General
John Wiegley after2:15 (703) 437-1808
Leon Raesly (301) 220-0717

Accounting Packages
BPI Programs
Jaxon Brown (301) 350-3283

BPI & Howardsoft (Tax)
Otis Greever (615) 638-1525

Dollars & $ense
Barry Fox (717) 566-6709

Home Accountant
Leon Raesly (301) 220-0717

Quicken
Gary Hayman (301) 345-3230

Apple SSC
Bernie Benson (301) 951-5294

AppleWorks
Ken DeVito (703) 960-0787
Bob Martz (301) 795-5689
Ray Settle (301) 647-9192
Harry Erwin (703) 758-9660
Gary Hayman (301) 345-3230
Leon Raesly (301) 220-0717

AppleWorks Database
Morgan Jopling (301) 261-3886

Communications Packages

ProTerm
Alan Levy (301) 340-7839

Talk is Cheap/Pt. to Pt.
Barry Fox (717) 566-6709

DataBases

dBase II
John Staples (703) 255-6955

dBase II&III, Data Perfect. Db Master-PRO
Leon Raesly (301) 220-0717

Profiler 3.0
Barry Fox (717) 566-6709

Dvorak Keyboard
Ginny Spevak (202) 362-3887

Hard Disk

CMC (not CMS)
Barry Fox (717) 566-6709

Corvus Omninet
Tom Vier (BBS) (301) 986-8085

Corvus
Leon Raesly (301) 220-0717

Sider
Jaxon Brown (301) 350-3283
Otis Greever (615) 638-1525

Languages

Applesoft
Louis Biggie (301) 967-3977
Peter Combes (301) 251-6369
Leon Raesly (301) 220-0717
John Love (703) 569-2294

Integer Basic
John Wiegley after 2:15 (703) 437-1808
John Love (703) 569-2294

Machine
Ray Hobbs (BBS) (301) 490-7484
John Love (703) 569-2294

Pascal
Michael Hartman (301) 445-1583

C and TML Pascal
Harry Erwin (703) 758-9660

Operating Systems

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

CP/M
Art Wilson (301) 774-8043

ProDOS
John Love (703) 569-2294
John Wiegley after 2:15 (703) 437-1808

ProDOS 8 and 16
Barry Fox (717) 566-6709

RWTS, Disk structure
John Wiegley after 2:15 (703) 437-1808

Print Shop
Thomas O'Hagan (301) 593-9683

Spreadsheets

General
Walt Francis (202) 966-5742

MagicCalc/SuperCalc2.0
Leon Raesly (301) 220-0717
Terry Prudden (301) 933-3065

Telecommunications
Allan Levy (301) 340-7839

TimeOut Series
Morgan Jopling (301) 261-3886

Utilities:ProSel
Barry Fox (717) 566-6709

Word Processors

General
Walt Francis (202) 966-5742

Apple Writer II
Dianne Lorenz (301) 530-7881
Leon Raesly (301) 220-0717

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

Letter & Simply Perf
Leon Raesly (301) 220-0717

Mouse Write
Barry Fox (717) 566-6709

Publish.It!
Gary Hayman (301) 345-3230

ScreenWriter II
Peter Combes (301) 251-6269
Gene Carter (202) 363-2342

Word Handler
Jon Vaupel (301) 593-3316

Word Perfect
James Edwards (301) 585-3002
Henry Donahoe (202) 298-9107

Word Star
Art Wilson (301) 774-8043

Apple IIGS
Paul Tarantino 703) 451-7670 (before 10P)
Neil Laubenthal (703) 691-1360
Fred Tillman (703) 503-8895
A.D. (Bill) Geiger (703) 237-3614

General
Barry Fox (717) 566-6709

General/PaintWorks+
Paul Tarantino (703) 455-7670

//e Upgrade
Morgan Jopling (301) 261-3886

APW
Andy Gavin (703) 734-3049
Jim Frison (703) 525-9395
Leon Raesly (301) 220-0717

Deluxe Paint II
Rich Sanders (703) 450-4371

GS BASIC
Barry Fox (717) 566-6709

Multiscribe GS
Ray Settle (301) 647-9192

Telecommunications
Dale Smith (301) 762-5158
Allan Levy (301) 340-7839
Bob Sherman (305) 944-2111

TimeOut Series & Utilities: ProSel
Chuck Ward bef. 9 pm (703) 830-3720
Barry Fox (717) 566-6709

VIP-Pro/Multibe
Jim Frison (703) 525-9395

816 Paint/Writ'rs Ch.El
Andy Gavin (703) 734-3049

Apple II Hardware Epson printers, hard drives,
Guy Durant (202) 363-0366

Apple III

3 Easy Pieces
Tom Linders
Charlene Ryan
David Jernigan

Word Juggler
Tom Linders
Charlene Ryan

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

Beagle Buddies

MARYLAND
Paul Schlosser (Mt. Airy) (301) 831-9166
Ray Settle (Annapolis) (301) 647-9192
W. T. Cook (Columbia) (301) 995-0352
Gary Hayman (Greenbelt) (301) 345-3230
Lee Raesly (Adelphi) (301) 220-0717
Harvey Kaye (Bethesda) (301) 299-8994
Allan Levy (North Potomac) (301) 340-7839
David Page (301) 599-7630

VIRGINIA
Kenneth De Vito (Alexandria) (703) 960-0786
Neil Laubenthal (703) 691-1360

CALENDAR AND SIG NEWS

APRIL

2 Monday
7:00 PM PI-SIG ..... office
Editorial Deadline—May Issue

4 Wednesday
7:30 PM dPub SIG ..... PEPCO
7:30 PM Mac Programmers ..... office

5 Thursday
7:00 PM Columbia Slice ..... Columbia
7:30 PM GameSIG ..... office

11 Wednesday
7:30 PM Board of Directors Meeting ..... office
7:30 PM Database SIG/4D ..... Computer Factory
7:00 PM NeXT SIG ..... NIH

12Thursday
8:00 PM StockSIG ..... office

14 Saturday
9:30 AM Annapolis Slice ..... Anne Arundel Co.
10:00 AM Frederick Slice ..... Frederick
Music SIG ..... Call

18 Wednesday
7:00 PM WorksSIG ..... office
7:30 PM Excel SIG ..... office
7:30 PM Fed SIG ..... Call
7:30 HyperTalk ..... Arlington

20 Friday
Ad Space Deadline—June Issue

23 Monday
Writers' Deadline—June Issue

25 Wednesday
7:30 PM AV SIG ..... Call
7:30 PM Apple III SIG ..... Call

26 Thursday
Ad Copy Deadline—JuneIssue

28 Saturday
8:00 AM AppleWorks Sig ..... Call
9:00 AM WAP General Mtg. ..... Bethesda/CC
noon HyperCard SIG ..... Call
noon Telecom SIG ..... Call
noon NewSIG ..... B/CC

30 April
7:00 PM Apple IIGS ..... McLean

WAP General Meetings

Monthly General Meetings are generally held on the 4th Saturday of the month at Bethesda–Chevy Chase High School, 4301 East-West Highway, Bethesda MD. Except sometimes, when we hold them other places. We try to give plenty of notice, but when in doubt, call. The place of meeting can, and does, change until we find a more permanent home. If anyone has ideas or suggestions about places that we could meet on a more regular basis, please call the Office and let us know.

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

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

Meeting Notices

Annapolis Slice 2nd Saturday; Anne Arundel Community College - Careers Bldg. Lecture Hall, Arnold, MD, 9:30 AM, 10:00 after April meeting.

Apple IIGS SIG Apple IIGS SIG (normally) the Monday after the regular WAP meeting; alternates between Dolley Madison Library in McLean and (NEW) NIH (building 31, 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) 4th Wednesday; WAP office, 7:30 PM. May be subject to change; call Nancy Seferian (202) 333-0126 to confirm.

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

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

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

April

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					

Meeting Notices

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 after the WAP general meeting, 12:00 noon.

HyperTalkSIG 3rd Wednesday, the Fairlington Community Center, 3300 South Stafford St., Arlington, 7:30 PM.

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

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

PI-SIG (Programmer's Interface) 1st Monday; WAP office, 7:30 PM (except for Monday holidays). Call Ted Meyer (703) 893-6845 to confirm date, time and location.

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

Telecomm SIG after the WAP general meeting, 12:00 noon.

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

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*		

MAY

1 Tuesday
Editorial Deadline—June Issue

2 Wednesday
7:30 PM dPub SIG ..... PEPCO
7:30 PM Mac Programmers ..... office

3 Thursday
7:00 PM Columbia Slice ..... Call
7:30 PM GameSIG ..... office

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

9 Wednesday
7:30 PM Board of Directors Meeting ..... office
7:30 PM Database SIG/4D ..... Computer Factory
7:00 PM NeXT SIG ? ..... Call

10 Thursday
8:00 PM StockSIG ..... office

12 Saturday
10:00 AM Annapolis Slice ..... Anne Arundel Co.
9:30 AM Frederick Slice ..... Frederick
Music SIG ..... Call

14 Monday
Apple IIGS ..... NIH

16 Wednesday
7:00 PM WorksSIG ..... office
7:30 PM Excel SIG ..... office
7:30 PM Fed SIG ..... Call
7:30 PM HyperTalk SIG ..... Arlington

18 Friday
Ad Space Deadline—July Issue

23 Wednesday
Writers' Deadline—July Issue
7:30 PM AV SIG ..... Call
7:30 PM Apple III SIG ..... office

24 Thursday
Ad Copy Deadline—July Issue

26 Saturday
8:00 AM AppleWorks Sig ..... Call
9:00 AM WAP General Mtg. ..... Call
noon HyperCard SIG ..... Call
noon Telecom SIG ..... Call

WAP HOTLINE

Macintosh

General
Jeff Alpher to midnight (301) 630-2036
Donald Schmitt (717) 334-3265

Art & Video
Nancy Seferian (202) 333-0126

Borland Products
Doug Ferris day only (800) 826-4768

Databases
Fourth Dimension
Bob Pulgino (301) 474-0634

FileMaker II
Tom Parrish (301) 654-8784

Helix
Jim Barry to midnight (703) 662-0640
Harvey Levine (301) 288-9380

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

Omnis 3 & 3+
Paul Tabler (703) 278-8657
Jeff Alpher to midnight (301) 630-2036

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

Pro-Cite
Elizabeth Mangan (703) 750-2710

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

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

Graphics
General
Bill Baldridge (301) 779-8271
Jay Rohr (301) 655-0875

Adobe Illustrator
Ling Wong (703) 378-5102

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

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

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

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

Languages
Pascal
Michael Hartman (301) 445-1583

Machine
Ray Hobbs (301) 490-7484

MS BASIC
John Love (703) 569-2294

MacMoney
Chuck Sicard (301) 963-2879

MacProject
Jay Lucas (703) 751-3332

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

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

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

Telecommunications
General
Allan Levy (301) 340-7839

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

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

WriteNow
Bill Baldridge (301) 779-8271

WordPerfect—Mac
Curt Harpold (202) 547-8272

General

Franklin & Laser 128
Bob Martz (301) 795-5689

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

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

Math-OR Applns
Mark Pankin (703) 524-0937

Modems-General
Allan Levy (301) 340-7839

Hayes Smartmodem
Bernie Benson (301) 951-5294

Practical Peripherals
Allan Levy (301) 340-7839

Music Systems
Ray Hobbs (301) 490-7484

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

MX-80
Jeff Dillon (301) 662-2070

Stat Packages
David Morganstein (301) 972-4263

Stock Market
Robert Wood (703) 893-9591

Volunteer on the Hotline

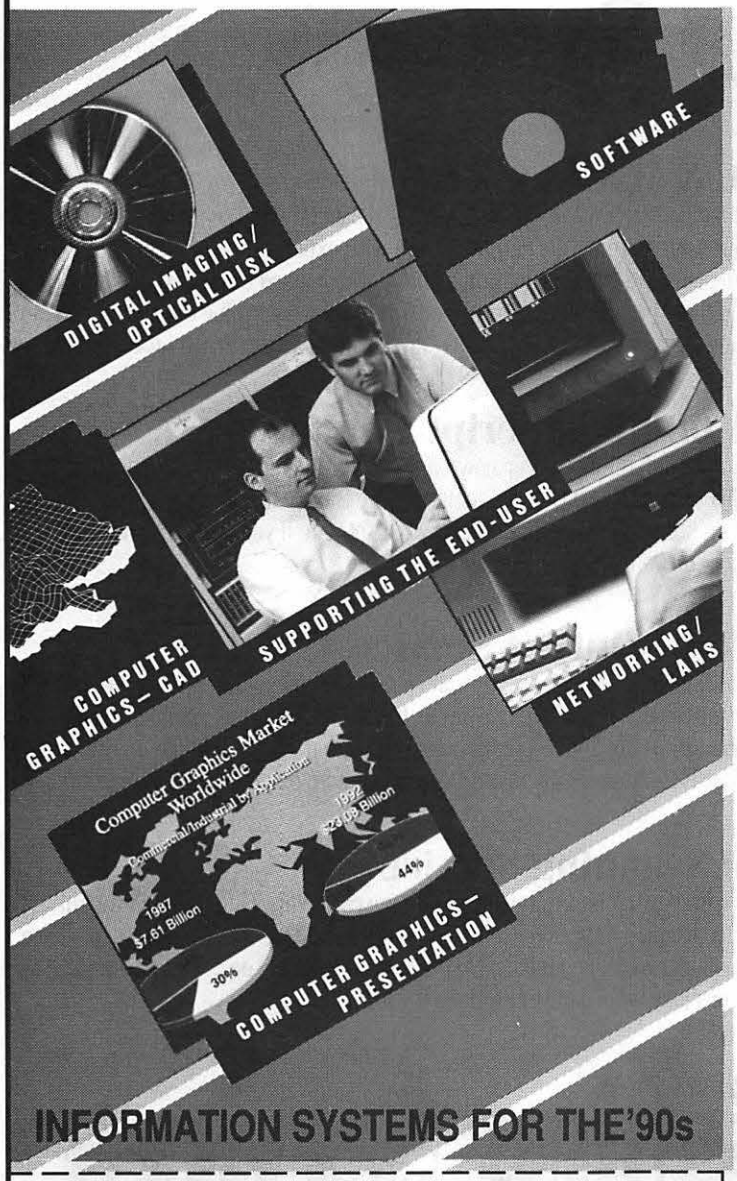
Call us (so we can call you) 654-8060

Frederick Apple Core Help Line

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

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

INNOVATIVE. ON TARGET. INFORMATION-PACKED.



FOSE '90®

AMERICA'S LEADING INFORMATION SYSTEMS CONFERENCE AND EXPOSITION

NEW FEATURES
NEW FORMAT
NEVER-BEFORE-SEEN PRODUCTS

Don't miss this highly interactive conference—41 dynamic conference sessions plus the FOSE/FOSE Software/ FOSE Computer Graphics exposition featuring over 500 leading companies in 8 acres of exhibits. For registration information and a free copy of the FOSE '90 conference brochure, including a **FREE** expo ticket, send in or fax the coupon today (fax # 703-836-4486) or call 800-638-8510. In metropolitan Washington, DC, 703-683-8500.

FOSE '90®
FOSE Software™
FOSE Computer Graphics™

CONFERENCE: MARCH 19-22, 1990
EXPOSITION: MARCH 20-22, 1990
WASHINGTON CONVENTION CENTER
WASHINGTON, DC

❑ Please rush me more information. My area of interest is (check one):

- ❑ Digital Imaging/Optical Disk
- ❑ Networking/LANs
- ❑ Software
- ❑ Supporting The End-User
- ❑ Computer Graphics—Presentation
- ❑ Computer Graphics—CAD

Name_____
Title_____
Organization_____ Mail Stop_____
Address_____
City_____ State_____ Zip_____
Telephone_____

Mail to: Director, FOSE '90, 313 South Patrick Street
Alexandria, VA 22314-3567 • Fax # 703-836-4486

Z42

Professional Typography
On
Desktop Systems

Do your computer-generated publications look computer-generated?

Is your kerning more cosmic than calculated?

Are you feeling boxed in by the "boxy" look?

Does your output service seem to have trouble putting out?

Are you answering "yes" to too many of these questions?

Bet we can help!

Full PC & Mac Support

Ventura Publisher, Pagemaker, Quark XPress—we work with the major players in the electronic publishing arena. We can assist you with expert advice, publication setup, style sheet design, and training on today's most widely used desktop publishing systems. And most important of all, by combining our typographic expertise with our technical know-how, we'll turn you into a "desktop typesetter" in no time.

Over 1,000 PostScript Typefaces

We set them...we sell them. Carver now offers one of the most extensive PostScript typeface collections in the D.C. area, including the Bitstream, Monotype and Adobe PostScript font libraries. If you've got 'em, we'll set 'em. If you want 'em, we'll sell 'em. Call for a quote on your favorite PostScript face.

Linotronic Output Service

Carver is a full service output bureau running one Linotronic 300 and two 202s. Our photo imagesetters can process pages up to 11″ x 17″, including scanned graphics or halftones, and any of the above-mentioned fonts. Standard turnaround on desktop publishing files is 24 hours. Call us any time for a quote on your next publication.

Digital Scanning Service

We now have first-rate black and white scanning capability. Our Microtek digital scanner can reproduce images to 300 dots per inch with a 256-level gray scale from original text, line or halftone images. No job is too simple or too complex—we'll scan it and print it, or make wholesale alterations if you wish.

Carver Publishing Services

(703) 528-0772

Free Radio-Dispatched Courier Service for Jobs Over $100
Normal 24-hour turnaround • 24-hour bulletin board service for telecommunications

Carver Photocomposition, Inc. • 1025 N. Fillmore St., Arlington, VA 22201 • One DuPont Circle, Suite 30, Washington, DC 20036
Professional typographers since 1973 • Expert users of DTP systems since 1987 • Linotronic service since 1988

View from the Cat House

by Kim Brennan

Once again I begin this column still working from my Sider 10MB hard disk. The clouds are dissipating however, and with patience, skill, and a bit more luck, next month I hope to be talking about my 150 megabyte hard disk. This month, however, I thought we could take a break and look at some of the wonderful stuff that is moving through the telephone lines.

Computer bulletin board systems (BBS) are wonderful things. Not only can you get information from people who share your interests, and who can help supply you with technical knowledge far in excess of any practical use, but you can also gain access to some of the newest programs for your computer. Whether these programs be the latest update of the operating system, or a simple program for correcting programming errors in your favorite word processor, they can appear so quickly and spread so fast across the country (or world) that you can sometimes be using them only hours after the programmers have released them.

There are a variety of types of programs available from BBSs, but not all of them come with no strings attached. Public domain programs are applications that are totally free. Freeware programs don't cost anything either, but unlike the public domain programs, the rights to the freeware programs are still held by the programmers. Shareware programs are programs that the authors request a small fee for their use, typically under $25. In addition there are some programs which are real commercial products that have regular updates via BBSs, such as Glen Bredon's ProSEL.

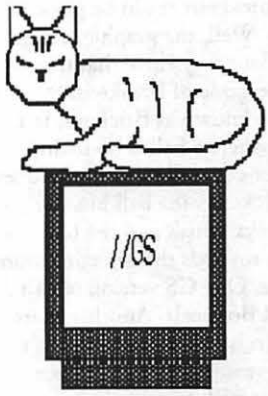
New Desk Accessories (NDAs) are small programs that just about any GS desktop application (such as the Finder or AppleWorks GS) can make use of. The graphic control panel of System 5 is one NDA. WriteIt! by Ravenware Software is another. NDAs such as WriteIt! are a wonderful addition to your system. WriteIt! does not make any pretension of being a word processor. It only reads and writes ASCII text files and doesn't allow you to print out anything. But, it is nice, easy to use and complete as it stands. The latest version (1.2) does add a search capability. Recommended. The author, C. K. Haun, doesn't specify a dollar figure to send; however the NDA is shareware.

Ravenware has another NDA called PeekIt! which allows one to examine the contents of any file on disk, not just text files. However you can just look, not change the files. Also shareware.

A variant on the freeware theme is Jesusware, which is distributed free in praise of Jesus. While I am not a religous person in any sense of the word I do appreciate the programming ability of the people who have created some of the Jesusware. One such NDA is ShowPic. This allows you to view most Super Hi-Res (SHR) pictures, as well as Print Shop pictures, from within any program.

Another NDA that I heartily recommend is File Manager. Although in this case for a different reason. File Manager is a NDA that allows you to perform some of the mundane tasks that you might otherwise use the Finder for, but since it is a NDA you can do these tasks without leaving your favorite GS/OS program. Such things as copy, move, delete, info about a file. However, what really caught my eye was the documentation, presented in two different formats. One is a simple ASCII text version. The other is an AppleWorks GS page layout version. Wow. Twenty pages, or 19 plus the title page, laid out in a format that closely resembles the format Apple uses in its own manuals. Included with the documenation was a small file that contained the necessary fonts to make the page layout printout look best. As an example of what one can do with AppleWorks GS, this is a must have. Now I wish I had a laserwriter so I could print these docs in even higher quality, or maybe that HP DeskWriter.

Some NDAs are more than a little useful. PaperSaver is something every



GS owner should have, especially if you use AppleWorks GS. PaperSaver (shareware) allows you to advance the paper on your ImageWriter printer up to the tear-off point. It also allows you to pull the paper back down to the printing point. You can also form-feed paper forward or backward, advance the paper up or down a line and set the top of form. Another must-have.

Most programs or desk accessories (DAs) make clear whether they are freeware, shareware, or commerical products, but not always. One NDA that falls into this latter category is StrangeMenus. This is an NDA that changes the color of the menu bar from white with black lettering to black with green lettering. Just the thing for adding a dash of color to your desktop.

Of course, you might want to change the color of your desktop itself. Especially if you are not a fan of that periwinkel blue. One control panel device (cdev) that will allow you to do that is called Desktop Painter. First let me explain what a cdev is. The graphic Control Panel that appears under the DA menu (Apple Menu) is actually composed of several individual modules. These modules, which you select by clicking on the various icons on the left side of the control panel, present their own separate panels of buttons. The nature of the GS/OS system allows programmers to add additional cdevs to the Control Panel for the control of various aspects of your computer. Desktop Painter lets you choose the color of your desktop from 16 different colors. As a person of Irish ancestry I prefer a green desktop. This goes very well with the green letters and black menu bar from StrangeMenus.

And now for some entertainment history. The earliest and first graphic screen on Apple II computers was the Lo-Res screen. This was designed so that

the game of Breakout could be played on the Apple. Well, the graphic screens have come a long way since that time and so has the game of Breakout. Breakout, also known as Brickout, is a simple game where a ball is bouncing between a user-controlled paddle and set of colored bricks. As the ball hits the bricks the bricks vanish and the ball bounces back towards the direction from which it came. One GS version of this game is called BounceIt. Another more famous version is Arkanoid, which is a commercial game. Now from France comes Bouncing Bluster.

What is all the interest in this simple game? It is easy to learn but difficult to master. Much more difficult when you consider all the new features these games have. Bouncing Bluster (like Arkanoid) has bricks that don't break, or break only after being hit several times. Or bricks that drop small "pills." If you can catch the pills with your paddle (being careful to not let the ball get away) your paddle may suddenly sprout laser guns for shooting out the bricks, or perhaps the paddle will become larger, or smaller, or... well you get the idea. Bouncing Bluster throws in another trick. One pill causes your ball to bounce up over the bricks when you click on your mouse. I haven't yet mastered this technicque myself, so I haven't found what other goodies are hidden in Bouncing Bluster. Bouncing Bluster is shareware.

Some of the other classic games are being reborn. The game of Asteroids, where you are shooting at moving Asteroids which get progressively smaller (and faster) each time you hit them, has been reborn as Orbizone. I've not played this game much since I never was any good at asteroids, but a lot of other people have been raving over it.

Do you remember Frogger? The game where you manueuver a frog across a log-strewn river and a highway filled with rapidly moving vehicles? The same programmers who wrote Orbizone have created a PG-13 version of Frogger. Called Senseless Violence, it features a baby instead of a frog. Enough said. On a side note, these same programmers have also written a commercial game called Xenocide; however Orbizone and Senseless Violence are both shareware games.

One of the most graphically oriented programs I've seen in quite a while is called Photonix. This shareware disk copier (3.5" disks only) is from France. However, it uses its own custom operating system and so must be booted separately. On the plus side, though, it boots very fast. It also has many options. So many, in fact, that Gary Hayman reviewed it in the January 1990 Journal. Free Tools Association (FTA), the people who wrote Photonix, believe that it is unnecessary (maybe even undesirable) to use the Apple toolbox that all desktop programs use. With Photonix FTA demonstrates what inspired creative programmers can do.

Out of Spain comes a music program from someone who does believe in the Apple toolbox. Soundsmith (shareware), which is still in its very impressive beta version, allows you to create music using synthesized instruments. Some of the first song examples are astounding in their quality. This program will be a 15-track MIDI song writer when it is finally finished. None of the examples I have use any more than 4 tracks currently, though 15-track capability is already implemented. The current version (0.9) does not support MIDI. This support has been promised in version 1.0.

Tonight's Sky GS by John L. Graham is a shareware planetarium program. After entering your location (in latitude and longitude) and the time, this program will calculate the appearence of the stars and planets visable at the input time. Very nice.

New stuff is cropping up on BBSs all the time. This is just a sample of some of the good stuff. Next month I'll be talking about hardware. My computer currently has its guts spread out all over the table as I try to shoehorn too many cards into the cramped interior of my GS. Perhaps my father was right when he described my computer as a trash truck that goes Warp 3.

WriteIt! NDA v1.2
PeekIt! NDA v1.1
RavenWare Software
C. K. Haun
22045 McClellan Rd.
Cupertino, CA 95014
Shareware

File Manager NDA v1.0
Jeff Hartkopf
533 Wildrose Court
Loiusville, CO 80027
Shareware $10

PaperSaver NDA v1.1
Steven Cole
5614 W. Villa Maria
Glendale, AZ 85308
Shareware $5.00

Bouncing Bluster
J.F. Dove & J.M. Vallet
25 Rue Bossuet
77150 Lesigny, France
Shareware $15 (100FF)

Orbizone
Senseless Violence
Pangea Software
10918 Kirwick
Houston, TX 77024
Shareware $5.00 (each)

Photonix v1.46
FTA
34 Rue Des Rutondes
21000 Dijon, France
Shareware $20 (cash only)

GS Soundsmith v0.9
Huibert Aalbers
Travesia Andres Mellado 3
28015 Madrid, Spain
Shareware $20

Tonight's Sky GS v2.0
John L. Graham
2254 Candlewood Dr.
Kettering, OH 45419
Shareware $10

Operant Systems ...since 1982

)(-series Hardware

DOT-MATRIX & LASER PRINTERS

- Panasonic 1180 (192 cps, 9-pin, Epson-compatible) . . . 199
  - 1191 (240 cps, 9-pin) . . . 249
  - 1124 (192 cps, 24-pin) . . . 325
  - 1624 (wide-carriage version of above) . . . 459
- Okidata 320 / 321 (300 cps, 9-pin, NLQ mode, std / wide carriage) . . . 379 / 525
  - 390 / 391 (270 cps, 24-pin, std / wide carriage) . . . 525 / 699
- NEC 2200XE (192 cps, 24-pin quality at a bargain price) . . . 349
  - 5200 / 5300 (265 cps, 24-pin, std / wide carriage) . . . 549 / 729
- Toshiba 321SL (216 cps, 24-pin) . . . 519
- HP LaserJet II (8 ppm, 512k) 1699
  - LaserJet IIP (4 ppm, 512k) 1049
  - DeskJet Plus (240 cps inkjet, 300 dpi, LaserJet-compatible) . . . 699
- Panasonic 4450 (11 ppm, 512k, dual input bins, LaserJet-compatible) 1395

MODEMS

- Applied Engineering DataLink 1200 / 2400 (1200 / 2400 card w / software) . . . 149 / 185
- Anchor 1200E / 2400E (1200 / 2400 external, Hayes-compatible) . . . 119 / 165
- Prometheus Promodem 2400A (2400 card w / software) . . . 135
  - Promodem 1200G / 2400G (1200 / 2400 external) . . . 115 / 175

MEMORY EXPANSION & VIDEO BOARDS & CPU'S

- Applied Engineering RamWorks III (256k--1 meg, for][e) . . . 159
  - RamFactor (256k--1 meg, for][+ or][gs) . . . 199
  - gsRAM (256k--1.5 meg, for][gs) . . . 139
  - gsRAM Plus (1 meg--6 meg for][gs) . . . 289
  - RamKeeper (battery backup for gsRAM) . . . 159
  - Sonic Blaster (stereo digitizer / playback for][gs) . . . 109
  - Transwarp II (7 mhz 6502c accellerator for][+ and][e) . . . 149
  - Transwarp GS (7-mhz accellerator for][gs) . . . 295
  - PC Transporter (IBM-on-a-card, 768k) . . . 389
- AMR 80-column card (64k, for][e) . . . 59
- Zip chip (4 mhz / 8 mhz CPU chip replacement) . . . 119 / 155

HARD & FLOPPY DISKS

- Sider II (20 / 40 / 70 / 90-meg for][+,][e,][gs or Mac) . . . (call)
- Applied Engineering Vulcan 20 / 40 / 100 (internal hard disk for][series) . . . 549 / 699 / 1295
  - Half-hi floppy, 143k (for][+ /][e,][c) . . . 119
- AMR A.5d (143k, daisychain port, for][gs) . . . 149
  - AS800 (3.5" 800k drive for][gs,][c+, Mac) . . . 199

INTERFACES & BUFFERS & CLOCKS

- ProGrappler (parallel printer interface w / graphics) . . . 85
- Grappler c / mac / gs (use most parallel printers from your serial port) . . . 95
- Practical Peripherals Graphicard (parallel interface w / graphics) . . . 59
  - SeriAll (serial interface for modems or printers) . . . 89
  - Microbuffer Mini (32k--512k printer buffer) . . . 85
- Applied Engineering Timemaster H.O. (clock card, supports ProDos time / date functions) . . 85

)(-series Software

WORD & PAGE PROCESSING

- Appleworks 3.0 (word processing, database, spreadsheet for][c, c, c+, gs) . . . 179
- Word Perfect (for][e,][c,][gs) . . . 109
- pfs:Write (w / speller) . . . 75
- Beagle Write (][gs) . . . 59
- Newsroom . . . 25
- Publish It ! 2.0 . . . 79
- Sensible Grammar . . . 59

SPREADSHEETS

- VIP Professional (][c,][c /][gs) . . . .79 / 89

DATABASE

- pfs:File w / Report . . . 75

HOME & BUSINESS ACCOUNTING

- Managing Your Money 4.0 . . . 95
- Quicken (easy home accounting) . . . 45
- BusinessWorks (best][c /][c /][gs-series business accounting) . . . 259
- Dollars & Sense . . . 79
- Peachtree Back-To-Basics Professional (GL / AR / AP / INV for][e,][c,][gs) . . . 169

COMMUNICATIONS

- Applied Engineering ReadyLink (split screen, VT-100 emulation) . . . 79
- Compuserve Starter Kit . . . 29

MISCELLANEOUS SOFTWARE

- Beagle Timeout SideSpread / Power Pak / Program Writer / Thesaurus . . . 32
  - UltraMacros . . . 39
  - QuickSpell / SuperFonts . . . 42
  - Graph . . . 55
- pfs:Workmates (includes Write, File, Report, Plan) . . . 125
- Print Shop / Print Shop Companion . . . .35 / 29
- Copy][+ v9.0 . . . 29
- Avery List & Mail . . . 45
- PaintWorks Gold (for][gs) . . . 49
- Flight Simulator II . . . 35
- Where in the World is Carmen Sandiego? . . . 29

Mac Hardware

LASER & INKJET PRINTERS

- General Computer Personal LaserPrinter (QuickDraw-compatible, six fonts) 1549
  - Personal LaserPrinter Plus (as above, w / seven additional fonts) 1649
  - Business LaserPrinter (6 ppm, Postscript, 2-meg) 2995
  - WriteMove (QuickDraw-compatible inkjet printer) . . . 525
  - HP DeskWriter (QuickDraw-compatible inkjet, 300-dpi) . . . 899
- NEC LC-890 (8 ppm, Postscript / HP emulation, 3-meg, dual-bins) 3199
- Qume CrystalPrint Publisher (8 ppm, Phoenix Postscript, 3-meg) 2895

HARD & FLOPPY DRIVES

- Peripheral Land PL 20 / 30 / 50 / 100 Turbo (1:1 SCSI for Plus, SE) . . . . 525 / 575 / 625 / 1049
  - PL 50i / 100i / 200 / 250 Turbo (1:1 internal for II series) . . . . . 499 / 949 / 1349 / 1599
  - Infinity (40-meg removable disk, also reads IBM floppy disks) 1049
  - Infinity Optical Disk (570-meg read / write removable, SCSI) 3949
  - TurboFloppy 1.4 (1.44-meg floppy, read / write Mac & IBM disks, SCSI) 325
- CMS 20 / 30 / 60-meg SCSI . . . 435 / 495 / 649
  - 100-meg internal, SE, II) . . . 925
- DaynaFile (360k floppy, reads and writes IBM disks) . . . 475

68020 / 030 ACCELLERATORS

- Dove Marathon 68020 accelerator (for SE) . . . 475
  - 68030 accelerator (for Mac II, IIx, SE/30) . . . 999
- Irwin Excelerator XL 16 (16-mhz 68000 for SE) . . . 329
  - Excelerator XL 20 (20-mhz 68020 for SE) . . . 649
  - Excelerator XL 25 (25-mhz 68020 for SE) 1125

MISCELLANEOUS HARDWARE

- 1-meg SIMM module (for SE or II series memory upgrade) . . . 109
- Lapis DisplayServer SE (supports a variety of multisync color & greyscale monitors) 325
- Datacopy 730GS scanner (64-level greyscale, software, cable) 1249
- Microtek MSF-300Z scanner (256-level greyscale & color, software, cable) 1895
  - MSF-300GS scanner (256-level greyscale, software, cable) 1450
- Sigma Designs / E-Machines / Moniterm full-page displays . . . (call)
- NEC MacSync (14" analog color monitor for Mac II) . . . 459
- Anchor MacPac 2400E (2400 / 1200 bps modem w / software & cable) . . . 179
- Dove MacSnap & SIMM memory upgrades . . . (call)
- Kensington System Saver Mac (fan & surge protector for 512, Plus / for SE) . . . . .69 / 59
  - Turbo Mouse Plus ADB (trackball for mouse-haters) . . . 125
- Shiva / Farallon / Nuvotech . . . (call)

Mac Software

WORD & PAGE PROCESSING

- Microsoft Word 4.0 . . . 259
  - Write . . . 89
- MacWrite II . . . 135
- Word Perfect Mac 1.03 . . . 229
- FullWrite Professional 1.1 . . . 249
- Write Now 2.0 . . . 129
- PageMaker 3.02 . . . 375
- ReadySetGo 4.5 . . . 289
- Interleaf Publisher . . . 649
- Springboard Publisher II . . . 119

SPREADSHEET

- WingZ 1.1 (super spreadsheet / graphics) . . . 255
- Excel 2.2 . . . 259
- Full Impact 1.1 . . . 249

DATABASE

- Filemaker II . . . 209
- FoxBase+ / Mac 2.0 . . . 269
- SuperCard . . . 135
- 4th Dimension 2.0 . . . 499
- Double Helix 3.0 . . . 349

GRAPHICS

- MacDraw II . . . 269
- Claris CAD . . . 529
- Adobe Illustrator 88 w/ Adobe Typeface Manager . . . 285
- Swivel 3D . . . 319
- Cricket Draw / Graph / Paint . . . 185 / 125 / 125
- SuperPaint 2.0 . . . 135

HOME & BUSINESS ACCOUNTING

- Quicken 1.5 . . . 45
- Managing Your Money 2.0 . . . 139
- MacInTax 1040 . . . 79
- Peachtree Back-To-Basics Professional (GL / AR / AP / INV) . . . 165
- Bedford Simply Accounting . . . 229

MISCELLANEOUS SOFTWARE

- Microsoft Works 2.0 (word proc, calc, database, commun, speller) . . . 199
- TOPS for MAC 2.1 Bundle . . . 195
- Symantec Utilities for Mac II / AntiVirus for Mac . . . 109 / 79
- Suitcase II 1.2 . . . 55
- MacProject II 2.0 . . . 339
- Smartcom II . . . 89
- Adobe Typeface Manager (scalable outline fonts for Imagewriter / DeskWriter) . . . 65

TO ORDER--Call Jeff Dillon
(301) 942-1100

We sell over 10,000 items--call for current prices.
UPS 1-day shipping is available. Md sales add 5% tax.

Operant Systems
3514 Plyers Mill Road
Suite 207
Kensington, MD 20895

Cross Country USA (Pt. 2)

by Phil Shapiro

Last month I introduced a fabulous geography game for the Apple II series, named Cross Country USA. This article will examine the program in greater depth.

The beginning of the Cross Country USA program is quite straightforward, but here's a pointer or two to help you on your way. After the title screen, the program takes you to the options screen. Here you'll be able to make some important choices about your road trip.

The most important of these choices is how many commodities you want to pick up. When deciding how many commodities you want to pick up, keep in mind that it takes an average person about ten to fifteen minutes to pick up each commodity. You'll probably want to only pick up two or three commodities when you first start playing the game. There're some nice graphics so don't choose too many commodities to pick up, you may miss these neat rewards.

Another important choice at the options menu is how many players will be playing the game. While the program allows for two players to play competitively, my experience has been that the game is far more fun played cooperatively under the "one player" option. Cross Country USA is an ideal game for the family to play together, assuming children are appropriately aged (about fourth grade on up), and are sufficiently compatible with each other to work towards a common goal.

The division of labor in such a cooperative enterprise would have one child sitting at the keyboard, "driving the truck," and another child poring over the map, acting as "navigator." Parents can then assume the roles of "assistant driver" and "assistant navigator." Or, perhaps, "independent consultant."

The final choice at the options menu has to do with choosing a "commodities table." This sounds confusing, and it is. What the "commodities table" refers to is to one of the customizing features of the program. You can actually re-assign the commodities in the program to different cities. Why anyone would choose to do so is not entirely clear to me. I'm perfectly satisfied with the U.S. economy as it presently exists, so I always press return to skip this option.

As soon as you've chosen your options for the game, you're ready to start the game. At this point the program presents you with a "Dispatch Notice," telling you the first commodity you have to pick up, which city you're starting from, and which city is your final destination. The program prompts you to flip over the disk, and away you go.

Here're a couple of pointers from a veteran trucker of the Cross Country USA game to help speed your journey:

• If you're a fast reader, you can speed up the messages on the bottom of the screen by pressing the space bar. (You can also speed up the display of the city billboards by pressing the space bar.)

• Should you ever run out of gas, or crash from lack of food/sleep, the appropriate action—naturally enough—is to "call for help." A second-grader informed me of this when I inquired, "Well, what am I supposed to do NOW?"

• Snow chains are highly recommended in a snowstorm (but don't forget to take off the chains once you've travelled into warmer climes). Just as your mother told you, don't forget to eat regularly and fill up the tank every couple of cities. Keep a watchful eye on the gas gauge, and you'll do alright.

• Once you've picked up one commodity, the program gives you clues to your next commodity. If you can't figure out the clues, just type anything. The program gives you two chances to figure out which is your next commodity, and then proceeds even if you don't guess it.

Cross Country USA is the type of game you can play for a full hour without getting tired. In my experience, the program is sufficiently varied to be playable many times.

This program is best used with children who have already shown an interest in learning about American geography. Geography is one of those subjects that should never be foisted on those who are not ready for it.

A complete software review ought to compare the merits of the program being reviewed with other programs in the same field. There are at least a handful of other programs that cover the same general subjects as Cross Country USA. A program titled "Coast to Coast" couches American geography in the form of a hot-air balloon race. Another program, titled "See the USA," gets children driving around from state to state by naming each state they drive thru.

While these two other programs are not without merit, they are just not in the same league as Cross Country USA. In the global economy of today, economic geography is equally an important a subject as physical geography.

While "Coast to Coast" and "See the USA" may hold the interest of younger geo-philes, Cross Country USA has sufficient complexity to hold the interest of students all the way through high-school.

If the newspaper reports are true, and American students' geographical knowledge is not up to par, this teacher's prescription is a healthy dose of Cross Country USA. This delightful program has been carefully designed to captivate the interest of growing minds. For students whose interest in geography has not yet been whetted, this program may well kindle a tiny spark. And for those students whose interest in geography is already burning bright, this program might well provide the fuel to make the fire burn even brighter.

The author teaches computers in elementary school, and develops educational software for the Apple II computer.

Cross Country USA
By Didatech Software Ltd.
3812 William Street
Burnaby, British Columbia
V5C 3H9 Canada
(604) 299–4435
Runs on any 64K Apple II computer. Color monitor not required.
Distributed by: Silicon Express,
1–800–999–6868
Price: $29.95

BSAVE Bug in BASIC.SYSTEM 1.2

by Chester H. Page

The new BASIC.SYSTEM 1.4 that is supplied with the recently issued GS.OS 5.02 for the IIGS does not have this bug, but all your IIe disks probably do.

If you have a binary file named FILE, BSAVED from (say) A$2000, and replace it with a later version by entering BSAVE FILE, A$2000, L500 the file will be overwritten by the new version. This is as expected. But if the new version is at a different memory location, either intentionally or due to an accidental reuse of the name FILE, then there is a problem.

Suppose you enter BSAVE FILE, A$3500, L550. The data will be copied from the correct location in memory, but on BLOAD or BRUN it will be loaded at $2000; the load address is not changed in the file entry! This happens because the address attached to a binary file is set by CREATE, not by BSAVE. When you BSAVE FILE before FILE exists on the disk, CREATE is called automatically; if FILE already exists, it is simply overwritten. Since the result of BSAVE can be a file that loads at the wrong address, and no warning of a duplicate file name is given by BSAVE, I consider this to be a bug.

A simple patch to BASIC.SYSTEM will kill the bug. The safest and most convenient way to enter the patch is by writing it as a small text file, e.g. with AppleWriter, and EXECing the text file. The text follows:

```
UNLOCK BASIC.SYSTEM
BLOAD
BASIC.SYSTEM,A$2000,TSYS
CALL -151
38D5:50 BB
4550:AD 53 BE C9 0F D0 17
A9 07 8D B4 BE AD D7 BE 8D
B9 BE AD D8 BE 8D BA BE 20
00 BF C3 B4 BE 4C 94 AF
BSAVE BASIC.SYSTEM,
A$2000,E$4570,TSYS
[Y]
PRINT "DONE"
```

The [Y] stands for an actual CTRL-Y in the text; in AppleWriter, entered verbatim by CTRL-V CTRL-Y CTRL-V.

This patch operates by inserting a detour near the end of the BSAVE operation, just before it calls for CLOSEing the file. First, the last command is checked that it was BSAVE, then the address from which the data were read (the A parameter) is put into a parameter list for SET.FILE.INFO, and that operation is called via the ProDOS MLI (Machine Language Interface). In the off chance that you have a non-standard version of BASIC.SYSTEM (or the faulty 1.3 version), first check $AED4 in memory. It reads 4C 94 AF in version 1.2.

If PATCH is written on a disk having ProDOS and BASIC.SYSTEM, simply boot that disk and enter -PATCH. The resulting modified BASIC.SYSTEM can be copied onto other disks.

The *Apple Writer* Dilemma

by Ron Evry

The volatile world of computing has brought about such rapid changes that traditional long-range business plans centered around a hardware or software product are useless. Products come and go so rapidly it makes no sense to purchase technology as a long-term investment.

State-of-the-art computers that sold for thousands of dollars six years ago can now be picked up for pocket change.

A case in point can be found in VisiCalc, the original spreadsheet program designed by Dan Bricklin, that forever changed the personal computer from a toy into a business tool. There was a time no Apple owner could be without a copy of VisiCalc. Then the IBM PC and Lotus hit the market. Bricklin and his associates thought that they would stay at the top of the heap forever, yet apparently overnight, VisiCalc entirely vanished. The program's fall from grace was total. Today, only a very few holdouts still use it.

Some programs vanish due to market conditions, some to mismanagement, and others disappear from obsolescence. One program that was deliberately withdrawn from the market a few years back still hangs on with a dedicated core of thousands of active users. This program is *AppleWriter* (most frequently in its little known, but terrific ProDOS format). Once the most popular word processing program in history, Apple Computer Corporation quietly stopped manufacturing it sometime after AppleWorks 2.1 and setting up Claris to be an offshoot software firm. The motivation for withdrawing AppleWriter was probably to boost sales of AppleWorks. Considering the fact that there are over a million registered AppleWorks users out there, Apple's justification for the withdrawal needs to be reconsidered.

First of all, judging from the sheer number of AppleWorks owners, it would seem illogical that other word processing programs such as WordPerfect, Multiscribe (now Beagle Write), Bank Street Writer, and geoWRITE would sell in the large numbers that they do. Most owners of these programs probably have AppleWorks.

The manufacturers of all of these other word processors have one thing in common: the ability to convert AppleWorks files to their own formats. The success of the other word processing programs has had negligible impact on the sales of AppleWorks. Yet Apple Computer, by not continuing to support AppleWriter, actually misses out on a significant share of the word processing market.

Assuming that Apple (or Claris, if you will) has missed out on grabbing the supplementary word processor market by supporting AppleWorks to the exclusion of all else, then why should they consider reviving an old, possibly outdated program like AppleWriter to recapture that market? Shouldn't they concentrate on developing something brand new?

Well, yes and no. AppleWriter is not all that outdated in the first place. It is the only major word processing program for the Apple II line whose native file format is entirely straight ASCII. Any other word processing program can read AppleWriter files. And when sent by modem, that includes word processors for Mac, IBM, Commodore, Atari or any other make of computer. Try sending an AppleWorks file to an IBM user without going through the hassle of converting the program to ASCII first, and see how far you can get.

AppleWriter is also capable of stripping control characters from downloaded files with a push of a button, no matter where they came from. A very large downloaded text file can be converted into smaller chunks right off of the disk (unlike certain other programs which will remain nameless here). AppleWriter is as fast as AppleWorks, whether speed typing or page flipping. Editing chores are simple, and due to the fact that the entire program is memory resident (if you don't need a spreadsheet or a database, then why bother wasting precious RAM to hold it?), there is virtually no disk flipping and swapping needed. After loading, the only time the master disk is needed is to access the help screen. This is a rare occurrence, indeed.

Another wonderfully unique feature of AppleWriter is its built-in programming language, called WPL. The average user of AppleWriter may never need it, but for those with a creative bent, WPL is a fascinating exploration of the power of the computer.

WPL is a highly structured language, similar to BASIC in its simplicity and resembling LOGO in its structure. With it, a user can manipulate files, create interactive programs, do fancy mail-merge tricks, and even program high-quality PostScript type and (believe it or not) graphics!

Yes, AppleWriter does cry out for updating. It currently needs an on-line dictionary (a la Beagle Bros.), a thesaurus, and a font editor. It already has a built-in telecommunications program. If the program were again available commercially, it probably would not be long before these and other add-ons appeared on the market.

Internally, the program shares many of the same machine language routines as AppleWorks, and it is not hard to believe that the AppleWorks word processor was somewhat modeled after AppleWriter. GS owners would need a special updating of the program.

There is a slight bug that causes the system to crash when accessing a printer from a GS, but Don Lancaster has come up with an extremely simple patch that will take care of the problem. It was printed in the March 1987 issue of the Computer Shopper magazine, and I will be glad to mail a copy to anyone who sends me a self-addressed stamped envelope (care of Washington Apple Pi). If there is a Super Serial Card attached to the GS, then AppleWriter does not have to be patched to run properly.

There are those who say that any attempt to revive AppleWriter is akin to beating a dead horse. Claris has made its position clear that they will brook no competition to AppleWorks, at least from within their own house. Facing reality makes Claris's position look more like dead horse beating, though. AppleWorks is securely a best-seller and will be as long as Apple IIs and compatible computers are sold. But failing to market AppleWriter is giving in to the

competition on the secondary word processor market. Try to imagine Microsoft taking *Word* off the market so that it would not compete with *Works*. It just wouldn't make sense.

Hopefully, Apple Computer will find it possible to put AppleWriter back in circulation. At present it is only possible to pick it up used, or possibly remaindered (as of this writing, the only known commercial source is Alltech Electronics of Santa Ana, Calif., with the manuals for $29.95—call them at (714) 543–5011 while they've still got it). There are a number of ways that the program could be put back in circulation. Here are some of the alternatives:

1. Claris can revamp the program and put it back in widespread circulation for something like its original retail price of $150. That ought to be worth at least a million dollars in extra profit for the company above and beyond AppleWorks sales figures. Any software company that doesn't want to make an extra million dollars profit ought to have its collective heads debugged.

2. Maybe Claris secretly doesn't want any more successful Apple II programs because that might eventually cut into Macintosh sales. This makes a certain amount of perverted sense, since computer sales are indeed software driven. In this instance, then, I propose a radical idea: Let the nation's Apple users groups market the program to their members only, at a pre-agreed upon price. Apple II owners who belong to users groups have established their commitment to the machine—in this manner Apple could be establishing their commitment to users groups, which they have verbally affirmed again and again.

3. Keep producing the program, but distribute it as if it were remaindered. Book and record publishers have been doing this for years. There are some perennial favorites in the "cut out" bins of book and record stores that have been available in multiple printings and publishers for decades! This cuts in to potential profits on the program, but is a low-key way of continuing to make it available to people who want it.

4. Put the program in the public domain! Seemingly, there is no money in this course of action for Apple or Claris, but it would be a great public relations move that, handled properly, would garner a lot of good press. This is not an unprecedented action by any means. AT&T put the transistor into the public domain back in the '50s, theoretically for altruistic reasons, but coincidentally, just before they raised most of the nation's pay phones from a nickel to ten cents. Hmmm....

Bootleg copies of the program, patched up and down by grassroots hackers, have surfaced everywhere. The best way to combat the bootleggers is to make legitimate copies available on a widespread basis.

One argument made for the burial of AppleWriter is that AppleWorks has become a de facto standard for Apple II word processors—but if a computer user were going to stick with industry standards, then why buy an Apple II in the first place? The typical Apple II user is generally an intelligent, independent sort of person who uses the computer as a cognitive aid, not as a substitute for thinking. And as long as there are Apple II users, there will be *Apple Writers*.

Giant AppleWriter Files

By Chester H. Page

Usefulness

The large memory of the IIGS makes it very attractive to modify AppleWriter 2.0 to make this memory available for textfile space. Some advantages would be: space for fonts, space for long lists and routines for reordering them without leaving AppleWriter, space for the text of a manual or book in a single file with provision for automatic indexing. With the ADDITIONAL FUNCTIONS MENU modified to allow loading and running of binary programs from *within* AppleWriter, I already have the following utilities:

(1) Multiple Sorts

MULTISORT is a fast routine for making multiple sorts on designated fields within strings in a sequential text file, i.e., no preassigned lengths to the fields. This is the type of file list that is easy to write on a word processor.

A typical file for multiple-sorting is a name/address/attribute list, such as one whose entries are in the form:

[B]Jones, John W.

1225 [F]Random St.

Houston, [F]TX

DEMOCRAT

where [B] and [F] indicate CTRL-B and CTRL-F buried in the text. These are benign markers which have no effect when the list is printed, not even using space. [B] identifies the beginning of a string; [F] marks a field. Each new line also starts a new field, implicitly marked by the [D] (<RETURN> symbol) at the end of each line.

The object is to order the file entries by specified fields. The simplest ordering is on field 1, a simple alphabetical ordering by name. A more interesting problem is to order the items so that all members of a given political affiliation are grouped together, alphabetically ordered within that group by state, ordered within a state group by city, ordered within a city by street name, and ordered within a street group by house number.

Logically, this is equivalent to ordering strings made up of segments of the items taken in the order

field 6 - affiliation segment

field 5 - state segment

field 4 - city segment

field 3 - street segment

field 2 - house number segment

MULTISORT orders the items with ANY SPECIFIED order of segments, and displays the reordered list as an AppleWriter file which can be edited, printed, or saved to disk just as can any such file. (The list is loaded by AppleWriter prior to sorting, and is reordered without leaving AppleWriter.)

I have a random list of the above type, containing 6,400 entries, 379,512 bytes, and taking 2 minutes and 20 seconds to load. (It would take more than 500 pages to print this list.) I originally developed a MERGESORT routine for a stable repeated ordering on different fields. This required 9 minutes. MULTISORT does the job in 2 minutes!

The sorting routine begins when the operator is asked for a list of field numbers in the desired order (For the above example, the response would be entered from the keyboard as 65432, with or without spaces between the digits). The maximum number of fields used by MULTISORT is 6. The string segments in the first-priority field are compared with a QUICKSORT algorithm. When two such segments are identical, the second-priority segments are identified as continuations of the two strings being compared. If these two extended strings are identical, the segment of next priority is appended, etc. Note that fields other than the starting field are examined only when necessary. For example, if there is a single FLAT EARTH affiliate in the list, his residence data are never read.

Alphabetical listing by name took 1 minute 6 seconds. This included 37 seconds of overhead: setting up field tables before sorting and redisplaying the rearranged list. The time spent on actual reordering was thus 29 seconds. The full 5-field sort took 1m 56s (with the same overhead) so the 5-field sort took 79 seconds of actual sorting time, less than three times the duration of a 1-field sort.

To provide for types of list in which separate lines are not to be identified as different fields, MULTISORT asks "Does a new line start a new field? (Y/N):" and two program bytes are chosen by the response. On a smaller scale, I use this program to arrange lists of our civic association members by (1) name, (2)subdivision and address, (3)date they last paid dues. Being treasurer, I find this last ordering very handy!

(2) Automatic Indexing

With unlimited space available for a text file, a whole book can be written as a single file, instead of breaking it up into chapters, or even pages. With such a text file loaded, I call in a list of words to be indexed, and all occurrences are displayed in inverse caps. The starting address of each match in the file is tabulated. There are always some trivial or unwanted references—these are cancelled by retyping the first letter of each unwanted reference. Then a routine is called to eliminate these unwanted references and to replace each text address with the number of the page that it would be printed on, and generate an index.

For books with illustrations, pagination is not known until page proofs are received, so indexing must be postponed. At this time, go back into your text file and add .FF form feeds to force page changes where the printer has decided to put them. Running the indexer will now give correct page references.

(3) Niceprint

This program prints a text file in the elite proportional type built into the ImageWriter, along with italics designed for an aesthetic match. The text lines can be justified with needed fill space inserted between words, but the largest and smallest of these spaces differ by only the space for one dot in bit-image printing (1/160 inch). This set of italic characters is downloaded to the printer by calling ITALICS, before NICEPRINT is used. Excellent for printing bylaws etc. for your civic association,

and for attractive medium-length Xmas messages to slip into cards without folding the paper.

Features of AppleWriter 2.0GS

Patching AppleWriter for use with the Apple IIGS allows use of as much of the added memory as is desired. The number of banks assigned to the GS version of AppleWriter can be increased or decreased in one-bank increments at any time without interfering with text already in memory. This is done by CTRL-O I, then entering + or - as desired.

For a large jump, the repetition of increments can be avoided by moving all text to the low-file with CTRL-E, entering the monitor by CTRL-RESET, entering B8F0:nn where nn is the hex number of the highest bank to be assigned, and CTRL-Y <RETURN> to go back to the program. The top-bank number is included in the SYS.PRT Print/Program Value File; it is saved as default by CTRL-Q D, with SYS as the requested file name. Booting AW2.0GS automatically installs the default top bank.

The status line has been stretched to display the remaining memory, file length, and position in file to six digits. When seven digits would be needed, the first one is omitted.

Note the above use of the "hacker's patch": CTRL-RESET to the monitor for examining or changing the program, with a CTRL-Y return to the point of interruption, without damaging a file or moving the cursor.

Some text file application disks carry a set of special Print/Program values in a file, <name>.PRT; for example a right margin value of 130 used with condensed type. Normally, loading such a file, or changing margins from the keyboard, requires CTRL-A Y to adjust the margins of text present, or to load text to the new margins. AW2.0GS, however, automatically adjusts margins when a <name>.PRT file is loaded using CTRL-Q C.

The save-with-delimiters routine has been expanded so that [S]: <filename> followed by a repeated delimiter, e.g. [S]: <filename>!!, saves from the cursor to the end of the file, without requiring a marker. (The standard AppleWriter requires using the last word as a marker, or adding a marker at the end of the file, and saving from the cursor to the marker. This requires moving the cursor to the end, noting the available marker or adding a marker, then returning to the desired starting point. Any added marker will be added to the file.)

The ADDITIONAL FUNCTIONS MENU called by CTRL-Q has been modified. [QJJ now calls up a sub-menu of 3 choices: (1) provides for loading a binary program at $6A80; (2) runs the program most recently loaded at $6A80; (3) loads a program at $6A80 and immediately runs it, as well as making it available for running by choice (2).

Installation

Make a copy of an AppleWriter 2.0 disk and rename the copy volume AW2.0GS. Unlock and delete AWB.SYS and AWC.SYS (These files are irrelevant to the IIGS, and waste disk space).

With AWGS.MAKER booted, place the copy in another drive. Enter -AW.GS.PATCH or EXEC AW.GS.PATCH. The program will be patched and put back on the disk, along with an auxiliary file (UPPER) and a NEW.SYSTEM replacement of AW.SYSTEM. For a one-drive system, copy AW.GS.PATCH into /RAM5, put your unmodified AW2.0GS disk into a drive, and enter -/RAM5/ AW.GS.PATCH. (Note: If you downloaded AWGS.MAKER.SHK and unshrunk it, you have the AWGS.MAKER.RED disk, which needs the addition of ProDOS and BASIC.SYSTEM, and renaming to AWGS.MAKER)

If your AppleWriter disk has an old version of ProDOS, it will not automatically record time and date on files; replace your ProDOS file with a later version, such as PRODOS 8 V1.7.

An AppleWriter Repair

AppleWriter 2.0 has a very useful Load-with-delimiters feature which allows loading segments of a file with the following constraints:

(1) Load from the beginning up to, or up thru, a specified end string (set of characters).

(2) Load starting with a specified beginning string, to the end, or thru a specified end string.

(3) Same as (2) but with the marker strings omitted.

There is, however, an error in logic which causes the marker-string search to fail under certain conditions; if a marker string appears in the file text with its first character replicated to an even number of occurrences, that string will not be found in the search process! This is a special case of the general failure: if the string is started, then restarted before the end, the search will fail. For example, if the desired string is ABCDE, then AABCDE will be missed, as will also ABABCDE, ABCABCDE, and ABCDABCDE.

The string search is carried out by checking successive text characters for a match with the first character of the string, and when a match is found, the next text character is checked against the next string character. If it matches, the next is checked against the next, etc. In case of a mismatch, the search is started anew, checking the *next* text character (after the non-matching one) against the first string character, and so on.

The flaw in this procedure is that if the first string character occurs as a pair in the text, its first occurrence will be accepted, then its second appearance will be rejected as not matching the second string character. But now the new search starts with the following (third) character, whereas it should start with the second appearance of the first string character. The same error occurs when the text contains any beginning fragment of the desired string, but then restarts the string. The restart character would be rejected as a mismatch, and the new search would start one character too late.

This flaw is corrected by inserting a routine that checks each rejected character against the first string character; if a match is found, the search checks the balance of the string.

I intend to upload the patching program plus some utilities to the WAP TCS as a shareware GS Utility named AWGS.MAKER.SHK. Unshrinking generates a "reduced" disk, AWGS.MAKER.RED, which requires the addition of ProDOS 8 and BASIC.SYSTEM to be a self-booting disk. It has its own STARTUP file.

...great graphics, gratis!

by Ron Evry

One of the most fascinating things about the Apple II (and compatible) line of computers is their capacity for full color graphics "right out of the box," with no expensive cards to add on. With a little practice, a new user can program terrific looking pictures in BASIC quite easily. By learning a few standard tricks such as page flipping or manipulating shape tables, it is possible to even create simple animated programs. There are lots of practical uses for these homemade graphics. One that immediately comes to mind is as a custom title designer for video tapes. Just plug the computer into the old VCR, push the Record button and RUN the graphics.

Now there are many Cheap Computists out there who have trouble drawing with a pencil, let alone with a keyboard. Also, a lot of folks simply do not have the patience to program their own high-resolution graphics but would still like to have some available. The easiest way to get top-notch graphics into a computer is with a scanner. These marvelous devices use advanced technology (for those with a more earthy bent, they really work by magic) to look at a photograph or drawing and put them into a form that can be used and stored with a computer. In this manner, any picture at all can be put into a document or visual presentation. Needless to say, scanners are very, very expensive.

The frugal computer user has no need to buy a scanner yet. When the local K-Mart has them for the price of a transistor radio, it may very well be worth considering for purchase. But until that day, why bother? Literally *thousands* of already scanned graphics are available right at this moment, for FREE!

A standard form for computer graphics is called GIF (Graphics Interchange Format). Another lesser-used format is called RLE (Run-Length Encoded). These scanned pictures have been posted on almost every bulletin board system in the nation by people who love to share their scanners' output. Miraculously, even though a great many of them were produced by and for non-Apple computers, with a little sleight of hand the pictures can be used on an Apple II. A free program is available for downloading on the Pi TCS called (what else) IIGIF. It is capable of easily converting GIF and RLE pictures to Apple double high-res format in either color or black and white. The Apple images can then be stored and used after conversion, without need of re-translating. The author of the program, Jason Harper, while retaining copyright to it, has generously introduced it as *freeware* to the public. This means that it can be freely copied, but not sold. A tip of this column's (cheap) hat to Mr. Harper is in order here. Thanks!

Once armed with a copy of IIGIF, a Cheap Computist can raid hundreds of local bulletin boards and build up a library of terrific graphics without even running up a phone bill. Utilizing these graphics can be a little bit more complicated (and even run into some money) depending on how they are to be used. To make simple slide show type presentations is easy. Most local Apple boards have various slide presentation programs free to download. However (be warned) many feature "adult-oriented" graphic displays, although the sysop will restrict access by under-aged computer users. But these graphics can easily be replaced by deleting and inserting "socially redeeming" DHR files.

Another practical use for graphics is in printed documents. As of yet, there do not seem to be any public domain or shareware programs that can integrate DHR pictures in printed documents. If there are any readers with access to such a program, there are lots of Pi members (and other Apple users) that would appreciate having access to it. Just send a copy to this column care of the Pi office, and enjoy basking in the gratitude of at least five or six dedicated readers.

There are a number of commercial programs that can make use of these downloaded pictures, and they should be mentioned here for the sake of those readers who have them, or are considering buying one. As far as I know, there is no way to utilize Double High Resolution graphics in Print Shop. However, the new version of Brøderbund's popular program is expected to be on the market by the time this column appears in print, and it could very well be possible that it will handle DHR graphics. No doubt more will be heard on this matter in the future.

Publish It! users have always been able to access DHR files with ease, and incorporate the graphics within text documents. Another terrific program that not only accepts virtually all DHR graphics, but enables the user to play around with them in limitless ways, is Dazzle Draw. The only drawback in using this Mac-like paint program is its very limited text abilities. One trick that has been handed down through the ages is to use Print Shop for text, leaving a big empty space for graphics. Then simply *roll back* the paper in the printer and use Dazzle Draw to provide the picture. It takes a little practice to handle this properly, but the results are incredible!

Owners of GEOS and GEOPublish have a slight problem regarding DHR graphics, inasmuch as the GEOS Graphic Grabber simply does not recognize them. But by converting a DHR image to a Dazzle Draw *section*, the picture can then be imported to GEOPaint. The only problem is that the image will be reversed! By entering the program's EDIT mode, the stalwart GEOS user can invert the image back to a crisp positive, suitable for putting in GEOPublish, GEOWrite, GEOFile or GEOChart documents. Time consuming? Undoubtedly. Worth it? Undeniably!

Have any cheap tips for the tight-fisted computer owner? Please send them along. As of now there are no prizes or rewards, except recognition. But that and four bits might get a person a cup of coffee. It's just a matter of knowing where to look these days.

The HyperStudio Tea Report

By Dirk Bakker and Chris Hutmire

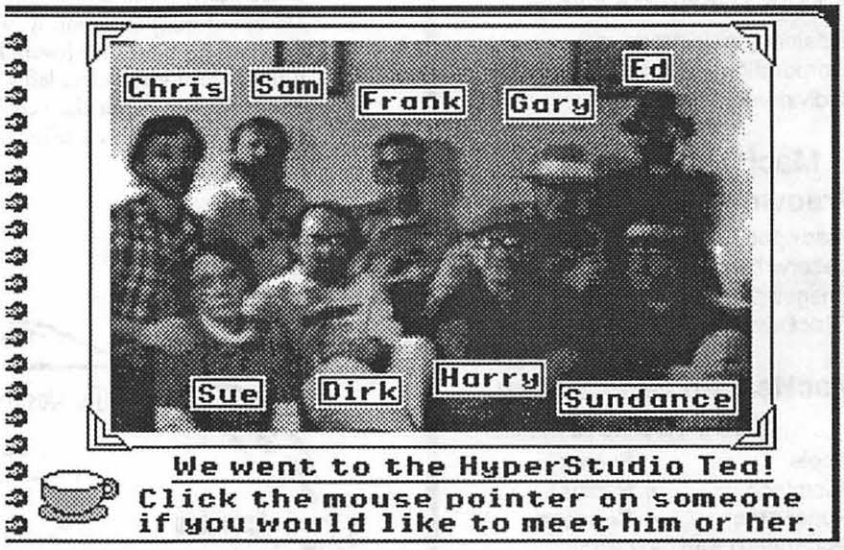
Teas are a Washington Apple Pi activity where a group of members meet at a member's home to discuss, demonstrate and use a hardware and/or software product. Although WAP teas have not been popular the last couple of years, we cosponsored a HyperStudio Tea on the 10th of February 1990, and it was a great success due to members' excitement and interest in this new application.

This addition to the IIGS family of software from Roger Wagner Publishing provides most of the capabilities once reserved to the Macintosh using HyperCard. HyperStudio provides the IIGS user with the ability to combine graphics, sound, and text files into a new "greater than the sum of its parts" referred to as Hypermedia. The combinations are innumerable. Just imagine being able to co-relate information, have a picture "launch" an application, or click on a word to generate a spoken version of it.

A variety of hardware and software was also demonstrated, requiring two Apple IIGS systems. This also allowed people to split into small groups. HyperStudio was demonstrated on both a hard disk and a floppy-based system. A hard disk system is preferable as the HyperStudio package comes on four disks. HyperStudio can be run from a single floppy but, as with most powerful applications, not without frequent disk swapping.

Chris demonstrated the three INITs that are included with HyperStudio. These INITs are equivalent to the public domain INITs: Start Pic, Start Sound, and System Beep. Start Pic displays a picture during boot-up. Start Sound plays a digitized sound file during boot-up. System Beep replaces the error beep with a digitized sound file. A future Journal article will describe these INITs in more detail.

Daniel Slaven demonstrated his USA-Arizona stack. This stack is part of the HyperStudio ten-disk demo set. Roger Wagner Publishing will be selling this stack in the future. The stack contains information on the climate, flora, and fauna that can be found in Arizona. The stack includes excellent graphics, pictures of Lake Powell and an Old West song.



Chris and others demonstrated how HyperStudio can be used as a program launcher. "Buttons" can be created and placed on the HyperStudio home stack which will launch an application when the button is clicked. Quitting the application will return you to HyperStudio. This process bypasses the Finder or other program launcher.

The A2 Stack-Central Sampler disk was released at the Tea. The home stack on this disk contains a variety of information about HyperStudio and A2-Central. Two stacks are included on this disk, HyperBrain v1.5 and ChessMoves. An application is included which makes subscribing to A2-Central an easy task. The application prints subscription forms for the A2-Central newsletter and disk subscriptions.

A disk with stacks downloaded from America Online was also released at the Tea. This disk contains four stacks: American History, Birds, HyperBrain v1.5, and America Online Intro Stack. The America Online Intro Stack is basically an advertisement with a few not-so-subliminal messages. This stack does contain a nice 320-mode digitized picture of AOL personnel.

Dirk brought his system containing three specially appropriate pieces of hardware: One, the ComputerEyes GS digitizing card (CEGS), an Apple II Video Overlay Card (VOC), and a Pioneer laserdisc player.

ComputerEyes can take a video source and convert it into a wide number of GS graphic formats.

After the demonstrations everyone participated in creating a HyperStudio stack. Many of us gained some needed experience with this new product. We decided that the stack would contain information about the people who attended the HyperStudio Tea. We ran out of time before the stack could be finished, but had fun in the process.

In order to digitize the attendees using CEGS, we connected the video output of an 8mm camcorder brought in by Chris' father to the input of the CEGS card. Once we got the hang of starting the camcorder and adjusted the VOC to frame the picture, Open-Apple "B" and six-seconds later: Voila! Chris in 640-mode grayscale. Although one can digitize in full 320-mode color using CEGS, we opted to use 640 as HS uses it primarily.

After having our "pictures" taken, we proceeded to record our voices. We used the HS sound digitizer card and the included Sound Shop software. A few of the members decided to make use of the sound editing and modification features. These features include echo, fade up or

down, reverse, stutter and others.

The results were interesting. The echo feature was very popular. Gary Hayman sounded as though he were recorded in a large concert hall even though the Tea was held in a small one-bedroom apartment. Sam Upton and Ed Moser made good use of the cut/copy and paste ability of Sound Shop. They copied part of Ed's voice and pasted it into Sam's sound file.

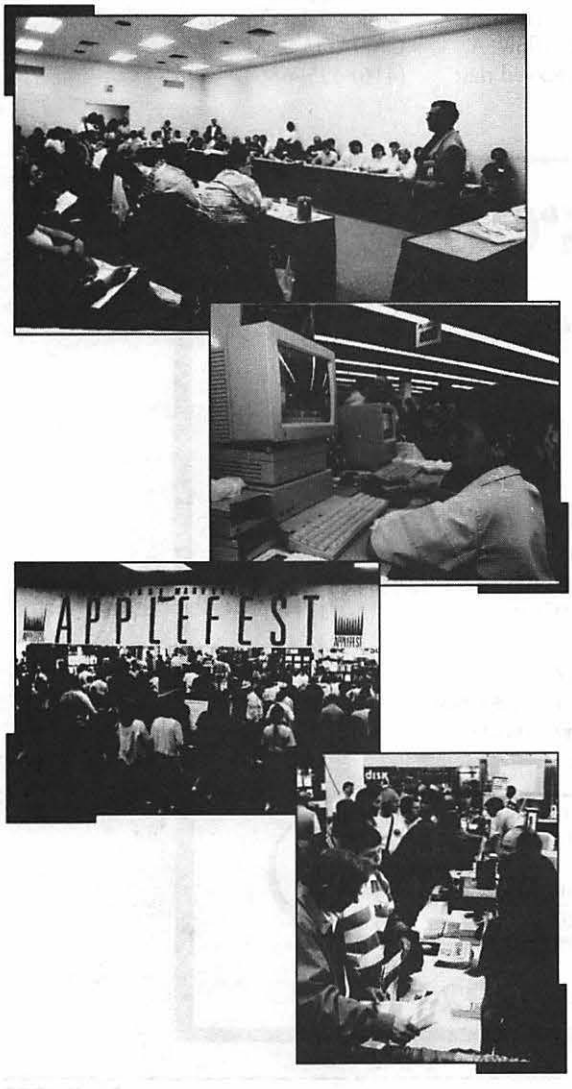
The time for the Tea was just not long enough. We went away with many answers but with many more new questions.

We have since continued exchanging comments and suggestions on the HyperStudio board of the TCS. Some of us are nearly finished with our own versions of the HS Tea Stack, but most importantly, we've discovered just how fascinating a piece of software HyperStudio is. We wonder if there are any attendees left who are not already using HS, or eagerly waiting for their copy. Join us in the discussion on the TCS; there's no telling when the next Tea will be held!

Save by Registering Today! Call 1-800-262-FEST*
** 617-290-0400 in Mass.*

It's the biggest.
It's the best.

AppleFest!®



and Announcing
ComputerFest!™
for PC & Commodore Users

Coming for the First Time to the Greater New York Metro Area!

May 4-6, 1990
The Garden State
Convention Center
Somerset, New Jersey

- ☑ World's largest home & K-12 computing event
- ☑ Thousands of products
- ☑ 70+ sessions and intensive seminars
- ☑ Apple II, Mac, PC & Commodore
- ☑ Terrific bargains & prizes
- ☑ Easy-access location
- ☑ The perfect event for teachers, parents, kids, and home office users!

MICOL Advanced BASIC

by Adam Robey

"MICOL Advanced BASIC" is different from your average BASIC compiler. One can gather from the title that this is based on BASIC, but with it, one may write structured code (similar to Pascal) using MICOL Advanced BASIC.

It is an Apple IIGS specific application with a command shell environment. The command shell is lacking several commands, but the editor is fine for the use of most people.

Once you have written your BASIC source code, you can compile it to an EXE file type. This file can be run under the Advanced BASIC shell. If you want to market the software that you write with this program, you must convert it to a program that can be run without the shell. You can either copy the runtime library file onto your boot disk or you can use one of the conversion utilities.

The conversion utilities can convert your code to a Classic Desk Accessory or an executable S16 type file. If you wish to sell your programs, there is no fee required as long as you do not remove their copyright message.

One can write desktop applications and access the toolbox. The toolbox access allows you access to *every function* and has recently been enhanced.

Some of the Advanced BASIC functions are faster than AppleSoft and some are slower. Mathematics appears to be its forte. It can calculate to 10 to the 4096th power without an overflow. A mathematics "benchmark" showed that it takes 83.55 minutes to generate one million random numbers between one and twelve under AppleSoft. It took 59 minutes to generate one million random numbers under Advanced BASIC.

All in all, Advanced BASIC is a good program! It is extremely difficult to locate. I had to buy it mail order through Programs Plus and it took a while.

The only real problem that I had with Advanced BASIC is the length of the applications and Classic Desk Accessories which it creates. When you create a shell application (for execution by those who already own this program), the length comes out fine. But when you create a Standalone Application or a Classic Desk Accessory, it adds about 50k to every program, regardless of length of the source code.

MICOL Advanced BASIC has a suggested retail price of $145.

Micol Systems Inc.
9 Lynch Road
Willowdale, Ontario
CANADA M2J 2V6
(416) 495-6864.

Look Mom, No Software!

by Phil Shapiro

A computer without software is supposedly no more than an expensive paperweight. Last week I learned how this maxim is not necessarily true.

The setting was a small after -school class I teach at a nearby primary school. The class is composed of four or five kindergarten students who share three computers. Since the school does not have a lot of funds for computers, the students make do with two old Apple II Plus computers, and a Commodore 64.

The Apple II Plus, while antique by today's standards, performs valiantly well in the classroom. A lot of educational programs were written in the early 1980's, the heyday of the II Plus. As long as the computer has 64k of memory, you can run hundreds and hundreds of fine educational programs. (The original II Plus came with 48k of memory. You can buy a 16k memory card for about $40 from various mail order companies.)

Last week we played Reader Rabbit on one of the computers. After the kids had played for a while, I decided to boot a simple joystick game on one of the two Apple II Plus's. One of the students wanted to continue playing Reader Rabbit, so I carried the disk over to the other II Plus to boot it up.

Much to my dismay, Reader Rabbit would not boot on the second II Plus. The only thing that appeared on the screen was a hodgepodge of mixed up graphics.

Meanwhile, the other students were tugging at my sleeve to play the joystick program. The situation forced me to consider how I could use the computer without any software.

First I switched off the II Plus to clear the memory. After a suitable five - second pause, I turned the computer back on, and pressed the two keys <Control-Reset> together. to stop the disk drive from spinning endlessly.

I then typed "HOME" to position the cursor at the top of the screen. Now the Reader Rabbit scholar could type whatever she wanted on the screen. My task as a teacher would be to give her little assignments to perform while I was assisting the kids at the other computers.

The first assignment was the typing of her name. Quickly completed, the next task was to type the name of friends, siblings and parents. Help with spelling was available, if needed.

All the while, this young scholar was learning both keyboarding (the position of the letters on the keyboard) and editing skills. Mistakes could be corrected by using the "back-arrow" key, and typing "on top" of the mistake.

For a young child learning to read and write, this type of activity is ideal for experimentation. For a young child, writing and erasing words on a blank screen amounts to his or her first brave steps into the mysterious and fabulous world of literacy.

So the next task almost suggested itself. "Could you please write the word "stop" for me?" Every kindergartner knows how to spell "stop." So she enthusiastically undertook the task of finding the letters "S-T-O-P." After the word "stop," the next task was "dog" and "cat."

By this time, the young scholar was on a roll. She had typed in over four words, and there was no stopping her now. Her stated goal was to fill the screen with as many words as possible. My job, as teacher, was to keep feeding her with simple, phonic words to type on the screen.

By the end of the half-hour class, she had typed in "red," "big," "ball," "play," "sky," "pie," and "boy." As her final assignment, I suggested she type in the short phrase, "big girl." The word "big" was already on the screen. All she had to do was go back and find it. Quite accidentally, this young student and I had stumbled into the world of literacy.

To her own astonishment, the young girl was able to find the word "big" from the long list of words on the screen. With a little prompting, she typed in the letters "G-I-R-L." As she finished her last assignment of the day, she grinned at her bold foray into the "adult world" of literacy. The last phrase neatly summed-up her own feelings of self-competence.

As I walked home from the lesson, I couldn't help but think that the lesson had actually been enhanced by the malfunctioning computer. Educational software still holds out great promise in stimulating young minds. But, by the same token, a blank screen provides an exquisite "intellectual sandbox" for inquiring young minds.

Here are some tips and suggestions for parents and teachers who would like to experiment with "blank-screen" computing. You may want to forewarn your kids that the computer may spit out some "Syntax Error" messages every so often. These messages are accompanied by an annoying short beep. Apple IIc, IIc+, and IIGS users can turn the sound down or off. II Plus and IIe users do not have any hardware options with sound.

From the computer's point of view, the words on the screen are part of a computer program. If the computer can't make sense of the words, a syntax error message will follow. You can minimize the syntax error messages by refraining from pressing the <return> key. Another option is to type "10 REM" before the child's writing. This little trick fools the computer into thinking the words are comments to a computer program.

As a matter of fact, you can use any number before the word REM. For your own edification, REM is an abbreviation for the word "remark."

Another option for blank-screen computing is to load up your trusty word processor. The drawback with word processors is that the text is usually displayed in 80-column format, which is far too tiny for young eyes.

The best possible situation would be to have large-sized, proportionally-spaced text on the screen. A Macintosh computer, with Adobe Font Manager, gives crisp looking, large-sized text. Choose a font size of about 48, or 72 point. That way, children will be able to clearly see the shape and form of the words they type.)

The author teaches computers in elementary school, and develops software for the Apple II computer.

FINDing OUT

by Gary Hayman

The use of the FIND token in UltraMacros can greatly facilitate quick loading of files to your AppleWorks desktop without having to navigate through layers of directory menus. In addition, FIND is often used to select an appropriate "TO" application from your TimeOut menus. In most cases FIND behaves as is expected, but BE WARNED, there are a couple of occasions where what you want to happen doesn't. For instance, when you are attempting to load several files to the desktop and they are not in the same order in the macro as they appear on the AppleWorks Files menu; and when using FIND within the "Select an application to Configure menus" of UTILITIES.

I will present you with three macros and discuss the "tricks" (techniques) that you can use to overcome the problems. In the course of my presentation, I am also employing some of the newer commands and techniques that you can use with UltraMacros 3.x, such as: the ' & "PATH" ', the KEYTO, and the "unsuccessful FIND Z".

Let's examine the BA-A macro in Fig. 1.1. What it does is to load 3 files from a preset prefix to your desktop. You set $9 to the desired prefix location where your files are to be found. We will assume, for simplicity, that the files are all in one subdirectory. Remember your quotes surrounding the strings. In the next three lines we are setting $1 - $3 to the names of the files we want on the desktop. We now use the new default "&" command coupled with "PATH" to quickly alter the current ProDOS prefix.

If you have previously run the basic program INSTALL.USER, which you will find on your updated UltraMacros 3.0 disk (in the subdirectory FILES.FOR.V3.0) or have the January 1990 update to UltraMacros, you will have already installed four default custom "&" routines in your ULTRA.SYSTEM file. It is one of these routines, ' & "PATH" ' that you are using here. For a brief explanation of the routines, look at the file MACRO.SAMPLES in the same subdirectory on your UltraMacros disk. Also note the use of colons after the "&" routines. They are required, just as they are required after MSG, PRINT and a couple of other statements.

The next group of commands takes you to the main menu where you are selecting to Add files. Place the contents of $1, which is your first file, into $0 and activate the FIND token and with the RIGHT, check-mark it. It happens fast and you may not see it being done. Now to solve the anomaly. If you look for your next file, and it is EARLIER in the listing than the previous, the macro will fail to find it. The macro, unlike in UM 2.x, continues to operate using what commands it can, though improper they may be. The highlighter will then go to the bottom of the listing, will stop, or, if the last file is a subdirectory, it will try to go to that subdirectory. Since this is unacceptable for you the simple trick would be to force the highlighter to the top of the menu before the next FIND search. This is easily accomplished by the use of the AppleWorks OA-1 command in the macro.

The macro continues with the two additional FINDs and the final RTN causes the three files to be loaded to the desktop and leaves you with the Desktop Index on your screen. The use of this, or similar macros, will greatly facilitate the loading of a group of files.

Now let's look at the BA-B macro in Fig. 1.2. This macro allows you to quickly select one of the 16 contained fonts in TO.SIDESPREAD so that you can print your spreadsheet, in sideways fashion, without leaving AppleWorks. Even if you don't, as yet, have TO.SIDESPREAD, the technique discussed here will be applicable to other TO applications that you might want to configure using a macro.

To change the font style/size we must first Configure SIDESPREAD using UTILITIES. We first put the string "UTILITIES" into $0 so that it can be used by the FIND token. Then access the TimeOut menu with the OA-ESC, find it with the FIND token, select it with the RTN and tell it that we want to Configure something with the next RTN. Unseen, during this process, is the new feature of the FIND token. No matter how many TimeOut menus you have, FIND will search each menu till it finds the application that you specified in $0—as long as it is there.

We next place the string "SIDESPREAD" into $0, for that is what we need to configure to change the font style/size. If we just used another FIND token we MAY or MAY NOT be successful (using just the FIND, strangely this macro doesn't work the first time after a fresh compiling but does work each time after). Unlike the previous search, the first time it runs, it may find an incorrect TO application. The reason for this remains a mystery to me—maybe Roger Brandt or Mark Munz can explain. If this does happen, it most likely will start doing things that you don't want. Again, this is an unacceptable circumstance.

Not to worry. If you are fast enough you could ESC out before any damage is done; however we will fix it in a more civilized manner. Let's turn our attention back to the macro. We will start a loop with the BEGIN command, then conduct a FIND for our SIDESPREAD and take advantage of the "unsuccessful search" condition that sets the variable Z to 0 if the search fails, or 1 if it is successful. Since we would like the search to be successful, use the conditional, IF Z = 0 (unsuccessful), to allow the macro to TAB to another TimeOut menu, and continue from the BEGIN again, this time finding our string, SIDESPREAD, which is contained in $0 and then ELSEing to the remainder of the macro. The next two RTNs selects items indicating our desire to change fonts. The BELL brings your attention to the displayed message giving you directions.

We now use another important innovation in UM 3.x; the KEYTO command. With our KEYTO 13, the macro now waits until we press a RETURN before continuing. (13 is the ASCII value of keystroke RETURN or CTRL-M.) This allows us, in the meantime, to use the arrow keys to highlight the desired font before we press the RETURN to signal our completion and allow the macro to continue. We need another RTN in our

macro to indicate selection of the font as the pressing of RETURN is only a trigger for the KEYTO 13 command to end. The series of ESCs are to back up through the menus to our spreadsheet document and the ENDIF, although unnecessary, is a good programming practice in an IF (IFNOT) statement.

By keeping the above in mind when you write your macros, you will find that correct navigation through your AppleWorks and TimeOut menus will be smooth sailing.

You should test out the second portion of my article to experience the problem yourself. Make sure that you are using AW 3.0 and have UltraMacros 3.1 active. Put UTILITIES in the first TimeOut menu and have SIDESPREAD resting in the second. Do a fresh compile of the macro in figure 1.3. The BA-C macro is the same as the BA-B macro, except that it expects to find SIDESPREAD with no difficulty with the FIND command, as one would imagine, so the loop has been removed. IT WON'T WORK ON THE FIRST GO AROUND but WILL on future activations. You will have to recompile it in order to see it fail again.

The BA-B macro will work all the time. Open a new spreadsheet (it can be blank) and activate the freshly compiled macro BA-C—it fails. Get back to the spreadsheet and activate it again—success. Since it is not consistent, you would be better off using the technique that is contained in macro BA-B. See, Now you are FINDing Out.

Gary Hayman is currently Director-At-Large of the Washington Apple Pi board of Directors, is Chairman of both the AppleWorks and Apple IIGS Special Interest Groups and is SYSOP of several Boards on the WAP Telecommunications System. He is also a Beagle Buddy helping members with TimeOut problems.

Figure 1.1

```
START
<BA-A>:<ALL $9 = "/AW/PERS" {desired
Prefix}
       $1 = "SS.YEAR89"  {first desired
file}
       $2 = "SS.DEC89" {second desired
file}
       $3 = "SS.COVER.LTR" {third de-
sired file}
       & "PATH"  : & $9 :{set prefix,
note colons}
       OA-Q ESC RTN RTN {to main menu to
add files}
            $0 = $1 FIND RIGHT{check
first file}
       OA-1 $0 = $2 FIND RIGHT {(TRICK)
to top; check second file}
       OA-1 $0 = $3 FIND RIGHT {(TRICK)
to top; check third file}
       RTN>!{activate file loading}
```

Figure 1.2

```
START
<BA-B>:<ASP $0 = "UTILITIES"          {to be used by the
FIND token}
    OA-ESC FIND RTN RTN     {go to TimeOut menu,
find, select and} .....
                {choose configure}
    $0 = "SIDESPREAD"          {to be used by the FIND
token}
    BEGIN FIND IF Z = 0 THEN TAB RPT ELSE
                {if unsuccessful find, Tab and begin again}
    RTN RTN BELL                {select and choose
Fonts}
    MSG ' SELECT FONT AND THEN PRESS RETURN
' : {give directions}
    KEYTO 13 {allows movement of highlight until RE-
TURN is pressed}
    RTN ESC ESC ESC ENDIF>!     {selects and returns to
document}
```

Figure 1.3

```
START
<BA-C>:<ASP $0 = "UTILITIES"          {to be used by the
FIND token}
    OA-ESC FIND RTN RTN     {go to TimeOut menu,
find, select and}
                .....
        {choose configure}
    $0 = "SIDESPREAD"          {to be used by the FIND
token}
    FIND          {NOTICE the BEGIN/RPT and Z test are
left out}
    RTN RTN BELL                {select and choose
Fonts}
    MSG ' SELECT FONT AND THEN PRESS RETURN
' : {give directions}
    KEYTO 13 {allows movement of highlight until RE-
TURN is pressed}
    RTN ESC ESC ESC ENDIF>!     {selects and returns to
document}
```

On the Trail of the Apple III

By David Ottalini

Printers

I've been considering an upgrade to my printer of late and have been looking at two possibilities: a 24 pin printer or a Hewlett Packard Deskjet Plus. But can they work with the III? The answer to both questions appears to be yes. The Deskjet is the more expensive of the two, and may need an Epson emulation card, but otherwise should work fine.

As for 24 pin printers, On Three's Bob Consorti recently told me on CompuServe: "The III simply sends out normal ASCII characters and commands and the printer prints the characters in all of their 24 pin glory. The only program that I know of that recognizes 24 pin printers is TGM (The Graphics Manager). It will support graphic printing at the full resolution of the printer. Actually I think the upper limit is like 180 or so dots per inch."

But Dr. Al Bloom suggested one problem to be on the lookout for: "Some are a little fruity when hooked to a III. My dad had an Epson LQ800 that would only print a page or two before hanging up. It worked great on PC's and on Apple II's that his local computer store could test. Instead of throwing it out, he gave it to my wife for her //e. We also used it with our Mac II for a year before swapping it out for a LaserWriter IINT. But it wouldn't work with a III. Just that one. I borrowed an LQ800 from my dealer, and I couldn't get it to fail. I bought an LQ800 for the office that I could not get to fail. Turns out it was a bad chip, and Epson ran him around long enough that the warranty expired, and it was cheaper for him to buy an LX-800 (that worked) than to fix his LQ800. If you get a 24-pin and if it doesn't work right off, take it back."

Keyboards

I was able to pick up some extra Apple IIIs recently (thank you WAP member Rae Benadetto and the Telecommunications Exchange for the Deaf) and found that they had keyboards with broken keys. Never having actually followed the instructions I've passed along to you in previous Trail articles, I decided this would be a good chance to give them a try. Aside from one little self-inflicted soldering gun burn, I managed to take two less-than-whole keyboards and turn them into one usable one.

All it really takes is the ability to use that soldering gun (and a "bulb" to suck out the solder) and a little patience to gently pry the keys out from one circuit board and replace them in another. If you have some questions about this, or need some hands-on instruction, let me know and we'll do a little show and tell at a SIG meeting.

By the way, one other note. I have found that after working with these older IIIs, it's not uncommon for the "on" lamp to blow when you turn everything back on for the first time. Your III will beep and nothing will happen. Just press <RESET> with the <OPEN APPLE> key and your III should go ahead and boot. You'll have to replace the bulb though. I still have a few, or you can get a replacement at Radio Shack.

Menu Making

Our good friend from Ontario, Canada, C.M. Davidson, recently wrote to update us on some of the things he's been working on. It seems he's been working a bit with our own Basic Menu.Maker program. Here's what he says:

Of all the software I have bought from the SIG, I have found the Menu.Maker program one of the most useful. With a few modifications, I have got it to run off my basic boot disk and give me access to all directory levels on my hard disk. While the program allows one to descend a directory hierarchy, it allows ascent only to the top level (via the <ESCAPE> key).

I have got around this by writing a short basic program called "Backout," which truncates the current prefix$ at the next "/" and thus generates a new prefix$ one level up. Running my modified Menu.Maker program with this new prefix$ defined gives me a screen showing the next higher directory ready for use.

The program looks like this:

```
10) l=LEN(PREFIX$)
20) a$=LEFT$(PREFIX$,l-1)
30) s=LEN(a$)
40) a$=LEFT$(a$,s-1)
50) IF RIGHT$(a$,1)="/" THEN GOTO 70:ELSE s=s-1
60) GOTO 40
70) PREFIX$=a$
80) HOME:PRINT PREXIX$
90) END
```

Mr. Davidson says he hopes to do something similar with the PASCAL Menu.Maker program too. We appreciate the contribution!

Public Domain 1

I'm happy to announce a little color is entering our PD disk library. Blue to be exact. Nothing to do with the IBM variety. Rather, the color of our newly released disks will be the color blue to help give our library a little more uniqueness. Thanks to John Ruffatto for pushing this through.

Public Domain 2

Ever wish you could do a little trouble-shooting to find out why your III isn't working correctly? We try to help you a little this month with some disks specifically aimed at helping you to repair your III. In fact, that's the title of Disk 1088, which contains two sides of information gathered from many sources to help you with your troubleshooting. Not a tutorial per se, "Repairing Your III" contains a number of files that should at least give you an idea of what to do if your III has a tummy ache.

Other disks this month may also help with software repairs. Disk 1089 is Brain Surgeon and will repair files damaged by Backup III; Disk 1090 is Disk Map, which will help restore damaged hard disk directories; Disk 1091 is Diskcheck and Prohealth, utilities that will check the "healthiness" of your files and of your Profile. Finally, disk 1093 has Vindicator and Catalyst Fixer. Vindicator will check the memory of your III up to 512K. Fixer will fix program disks that have been "locked"

by Catalyst when loaded onto your hard disk. See our PD article for more on all these.

Next month we'll offer even more disks to help with repairs, including a dealer diagnostics disk. If you have any tips or suggestions for a second "Repairing Your III" disk, pass them along and I'll see what can be done. There are a number of disks working right now for your PD library (as we work towards 100!), so stay tuned.

Survey Notes

As all our III SIG members know, with your January mailing you received a "Quick Survey" to get your thoughts and feelings about how we're doing. I want to thank everyone who has sent them in so far and would urge those who have not yet done so to take a couple of minutes (OK...after you've finished your tax return) to get them in. We really do care about hearing from you. I am happy to report that we are getting some response to our request for Hotline Volunteers. In fact, we will have our own Apple III section for easy use by all IIIers. As soon as a majority of the surveys come in, I'll let you know the results as we travel down "The Trail."

Butterfly

III SIG member John Lomartire offers this fun little program you might like to try. Commenting about it on CompuServe recently, he said:

The newsletter from Adam and Eve Apple Users Group of Madison Wisconsin contained a review of the Ariel Publishing Company newsletter. According to the reviewer, H. Jackson, the July-August issue published an AppleSoft Basic program (Apple II) that would produce a "butterfly" on the screen. I have rewritten the program so it will run on our Apple III, and since it is so short I have listed it here with acknowledgement to Adam & Eve and Ariel Publishing.

The program:

```
100 HOME
120 INVOKE ".D1/BGRAF.INV"
130 OPEN# 1,".GRAFIX"
140 MODE=0:BUFFER=1:PERFORM GRAFIXMODE(%MODE,%BUFFER)
150 PERFORM FILLPORT:PERFORM GRAFIXON
160 FOR T=0 TO 75.36 STEP .01
170 S=SIN(T):C=COS(T)
180 R=24*((EXP(C)) - (2*COS(4*T)) + (SIN(T/12)^5))
190 H%=140 + R*S:V%=96 - R*C
200 PERFORM DOTAT(%H%,%V%)
210 NEXT
220 VPOS=23:GET A$
230 CLOSE:TEXT:HOME:END
```

Note that the way the program is written, BGRAF.INV must be in Drive #1 since that is where it is called in line 120. You might have some fun changing the parameters in line 180.

I used Desktop Manager to "capture" the listing and "print" it into Business Basic (PowerKeys in our PD library has the same capability) and ran this program. It takes a short while, but it does indeed come up with a butterfly. Enjoy!

Finally

Ran out of time this month to try and do a little historical perspective on the III. We'll give it a shot next time we travel down the Trail together.

The Inpert's Corner

by Allan M. Bloom, PhD, CDP

Welcome to The Inpert's Corner! What is inpertise? It arises from the old categorization of being a jack of all trades and master of none. An inpert knows a few arcane things about a lot of stuff, the sum of which doesn't amount to actual expertise in anything. This column will be devoted to tips that I have gleaned over the years.

Let's start with the bugaboo of many novice Apple III owners, that strange thing called SOS.DRIVER on your boot (startup) disks. The biggest bug among those boos is the printer driver. The Apple III is very flexible in what kind of printer you can hook up to your computer. Baby Blue and Tandy limit all but the expert to Epson-type parallel printers. A Macintosh is assumed to have either an ImageWriter or a LaserWriter printer. The Apple III has no such restrictions, and a lot of people have difficulty with that kind of ambiguity. Especially when they get new boot disks or add Catalyst or Selector III and find their printers have gone to cloud cuckoo land.

When you get a new boot disk, it very likely does not contain a driver for your particular combination of printer and printer interface. You can find that out the hard way by trying to print something and having your computer hang up. I prefer finding out beforehand what I'm up against and fixing it before I lose the Great American Novel that I forgot to save before trying to print it and hanging up the computer and losing all that deathless drivel in the machine's death throes. Maybe you would, too. Let's see if I can give you a cookbook approach to the mystery of the missing printer.

Save a Printer Driver

Let us assume you have a printer and you have used it successfully in one or more application programs. In the spirit of planning ahead, let's save a copy of that printer's driver just on the off chance that you may get another program that you want to print from. Trust me. You will get another program. You will want to print from it. You won't be able to do so with the printer driver that comes with it. If you're prepared, it will be no problem.

Let's prepare for that eventuality by having a "good" printer driver immediately on hand. You will need at least two disks—your System Utilities boot disk and a formatted blank disk. If your System Utilities boot disk can write to the printer, fine. Otherwise, you'll need a third disk—any boot disk that works with your printer. Put a label on the formatted blank disk that reads "My Printer Driver" and date it.

1. Boot System Utilities, select SCP (the System Configuration Program) from the main menu, and select READ A DRIVER FILE from the SCP menu.

2. Remove System Utilities from the inboard drive, and insert the boot disk that knows about your printer. If that's System Utilities, skip this.

3. Accept the SCP default to read a driver file from .D1/SOS.DRIVER. When the driver file has been read in, escape to the SCP menu.

4. From the SCP menu, select DELETE A DRIVER. Delete everything but the .PRINTER driver. When only .PRINTER is left, escape to the SCP menu.

5. Remove the boot disk from the inboard drive and insert the blank disk.

6. Select GENERATE NEW SYSTEM from the SCP menu. After verifying the system configuration, SCP warns that you don't have a .CONSOLE driver. That's OK, since we're not trying for a full SOS.DRIVER here.

7. SCP offers .D2/SOS.DRIVER as the default destination for the new driver file. Replace that by typing ".D1/MYPRINTER.DRIVER" and pressing RETURN. Your printer driver will be placed on the previously blank disk.

8. Remove your "printer driver" disk, put the System Utilities boot disk back in the inboard drive, and quit from the SCP menu.

You are now prepared for the certain eventuality of running across some boot disk from which you cannot print. You may already have some of those. What happens when the "no print" situation occurs? Read on.

Adding Your Printer Driver

When you find a boot disk from which you cannot print, the odds are that the boot disk's SOS.DRIVER file does not contain a .PRINTER driver for your particular setup. Screwy printing from III Easy Pieces is another topic that I'll take up at a later date. Let's stick to printer drivers.

The smart thing to do with any new boot (startup) disk is to put your own printer driver in the SOS.DRIVER file before you do anything else. I do that as a matter of course because I'm certain no disk (except those I created myself) will have a driver for a Qume Sprint 5/45 hooked up to an Apple II Super Serial Card in Slot 1. If you have any of my stuff, you have already run into the problem. My boot disks are configured for my machine, and I fair promise that you don't have my printer setup.

However, you are prepared for this eventuality, yes? Adding your printer driver is like what you went through to save your special printer driver in the last section. You will need three disks—your System Utilities boot disk, the "unprintable" boot disk, and your "My Printer Driver" disk.

1. Boot System Utilities, select SCP (the System Configuration Program) from the main menu, and select READ A DRIVER FILE from the SCP menu.

2. Remove System Utilities from the inboard drive and insert the boot disk

3. Accept the SCP default to read a driver file from .D1/SOS.DRIVER. When the driver file has been read in, escape to the SCP menu.

4. From the SCP menu, select DELETE A DRIVER. Delete everything that looks like a printer driver. Most often that will be a single PRINTER entry, but you might see PARALLEL, QUME, SILENTYPE, DAISYWHEEL, any number of names for printers. When no printer driver is left, escape to the SCP menu.

5. Select GENERATE NEW SYSTEM from the SCP menu. After verifying the system, SCP offers .D2/SOS.DRIVER as the default destination

for the new driver file. Replace that by typing ".D1/SOS.DRIVER" and pressing RETURN. Yes, you DO want to replace the existing SOS.DRIVER file.

This step isn't always necessary, but I recommend it for generality. When SCP deletes one or more drivers, it does not release the memory they used, so you may not be able to add your own printer driver. This way is safe.

6. Remove the boot disk, put System Utilities in the inboard drive, and quit from the SCP menu to the main menu.

7. Select SCP, and select READ A DRIVER FILE from the SCP menu.

8. Remove System Utilities from the inboard drive and insert the boot disk.

9. Accept the SCP default to read a driver file from .D1/SOS.DRIVER. When the driver file has been read in, escape to the SCP menu.

10. Remove the boot disk from the inboard drive and insert your "My Printer Driver" disk.

11. Select READ A DRIVER FILE from the SCP menu. When asked, replace the default ".D1/SOS.DRIVER" by typing ".D1/MYPRINTER.DRIVER" and pressing RETURN. When your printer driver has been read in, escape to the SCP menu.

12. Remove the "My Printer Driver" disk from the inboard drive and replace it with the new boot disk.

13. Select GENERATE NEW SYSTEM from the SCP menu. After verifying the system, SCP offers .D2/SOS.DRIVER as the default destination for the new driver file. Replace that by typing ".D1/SOS.DRIVER" and pressing RETURN. Yes, you DO want to replace the existing SOS.DRIVER file.

14. Remove your boot disk, put the System Utilities boot disk back in the inboard drive, and quit from the SCP menu.

You're almost done. The process is really easier to do than to describe in excruciating detail. The final step is to check your work. Remove System Utilities from the inboard drive and replace it with the new boot disk. Press CONTROL and RESET to boot the program. If you did good, you'll be able to print.

Dr. Bloom writes "Inpertise" for the TAU Journal. Occasionally, some of his columns, minus the specific TAU member comments, will be reprinted in the WAP Journal.

Allan M. Bloom, PhD, CDP
Institutional Research, VA Tech
Blacksburg, Va. 24061
(703)961-7921

2303 San Marcos Street
Blacksburg, Va. 24060
(703) 951-2025

CIS: 76656,1514
BITNET: IRBLOOM at VTVMI

Game review

Sargon IV

by Paul Moore

An Assessment from a Tournament Chess Player's Perspective

Sargon IV is the strongest chess program I have played against on a microcomputer. While that is a relative judgement, you should be advised that I am a relatively strong tournament chess player (in the upper half of the U.S. Chess Federation's "Expert" rating class); and I base my assessment on the chess-for-blood approach that tournament players take toward interloping computer chess programs. If you're interested in Sargon IV's custom chess piece editor, or its 3-D graphics, or its various windows, please read no farther; my intent is only to discuss my impressions of how well and effectively it moves its pieces around the chess board.

I've played against the Macintosh version of Sargon IV many times and have come to respect it a great deal. There is an old maxim in chess that used to epitomize play against computers: "When you don't know what to do, wait for your opponent to get an idea—it's sure to be bad." This is sad but very, very true advice in chess; and even at the upper tournament levels, players are much more likely to spot and punish an opponent's small error than to think up their own original and overpowering ideas. As a rule of thumb, against chess programs you just had to wait for the program to make an outrageously weakening move. This approach doesn't work very well against Sargon IV, however. The program is now able to play "nothing" moves very well: faced with no immediate active moves to make, the program now knows that it's a good idea to make moves which strengthen its own position. In other words, if Sargon IV can't see anything immediate to do, it tends to move a piece to a strong position, in the hope that somewhere down the line it will be able to do something good with it. This is excellent chess strategy, and I urge you to do the same. The bottom line is that you used to be able to wait for the computer to make a "computer move" and then bash its brains in, but now you can't. In fact, odds are you will make a "human move" that hurts you before Sargon missteps.

The bottom line is that you used to be able to wait for the computer to make a "computer move" and then bash its brains in, but now you can't. In fact, odds are you will make a "human move" that hurts you before Sargon missteps.

Another approach that used to work but isn't particularly effective against Sargon IV is trying to win the game out of the opening. Many of the initial common sequences of moves in chess have been played over and studied thoroughly, and there is a large body of knowledge about which plans and piece deployments are better than others. It used to be that you could just wait a few moves until the computer ran out of its built-in "book" of chess opening knowledge—once it was on its own, it was likely to make a mistake quickly, because it didn't have a clue why it had made the moves its opening book instructed it to and it wasn't apparent from the position it arrived at what it should be done next. Sargon IV's opening book is much larger than, say, Sargon III's, and the machine now has enough in-depth knowledge to arrive at a position where it's much more apparent what it should be doing. I can still get good positions against Sargon IV when I play my favorite openings, but I often get into hot water when I play openings that I know less well. I don't think that a casual player is likely to outbook the program.

Still another anti-computer strategy was to take advantage of the program's "horizon effect," that is, the program's total inability to see things beyond the several moves ahead it can directly calculate. Computer chess programs thus would take risks humans would never consider taking, simply because the computer couldn't see an immediate reason why it shouldn't gobble a tasty pawn or piece. This limitation was so marked that several years ago I published a short article in the WAP Journal about how you could take advantage of the Apple II version of Sargon III to achieve a "forced win" over the program by feeding it pawns its programming was simply unable to refuse because it couldn't see far enough ahead to perceive what to a human would be an insane danger. This doesn't work against Sargon IV, whose program on the Mac is strong enough and fast enough that it can now calculate much further ahead, so the "horizon effect" that does come into play typically is the one that limits your own ability to see into the future.

I think Sargon IV is a formidable chess opponent and dread the thought of a Sargon V some day.

Our far-flinging corespondent

Mac Telecommunicating

by Lou Pastura

Rumors, Rumors, Rumors

The phone lines are buzzing recently and the ASCII is flying as Macophiles everywhere debate the reason(s) behind and the impact of the senior personnel shakeup at Apple. Rumors also abound in response to Apple's recently announced price reductions. Are these price cuts a harbinger of soon-to-be released models? The IIxi is just around the corner and discussions of a low cost color Mac abound. A leaked code names are popping up faster than bugs in a new version of Mac system software. The longer warranty rumor continues to flourish, hopefully with some basis in fact.

Another topic of substantial discussion has been PageMaker 4.0. Comments on the beta version have been almost unanimously favorable. Should you jump right in and try the latest and the greatest? Only if you desperately need the new features RIGHT NOW. Remember, you can always spot the pioneers–they're the ones with the arrows in their backs. I prefer to let others test a new release before entrusting important work to it. This little axiom applies to both hardware and software. When you're standing out there on the cutting edge it's too easy too fall off, and it's often more frustrating than it is exhilerating. Those of you braver than I, let us know what you think of the new version.

RAM Prices

Every time I suggest that prices have bottomed out and can't possibly drop any lower, a new ad in MacWeek proves me wrong. Lowest mail order price spied recently—$61 per Meg.

The Handyman Can!

The TCS Committee recently added a new Handyman Board to the TCS. This new addition is a place where Pi members can offer services to other members. These services are not limited to computer related offerings and may be free or fee based. Combining the Handyman Board with the reasonable prices for SIMMs seems a match made in heaven. I, and I'm sure others, will be happy to install additional memory in Mac II series computers for the faint of heart. I'm sure others with Plus, SE and SE/30 experience will come forward as well. I will request payment in the form of a donation, in an amount the customer deems fair, to the Washington Apple Pi. I'd like to encourage those of you with a skill or service to offer to consider a similar approach.

More Hints

The response to last month's discussion of hints prompted me to search out additional gems:

If you press the Option key while dragging an application (or a folder containing one) to the Trash, you can avoid that annoying question: "Are you absolutely, entirely, irretrievably, unremittingly, positively, totally, one hundred percent sure you want to want to throw this indispensable treasure in the Trash?" (Can you tell I just installed a new online Thesaurus?) Also, the Option-Trash trick eliminates your Mac's usual reticence regarding throwing out locked files/folders.

And for hard drive users, this quote from Bob LeVitus's Dr. Macintosh : "If you back up regularly, you will never have a disk crash. If you don't you will have a total crash-and-burn the day before that important work is due. This is an immutable Law of Nature. You are not lucky. Anyone who tells you this is a Minion of the Devil." I couldn't have said it better myself.

MacWrite II, Version 1.1

The latest version of this old friend from Claris adds a file translation capability that is a "must have" for those suffering the trials and tribulations of importing and exporting text files, thereby losing format and font information. Translations of files to, from and among all major Mac word processors are as easy as selecting a file type. MS DOS formats available as of this writing are Microsoft Word 4.0 and 5.0 and Word Perfect 4.2 and 5.0. The combination of these translators, Dayna Communication's Dos Mounter and the Apple 3.5 FDHD disk drive will almost make you forget what a pain that MS DOS box at work can be. There's also a translator for AppleWorks files.

Other features added in this latest release are a Go To Page command and an improved help stack which, according to a local Claris representative, is more "graphical" than the previous version.

An upgrade from the earlier version of MacWrite II is available free of charge to all registered owners. It includes three disks and a ten page addendum to the manual. To obtain the upgrade, call Claris, toll free, at (800)544-8554.

When you're standing out there on the cutting edge it's too easy too fall off, and it's often more frustrating than it is exhilerating.

Lou Pastura is currently working on genetic experiments designed to finally produce a true Mac clone. His work for the government is so secret that he doesn't know what he's doing. His goal in life is to become as nice as Marty Milrod.

Springtime Savings At COMPUTER AGE

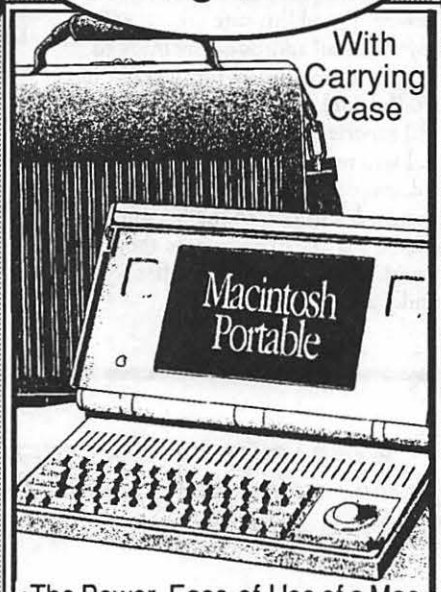
Authorized Dealer

Macintosh IIcx
40 Meg $3695
80 Meg $3995

Monitor & Keyboard Extra

- 68030 Processor
- Flexible, Modular Design
- 1 Meg RAM
- One 1.4M FDHD SuperDrive
- Quantum Hard Drive
- 2 Year Hard Drive Warranty
- Mouse • *HD Prepare* Utilities

Macintosh Portable
40 Meg $4699



With Carrying Case

- The Power, Ease-of-Use of a Mac In an Easy-To-Carry Design
- 1 Meg RAM • Crisp LCD Screen
- One 1.4M FDHD SuperDrive
- 40 Meg Conner Hard Drive
- 5 Year Hard Drive Warranty

Macintosh IIci
40 Meg $4799
80 Meg $5099

Monitor & Keyboard Extra

- 68030 25 MHz Processor
- Built-In Video Support
- 1 Meg RAM
- One 1.4M FDHD SuperDrive
- Quantum Hard Drive
- 2 Year Hard Drive Warranty
- Mouse • *HD Prepare* Utilities

Macintosh SE

Keyboard Extra

- Compact, Transportable
- Built-In Expansion Slot
- One 1.4M FDHD SuperDrive
- Mouse

30 Meg SE
1 Meg RAM, 30 Meg Seagate HD, 1 Year Hard Drive Warranty, and *HD Prepare.*
$1999

2/40 Meg SE
2 Meg RAM, 40 Meg Quantum HD, 2 Year Hard Drive Warranty, and *HD Prepare.*
$2399

Macintosh Plus

Keyboard Included

With 1 Meg RAM **$1169**
With 2 Meg RAM **$1269**

- 800K Floppy Drive
- Mouse

20 Meg Plus $1549
30 Meg Plus $1599
1 Meg RAM, Seagate Hard Drive, 1 Year Hard Drive Warranty, and *HD Prepare.*

Macintosh SE/30

Keyboard Extra

- Compact, High-Performance
- 68030 Technology
- Internal 030 Direct Slot
- One 1.4M FDHD SuperDrive
- Mouse.

40 Meg SE/30
1 Meg RAM, 40 Meg Apple HD, Apple Hard Drive Warranty.
$3049

80 Meg SE/30
1 Meg RAM, 80 Meg Quantum HD, 2 Year Hard Drive Warranty, and *HD Prepare.*
$3249

COMPUTER AGE

SILVER SPRING 588-6565 | BELTSVILLE 937-0300 | ANNANDALE 642-2310

Check Our Weekly Ad In Monday's Post For Late-Breaking Bargains!

Apple Portrait Display
w/ Apple Video Card
$1249

Apple Two Page Display
w/ Apple Video Card
$1999

Radius Two Page Display
w/ Radius Video Card
$1399

External SCSI Hard Drives

Compare and Save

Seagate
20 Meg $389
30 Meg $439
45 Meg $499
80 Meg $649
One Year Warranty

Quantum
40 Meg $559
80 Meg $769
100 Meg $859
Two Year Warranty
SCSI ID Selectable Through Software

Complete With Cables, Manual, and *HD Prepare* Utilities With True Partitioning. Ready To "Plug-In and Run".

Telephone Orders Accepted
(301) 588-6565
No Surcharge On MasterCard /Visa

Silver Spring Service Center

RAM Upgrades
SALE

Macintosh Plus, SE, Macintosh II, IIx, IIcx, or SE/30
1 To 2.5 Meg $199
1 To 4 Meg $399
1 To 8 Meg $799

Macintosh II, IIx, IIcx, or SE/30
1 To 2 Meg *ONLY* $99

Prices Include Free Installation At Our Service Center

Apple 1.4M FDHD SuperDrive Upgrade
(With ROMS)
For Mac SE $299

Apple Scanner
For Macintosh $1199

AppleCD SC
CD-ROM Drive $899

"All-Star" Macintosh Software

Pagemaker 3.02	$349
MS Excel 2.2	$239
MS Word 4.0	$239
MS Works 2.0	$199
SoftPC	$299
TypeAlign	$99.00
DiskFit 1.5	$49.00
Quicken	$34.95

Apple Printers

ImageWriter II	$429
ImageWriter LQ	$999
LaserWriter II SC With Toner	$1999
LaserWriter II NT With Toner	$3395
LaserWriter II NTX With Toner	$4599

COMPUTER AGE
LaserWriter Prices Always Include A Toner Cartridge!

Apple PC 5.25" Drive
For Macintosh $249

CAi/Sony 1.4M External Diskette Drive $299

CAi/Sony 800k External Diskette Drive $199

2400 Baud Modem
With TermWare $139

Universal Security Kit
For Apple Computers $49.95

Ergotron MacTilt
For Macintosh SE $75.95

CoStar Organizer
LaserWriter II Cart $199

COMPUTER AGE sm

"Our Eleventh Year"
Now Open In Annandale!

9433 GEORGIA AVENUE	10606 US ROUTE 1	4227 ANNANDALE ROAD	Service Center
SILVER SPRING, MD	BELTSVILLE, MD	ANNANDALE, VA	9431 GEORGIA AVENUE
588-6565	937-0300	642-2310	SILVER SPRING, MD 565-9130

Authorized Dealer
SALE ENDS 4-30-90

Download City

by Paul Schlosser

Download City

by Paul Schlosser

The following files were uploaded to the Tele-Communications System by members during the last thirty days. This listing represents only a small portion of the files available for downloading on the TCS. Call the Pi Office at 654-8060 to obtain a password.

File area 5 - GS Desk Accs

081 KEYCAPS2.2.SHK Keycaps NDA v2.2 (for System 5.0.2)
080 INIT.MASTER.SHK Activate DAs and Inits on boot
079 ORBIZONE.SHK Orbizone GS
078 DOODLE.PAD.SHK Doodle Pad NDA
077 FRANTIC.SHK Frantic NDA
076 INVERTOR.SHK Inverter NDA
075 MLI.ERRORS.SHK MLI Errors CDA
074 DESKTOP.LORD.SH Desktop Lord NDA
073 MOONPHASE.SHK MoonPhase NDA
072 MENUTIME.SHK Menu Time NDA
071 PDSFILER.SHK ProDOS Filer NDA
070 PREFIX.NDA GS/OS prefixes
069 QUICKSND1.5.SHK Quicksound V1.5 NDA
068 SCNSAVER.SHK Screensaver NDA
067 GS.CAT.SHK GS Catalog CDA
066 FONTDA.INST.SHK Font.DA.Installer V1.0
065 MENUS.SHK StrangeMenus NDA

File area 7 - GS Games

036 BOUNCE.IT.SHK Version 1.2

File area 9 - GS Misc.

043 JIGSAW.SHK Soundsmith song
042 TONIGHT.SHK Tonight's Sky
040 FORM1040GS.SHK AWGS 1989 Tax forms

File area 11 - AppleWorks

057 TAXES.89.SHK 1989 Tax forms
056 HLPSCRNMKRMACRO Fast help screen maker

File area 12 - ProSel Updates

022 COMPARE.SHK Comparison ProSel-16/Salvation
021 REVISION840.SHK Revision history: v8.2 - 8.40
020 DOC8.40.SHK ProSel-16 Docs - V8.40
019 PROSEL8.40.SHK ProSel-16, V 8.40

File area 14 - Mac Games

079 CRIBBAGE.SIT Cribbage, in color
078 SIMCITY.DC The crack wars in D.C.
077 QUIT....SIT Just try to quit. That's it!
076 SIMCITIES My own Sim Cities
075 DOFDOOM5.4.SIT Dungeon of Doom, v5.4
074 THIEVES.SIT Solitiare type game
073 IAGO.SIT Iago game

File area 15 - Mac Graphs

070 BRITAIN.SIT 02/07/90 0029K Outline map of British Isles. PICT.

File area 16 - Mac Hypercard

080 ADVENTURE.SIT Adventure stack
079 NUMENUMAKER.SIT Another, simpler custom menu maker.

File area 18 - Mac Utilities

193 TERMULATOR.SIT Nice tele-communications program, v1.7
192 RAMDISK.SIT Newest version of RAMdisk+
191 MAC.ENVY.SIT v2.1 of the cdev MacEnvy
190 DISKLIB17.SIT Disk Librarian, v1.7
189 MAC.LOAN.SIT Calculate/print amortization schedules
188 POCKET.CAL.SIT DA pocket calendar
187 ADB.PROBE.SIT cdev to check ADB devices
186 SUNDESK.SIT Use the new icl8 color icons
185 HAND.SIT Replace watch cursor with counting hand
184 INIT.3.0 Turn inits on and off
183 GIFWATCH.SIT Online Gif Viewer
182 SMP152.SIT Sound Mover Package 1.52R. Nice.
181 MAXZOOM.SIT A MUST for Apple 13" color, see browse
180 UZ102B.SIT Version 1.02 of UnZip
179 ICON.COLOR.SIT Icon Colorizer, version 1.3
178 DIALER.SIT Dial from almost any Mac program
177 AFTER.DARK.SIT Upgrade After Dark to v1.1
176 ADD.STRIP.SIT Modify text files
175 SIT.REPORT.SIT Create reports of Stuffit files
174 FILEVISION.SIT Filevision 1.0, shareware
173 HAYES.NOTE.TXT Notes on Hayes Dev Conference
172 LASERDUMP.SIT Screen dump for Laserwriter/Deskwriter
171 FILELIST.SIT Disk Catalog Application (Version 1.2)
170 FRONT.CNTR.SIT INIT-Centers dialog boxes around cursor
169 UNDERDOG.SIT Sound file
168 HEYWILMA.SIT Sound file
167 CANTDOTHAT.SIT Sound file
166 YOU.NUT.SIT Sound file
165 GKEEPER101.SIT GateKeeper v1.01
164 MOREFKEYS.SIT Some extra function keys
163 FKEYMGR.3.0.SIT Function Key Manager
162 DISINFECT16.SIT Disinfectant version 1.6
161 MC.SINK.SIT McSink version 7.0
160 JETSONS.SIT Sounds from the Jetsons tv show
159 SUPERPLAY.SIT Sound player application
158 MIC.PHONE.SIT Notes on v3.0 of MicroPhone
157 ROCKY.BULL.SIT Sounds from Rocky/Bullwinkle
156 EZSHARE.SIT Easy Share
155 FASTFORM3.0.SIT Fast Formatter, v3.0

File area 22 - Hyper/Tutor * Stacks

012 XCMDS.SRC.SHK Xcmds source code from RWP

WAP III SIG PD Library

by David Ottalini

When your III's hardware or software gets a little sick, it can be one of the most frustrating experiences you'll ever have. Most of the time you really don't know what's wrong. It just doesn't work, or there's information you just can't access. And even if you did have an idea of what was wrong, where would you go to get help?

The reality of owning an orphan is that your options are relatively limited. Sun Remarketing can always come to the rescue if need be. But that can be expensive. So the alternative is to try and fix it yourself (perhaps with a little help from your fellow III SIG members).

Having been frustrated myself more times than I care to count, I've put together a series of disks for our PD that can at least provide some help if you have a hardware or software problem. No guarantees of course, but at least they are something you can go to to try and provide some clues about what can be done.

Our first PD offering this month is disk 1088, "Repairing Your III." Its a double-sided disk full of information related to problems experienced by others and suggestions about how to fix them. It's not really a tutorial per se, just a collection of problems people have experienced over the past few years. Much of the information comes from the III section of CompuServe or from Ed Gooding's IIIs Company BBS.

Disk 1089 is called Brain Surgeon. It's a Backup III repair program which is "not for the faint of heart." Please read the documentation file carefully before using this program. Disk 1090 is called DiskMap. Written by Rick Sidwell, this program is a hard disk directory fixer. Complete documentation included.

Disk 1091 has Diskcheck on side 1 and Prohealth on Side 2. Diskcheck is useful for 2 primary types of situations: 1) Directory damage or 2) Using a block editor on a disk. It will let you know what kind of damage exists to the directory and attempt to fix it if you wish. Prohealth only supports Profiles and will check it for general healthiness.

Our final offering this month is disk 1092. "Vindicator" is a RAM memory check program and will work on IIIs with up to 512K. If you think you are having a RAM problem, run this program all night for the best results.

Next month, we'll have more programs related to helping you fix software on your III, including some block editor programs, another diagnostics disk and a dissassembler program.

Oh yes. We're also putting together a cookbook disk, so any contributions welcome!

A fair number of people are advertising in the Journal nowadays, and more are showing up each month.

You will help them, and you will help us, if you let them know that you have seen their ads in the Journal. If you think they could be improved, tell them that too. Feedback is what it is all about, and it is almost always appreciated.

On the other hand, if you feel like throwing bricks through their windows, please don't wrap them in this issue.

Mac Disketeria

by Dave Weikert

New and Recent Disks

We have four new disks this month and have revised the Mac II disk series. The four new disks are Misc. Utilities, tested and annotated by Chuck Sicard. The Mac II series was revised to eliminate programs that didn't work with current versions of Apples' System, Finder and MultiFinder and to update earlier versions of programs with newer versions. The series was also reorganized to group like programs together.

Recent disks include Anti-Virus Utilities (Mac Disks #1.01B through #1.03B), the initial disks of the INITs/cdevs Series (Mac Disks #9.01 through #9.05), the second disk of the Miscellaneous Series (Mac Disk #10.02 – Tax Templates), a Telecommunications disk featuring WAP's own TCS (Mac Disk #13.09), Programmer/Hacker Series (Mac Disks #14.02 and #14.03), Misc. Utilities (Mac Disks #15.01A through #15.07A, only the last of which has updates to programs previously in our collection) and the three HyperCard StackWare (Mac Disks #19.30 through #19.32).

Miscellaneous. Series

Paul Koskos completed his tax templates for Apple II AppleWorks; he also produced a version that runs under MS Works on the Macintosh. The template includes Federal Form 1040 with Schedules A, B, C, D, E, SE and Form 6251 and MD Form 502 for residents. I also converted the his spreadsheet to SYLK, Excel 1.5 and Excel 2.2 formats and included all these and the original MS Works version on Disk #10.02 which was introduced last month.

Misc. Utilities Series

Chuck Sicard has been busy sorting through and testing nine disks of candidate Miscellaneous Utilities programs. The best of these programs have been culled to fit on four disks; they are now available as Mac Disks #15.08 through #15.11. These programs perform a wide varity of useful or amusing functions. Look over the descriptions following to see which ones you may want to add to your software collection.

Mac II Series

Rick Chapman, our original Mac II librarian, has other pressing commitments and cannot continue. Rick has been ably performing the review, assembly and annotation of the Mac II Series since the inception of the Mac II in 1987. We are going to miss his efforts and sometimes whimsical commentary. Thanks, Rick; we are grateful for your efforts and wish you well in your commercial endevors.

To set the stage for a transition to a new librarian, I reviewed the current series, removed those programs that were redundent or didn't work and replaced older versions of programs with more recent ones. I also reorganized the series to group like programs and compressed some graphics and source code with Stuffit; the result is now eleven disks instead of fourteen. The new series includes Mac Disks #20.01A through #20.11A.

Revised programs include Giffer v1.06 and Vision Lab Demo v1.0d12 (#20.04A), !DeskPict v1.1 and Switch A Roo.FKey v1.4 (#20.07A), Image v1.26 (#20.08A), Image Source v1.25 (#20.09A) and Klutz v1.0 (also on DAs #2.05) and SSSwitcher v2.4 (#20.10A).

New programs include Mandelbrot 4.7 (#20.03A), StartupScreen.Garfield and StartupScreen.Unicorn (#20.06A), Screener (cdev) (#20.10A) and BIG Chime (#20.11A).

StackWare & Externals Help

David Condit, our HyperCard librarian, is still looking for help. He has over 50 disks with stacks and XCMDs/XFNCs needing evaluation (and annotation if they are good enough to be included in the Disketeria). Give David a call at (703) 349-8752 if you can help. There are still a number of volunteers who have received stacks for evaluation and annotation and have not returned them. You know who you are so give David a call and let him know when you will have them done.

Cartridge Barter

Most of the programs in our Mac Disketeria are archived on five inch 20 Megabyte Bernoulli cartridges or on 45 Megabyte SyQuest cartridges. This includes material already issued as well as downloads waiting to be tested, annotated and assembled onto disks. Because of the expense, the club has been able to purchase only a limited number of these cartridges. I previously requested donations or long term loans of these cartridges and have had no response thus far. However, one member was willing to barter cartridges in exchange for copies of disks in the library. The deal we worked out was a one for two exchange. We received six cartridges, returned four of them filled with copies of all the library disks and kept the remaining two. We will offer the same two for one deal to anybody else who is interested. Call me at (301) 948-9646 and leave a message. The Bernoulli cartridges may be from IOMEGA, Mountain Computer or Bering; the SyQuest cartridges may be from PLI, CMS, Ehman, MassMicro, LaCie or a number of other vendors.

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. You may have noted the trend in the past year of a much larger number of Demo and crippled programs instead of the historical shareware that can be used without limit. This is the response that many software authors are making to the non-receipt of shareware fees.

Disk 15.08A — MU 8 MISC. UTILITIES

Address Book 1.9.9 *f:* **Address Book 1.9.9**: By Jim Leitch. This is a phone list and dialer which permits viewing

of 66 names (length limited to 40 characters) in three columns per page. Select name and double click to open record and chose one of three telephone numbers to dial automatically. Several pages of help and is MultiFinder compatible. Files can be exported. **Addr_list Demo** is a sample address list. ***Shareware – $10.***

AppleDrawer (v4.1.1) *f:* **Drawer:** By Günther Blaschek of Austria. This application can be opened only if the DA **Draw** is installed. This powerful graphic tool functions like most Mac drawing tools. Don't install before reading **V4.1.1Read me FIRST!** (MacWrite format) or you may corrupt your system if Vaccine is present. **V4.1.1 Documentation** includes essential guidance in MacWrite format. **Draw Templates** *f* has 15 sample templates. ***Shareware – $30.***

Bandleader™ 1.25s *f:* **Bandleader™ 1.25s** and **Bandleader™ INIT**: By Rick Frank. A scheduling program for managing a band for up to 75 gigs. It keeps records of dates, times and locations of gigs, the personnel, their pay, charts of locations and other useful information. Help menu included. Needs 1024k of memory. ***Shareware (75 gigs only) – $25; full featured version for $59.95.***

Biorhythm II (v 4.1): By David A Bailey. Chart your emotional, mental, and physical well being. You can chart two persons' birth dates and compare patterns for a given 30 days. Other statistics like number of days since birth date and day of the week for the birthday are provided. ***Shareware – $15.***

CClock *f* (v1.3.0): **CClock**: By Stephen W. Martin. Displays a digital clock in a window on the Mac. It can be re-sized and repositioned anywhere on the Mac Desktop and will remember where you put it every time it is run. Allows you to select a Chime to sound on the Hour and/or Half-hour and to specify up to 10 alarms which can be set between now and the year 2019. CClock DOC is the documentation in MacWrite format.

Clock v4.2 *f:* **Clock v4.2**: By Mark S. Wall. An alarm clock in the form of a clock radio. You may set alarms and select times for different cities of your choice. If you have Macintalk in the System Folder then you will hear "radio" announcements. **Clock v4.2 Read Me** is the documentation in application format, just double click to run it.

Delay Calc. 1.5 *f:* **DelayCalc™** (v1.5): By DH Productions (Don Harriss). A small multi-finder application. Entering the beats per minute (tempo) of your song or sequence will give you a read out, in milliseconds, of the delay time for half, quarter, eighth, and sixteenth notes, including triplets. This allows you to set up your pre-delay, digital delay or echo box to sound "in time" to your sequence (always a must for gated drums etc.). **Please Read!** gives you more particulars. ***Shareware – $5.***

FlipTIFF By McCreight, Cohn and Bezan. Converts a "Motorala" image formatted as a TIFF file to an "Intel" formatted image and vise-versa. Not tested.

Disk 15.09A — MU 9 MISC. UTILITIES

DailyDeeds *f:* **DailyDeeds** (v 1.04): By Leo Wierzbowski. An application you use to track and report what you do with your time on the job. It is intended for folks who have many different tasks during their workday, and like to produce a periodic accounting of how much time is spent on each of their tasks. **How to Use DailyDeeds (MW)** gives you additional information. **Sample Timelog** is a sample document. ***Shareware – $20.***

Kaleidos Kache™ v1ß1 *f* : **Kaleidos Kache™ v1ß1**: By Edward G Harp. Kache is intended to be a basic personal and small business finance tracker. You can track checking and savings accounts and print reports on where you are spending your money, based on recurring entries, categories, or even just the checks you write. With Kache, you are not limited to one checking/savings account, or one set of recurring entries and categories. You could even track your personal and small business finances separately within the same document. **Finances**: is a sample file **Kaleidos Kache™ Docs 9/89**: is the documentation file. ***Shareware – $25.00***

Label Manager 3.0s *f:* **Label Manage 3.0s:** By Andrew Welch. Allows you to conveniently maintain a database of mailing labels. The number of labels may vary from a few to a mailing list consisting of thousands. Label Manager is flexible; it supports any printer, label "formats" which describe the size of labels and their layout on the page are user definable, labels can be printed in any font and font size, you can print one label at a time or thousands all at once, and Label Manager allows you to import data from other databases as well as exporting data to them. **Sample Labels** is a sample label format and **Label Manager Docs** describes the programs and the user definable options. ***Shareware – $15.***

MacPage1.3.1 *f:* **MacPage1.3.1**: By Chris Lyons. A program for accessing and utilizing alphanumeric radio paging terminals. For the program to be useful it must "remember" the subscribers, paging terminal telephone number and modem settings. This is accomplished by storing this data in a file called **mp.config:**, which must reside in the same folder as MacPage. **MacPage.docs.MW**: is the documentation.

MIDIScope™ 1.41 *f* : **MIDIScope™ 1.41**: By Ralph Muha; Kurzweil Music Systems. A serious data capture and analysis tool for the Macintosh. Unlike some programs which simply display the raw MIDI data, the MIDIScope offers the following unique features: (1.) A programmable filter to select incoming messages by class and channel. (2.) A real-time display of key velocities, pressure or control values with peak, average and histogram modes. (3.) A trace buffer with symbolic message display. (4.) A programmable data matcher for triggering the trace buffer. **MIDIScope.doc**: this documentation is essential; many of us will never understand with or without the documentation.

Disk 15.10A — MU 10 MISC. UTILITIES

Neutral Test Window v1.1: By Corti Systems Inc. This is a photographic utility which simplifies the task of determining exposure settings for b&w or color slides to be taken directly from the Macintosh screen. It

creates the necessary "neutral test card" on the screen so that the proper exposure can be made directly from the screen. ***Shareware – $10.00***

Pcal 2.11 *f*: **Pcal 2.11**: By Joseph F. Buchanan. A handy appointments calendar with a variety of presentation formats including day, week, month and year. **PCal docs (text-only)** is the documentation and **Sample Events** is the sample file containing user defined events; both are in text format. The MiniWriter DA referred to in the documentation is available in the DA series.

Powerhouse™ *f*: **Powerhouse™**: By Harry Guiremand. The Demo version of the X-10 Home Control Interface which requires not only this software but cable and X-10 Interface Hardware. When this product is utilized any electrical device can be programmed to be turned on or off according to a schedule set by the user. **Powerhouse™ Patch Info**: Up dated information about a fix or patch that was added.

PrintText1.0 *f*: **PrintText1.0**: By Gerald Baron. When using a Macintosh Plus with a Grappler connected to a 9 pin dot matrix printer (Panasonic 1092, emulates Epson FX 80). Therefore draft mode printing of ASCII text files, will able to use the built-in character set of the printer rather than the slower bit image graphics character set (Monaco) of the Mac+. The program was created to do that for printing multi-page documents using single sheets hand fed into the printer. **Brief** and **PrintText.Doc**:provide this information above and more. Keep **PrintText.p, PrintText.rsrc** , and **PrintText.** files in the same folder as the application.

Roman Date 4.0: By Joseph Casazza. Converts modern dates to Roman date and year. Does not do the reverse.

Sunny 2000: By Lou Moccia. Computes time of astronomical, nautical and civil sunrise and sunset for a specified latitude and longitude and specified time zone (for continental U.S. only). ***Shareware – $5.***

The Shipper Plus* *f*: **The Shipper Plus***: By L M M Productions. An automated manifest system for the United Parcel Service. This software was developed to handle UPS shipments in a precise and orderly manner. It has ten data flies named as follows: **The Shipper Plus* Help** (provides help from within the application), **10-01-1989 UPS, clientdata, CompanyData, Country, InvenShiped, InvoiceList, ProductData, Sip** and **Sample Import File.** This Demo program limited to UPS zones 2,3, and 4. ***Demoware – $79 for latest fully functional version.***

TimeKeeper *f*: **TimeKeeper**: By Larry Rosenstein. Displays a circular analog clock in a circular re-sizable and moveable window on the screen. **TimeKeeper Doc** is in text format and **TimeKeeper Preferences** is the support file.

Disk 15.11A — MU 11 MISC. UTILITIES

Today *f*: **Today**: By Patrick Kincaid. Have you ever thought it would be nice to know what interesting things happened on a date in history? When famous, or not so famous, birthdays occurred? TODAY will tell you. When the program is run, it looks at the system date, or a date you supply, then tells you what things of interest happened on that date. You can even create a file of dates important to you and be reminded of them right along with the Marquis de Sade's birthday or the first commercial radio broadcast. **TODAY.Doc**: today source *f*: includes 16 Today data documents (one for each month plus more) all which must be in the same folder as the application to run.

V3d *f*: By Jonathan Alan Hess. **V3d**: is a three dimensional viewing program. It supports Movie.BYU text and Phoenix 3D data files. V3d allows the user to specify his viewing position, point of attention, camera viewing angle and up direction. The user may also open multiple data files and display multiple views. Its rendering features include wire-frame, back-face removal, hidden surface removal, and a variety of shading options. Finally, a rendering may be copied to the clipboard as a picture for use or editing by other applications. **V3d.doc: V3d.doc.txt**: Data files *f*: includes six files for sample views

Viewer (1.04): By Glue™Viewer™. is one of three applications that comes with SuperGlue. It is the application that allows a user to open a saved image document and print or copy it to an other application even though you may not have the application which created the graphic.

XConnect *f*: By H. Wurzburg. **Xconnect**: CrossConnect is a simple program which will allow the interconnection of two terminal units or modems via the Macintosh. One terminal unit is connected to the Modem Port (Port A) and one to the Printer Port (Port B). The program allows the user to type to either port independently from the keyboard to allow setup of each terminal unit or modem, and will inter-connect the two devices. Activity of the ports is displayed on the screen. A typical application for this program in amateur radio would be to have your packet terminal unit or other digital communications terminal unit on the modem port and an auto-answer modem on the printer port. CrossConnect would then allow you call into your station on the modem and control the packet terminal via the remote terminal. **XConnect.docs**: tells you the above and more. **XConnect.log**: keep with the application.

XVT-Draw *f*: Created with the Extensible Virtual Toolkit (XVT), a product of API Ltd. **XVT-Draw**: allows C programs to be written which are 100% portable between MS-Windows and the Macintosh. XVT-Draw is an example. Both Mac and Windows versions are available directly from API, as well as on bulletin-board systems such as CompuServe. **.XVT-Draw.hlp**: is the help menu available from within the application **Read Me: XVT Q & A**:is a question and answer document which tells you what this program is all about. ***Shareware – $25.***

Disk 20.01A — Mac II 1 Graphics 1

Color Geometrics *f*: The programs in this folder all create interesting geometric patterns on the Mac II screen. You really need a color monitor to appreciate the myriad

of patterns that are generated.

Color kaleidoscope: By John Connolly. A simple kaleidoscope program that creates interesting color images; you can experiment with the settings to control the pattern but the lack of documentation makes the results chancy at best.

Color Mac Star: By Andrew Welch; updated by Mike Whittingham. An attractive diamond-like pattern of alternating colors.

Color Optical: By Andrew Welch; updated by Mike Whittingham. A repeating pattern of facets of color.

Kaleidoscope: By MacMaster Systems. A very attractive and fast kaleidoscope.

Rainbow: By Keith McGreggor, Pixel Resources Inc. A most wonderful display of continuously changing colored curved lines.

Random Art: By Ted Lowery. A simple program that can create abstract "art" on the screen; the "art" is a random scattering of colored rectangles, circles, lines and other objects.

Spectra: By Jim Stout. Wonderful blends of vibrant rainbow colors in a variety of patterned modes.

Spirograph Mac II: Draws straight line segments in continuously changing colors and orientations.

Worms: Jim Stout. Creates color worms that will crawl around on the window; works in the background under MultiFinder! This program will also run on the Mac Plus, but the worms are in full color on the Mac II.

Zoomation: By Andrew Welch. Yet another program for creating pretty patterns on your screen but run it under Finder as the desktop is not refreshed in MultiFinder.

Display/Render Display *f*: This folder contains seven demonstration images, along with two programs to display those images. These computer-generated images were created by a program called Solid Dimensions produced by Visual Information, Inc. The images are designed to show off the Mac II's graphics capabilities **Arches Image4**, **Balls**, **FineJet4**, **IceCream**, **Spheres5**, **Tubular** and **VII Tree Image** are the image files and they range from the abstract to the somewhat realistic.

Display: One of the earliest image-demonstration programs. Allows you to display any of the images in this folder.

Render Display: Shows 8 miniature panels of the same images in this folder; each panel is shown in different colors.

GrayView 1.9.8a4 *f*: **GrayView 1.9.8a4**: By David S. Fry. The latest version of GrayView, a program especially designed to convert ThunderScan™ SCAN documents to gray scale images on a Mac II. This version allows the user to manipulate the picture in several fundamental ways, sort of like a MacPaint for gray scales. Also, GrayView can be used to view and manipulate any PICT image, color or B/W. It even works with TIFF files. Documentation is included in the MacWrite format file **About GrayView**.

GrayView Converter *f*: **Grayview Converter**: By David Fry. Early Grayview documents are not 100% compatible with the most recent version of the program. This program updates old files so that they can be read by Grayview 1.16. All of the Grayview files included on this disk have already been updated. The program is documented in the **About Converter...** text file.

GrayView Documents *f*: **Kim Doughnuts**, **USC Girl** and **Welcome to Mac**.**StartupScreen** are some sample Grayview images. You may also view these with the application Image which is included elsewhere in the Mac II series of disks.

Disk 20.02A — Mac II 2

Pixel Paint Pictures

PixelPaint Documents *f*: A collection of files that may be examined by PixelPaint Viewer when decompressed to Pixel Paint format. These files are compressed in Stuffit format to save space. Move the files to another disk and use Unstuffit 1.5.1 to decompress them for viewing.

Blue Marble.sit: A view of the earth from space.

Caution.sit: Oliver tries to load a Messy DOS disk into a Mac; Patooie!!

Colored Opus.sit: That Bloom County character with the big nose.

Ferrari Mondial.sit: Rendered in traditional Ferrari red, what else.

Final Froggy.sit: The wonderfully green frog from the Pixel Paint advertisement; wouldn't Kermit (no Nerd, not the communications protocol) be proud.

Fish.sit: An underwater scene; mostly in blues and greens.

Flyover.sit: Good space shot of North America.

Goblet.sit: An artistic rendering of a wine goblet.

Maelstrom—One horse, One fish.sit: For the more contemporary artists among our audience.

Tree.sit: A stylized variant of a tree.

PixelPaint Viewer: By Keith McGreggor. A program to display pictures created by Pixel Paint, a commercially available painting program designed specifically for the Mac II.

UnStuffit 1.5.1: By Raymond Lau. Use this utility to decompress the Stuffit documents to Pixel Paint format.

Disk 20.03A — Mac II 3

Mandelbrot

JuliaSet 5.1b0 *f*: **JuliaSet**: By Ray Sanders. A fractal geometry program which draws Julia sets and pools of attraction. This program runs on the current Mac II family (x, cx and ci), directly addresses the MC68881 FPU and draws in 16 colors (greys). The source code in MPW assembler (**JuliaSet.a**, **JuliaSet.r** and **JuliaSet.make**) and text format documentation (**JuliaSet.doc**) are included. ***Shareware – $5***.

Mandelbrot 4.7 *f*: **Mandelbrot 4.7**: By Jesse Jones. This program draws two fractals: the Mandelbrot fractal and the Julia fractal. Fractals were "discovered" by the mathematician Benoit Mandelbrot. The Mandelbrot fractal (or set) is by far the most interesting fractal. The fractal itself is traditionally colored black, other points are given various colors depending on how "close" to the set they are. The best looking images lie along the border of the set. The Julia Set, unlike the Mandelbrot Set, actu-

ally consists of an infinite number of fractals. A particular Julia Set corresponds to a point in the Mandelbrot Set. If the point is in the Mandelbrot Set the Julia fractal will be a solid object. If the point is outside the Mandelbrot Set the Julia fractal will usually be nothing more than a few unconnected dots. The MacWrite format documentation is **Mandelbrot Docs**. This program needs 8 bit color for the Mac II family but will also work on a Mac Plus or SE. **bump.m, dragon.j, galaxy.j, minature.m, spike.m, spiral.m, star12.m** and **whirlpool.m** are some sample points of interest for Mandelbrot (.m) and Julia (.j) fractals. ***Shareware – $25 (or whatever).***

Mandelbrot *f:* **Mandel881, MandelSANE:** By Stephen Eubank. These programs calculate the Mandelbrot set and display it in color on the Mac II screen. The Mandelbrot set is a fractal derived from an iterative application of a simple mathematical rule. Even without understanding the math, the results are spectacular. The first version uses the Mac II's numeric co-processor (a Motorola 68881) directly while the second version accesses the co-processor through SANE (Standard Apple Numerics Environment). Not MultiFinder compatible.

MandelColor *f:* **MandelColor:** By Robert J. Woodhead. A color Mandelbrot set rendering program. It works only on the Macintosh II, and you need a color display (preferably with 8 bits of color resolution.) You'll also need at least 2 MB of memory if you want to generate full screen displays on a SuperMac or other large display. Be sure to set the monitor to 8 bits before running the program. The program is well documented in the **About MandelColor** MacWrite formatted file. **1-Basic Mandelbrot Set, 2-Mandelbrot Closeup, 3-The Bay of Mandelbrot,** and **4-Fiords (the crinkly bits)** are four sample images computed by MandelColor. ***The author requests a $10 donation to the Vision Fund for the use of this program.***

MegaBrot: By David Van Brink. Another program for drawing fractals. This one draws the Mandelbrot set. It features support for the Megagraphic's Mandelbrot Engine, a Mandelbrot generation card for the Mac II (although the card is not required). It is fast and spectacular and has a number of saved fractal points of interest. Requires 8 bit video and works across the current Mac II family (x, cx and ci).

Disk 20.04A—Mac II 4 Graphics 2

GIFConvertor Demo *f:* **GIFConvertor Demo:** This is a utility program for Macintosh computers which allows you to convert between various graphics formats, especially Compuserve's Graphics Interchange Standard or GIF for short. You may use GIFConverter Demo to view and save graphics images in GIF, MacPaint, Thunderscan, or PICT format. The program will convert a grayscale picture into a standard MacPaint picture using the Floyd and Steinberg dithering algorithm. This program works on any Mac with a 128K ROM, but is included here to enable Mac II owners to create images that are useable by other Mac owners. Images may be printed in color, even if you don't have a Mac II. **GIFConverter Doc/Write** is the documentation in MacWrite format. ***Shareware – $40 for full featured version.***

Giffer 1.06 *f:* **Giffer 1.06**: By Steve Blackstock. Giffer is a program that allows you to display and modify GIF, ThunderScan and Quantized Digiview image files on the Mac II. GIF is a general machine-independent graphics format that is popular on CompuServe. The program is easy to use and works well with MultiFinder. Editing features include contrast and brightness changes, image scaling, and individual scan line shifting (a useful feature when cleaning up ThunderScan images. Be sure to set your system to display multiple bits (16 or 256 as appropriate) before using this program (use the monitor function in the control panel). **Giffer 1.04 Docx** is the documentation for Giffer. ***Shareware – $20.***

Giffer Documents *f:* Included in this folder are 6 sample GIF image files including **DebraJ.gif, Earth.gif, KimDoughnuts.gif, Mikki2.gif, Miller.gif** and **Sondra.gif**.

Vision Lab Demo *f* (v1.0d12): **Vision Lab Demo:** By John Raymonds. A program for manipulating gray scale and bit mapped images. With it you can store gray level information from the MacVision™ digitizer, load files created with Thunder Scan™, or load pictures created in other programs. The program supports GIF™ files and color. It will convert halftoned MacPaint images to gray level images (a very neat trick!), and will halftone gray level images using a wide variety of algorithms. (Halftoning is the art of representing a gray scale picture on a non-gray scale device such as the Mac Plus or SE screen.) Included are the documentation **Vision Lab Help** and the associated file **Vision Lab Prefs.**

shared.h: New image processing routines can be added to Vision Lab through the use of resources. This text file explains how to incorporate your own routines into Vision Lab.

Easy 'C' Threshold: A resource for performing a simple threshold operation within Vision Lab. **Easy 'C' Threshold.c** is the C language source code to this example.

Invert Clut: A resource for performing a simple color inversion operation within Vision Lab. **Invert Clut.c** is the C language source code to this example.

Disk 20.05A—Mac II 5 Ray Trace Programs

This disk contains a complete image generation program for the Mac II. This program uses a technique called ray tracing to create some amazingly life-like pictures. To run the program, you must first create a data file describing the scene you want to create. This data file will include information on the objects in the scene, the background, if any, and the light sources. A calculation program is then run to create a temporary image file of the scene. Finally a second program is run that converts this temporary file into a standard Grayview file and displays it onto the screen. These disks are a must for anyone interested in computer generated art.

Ray: By Dean B. Wecker. The main

ray tracing program which converts scene description files into temporary image files. The generation of a complex image may take several hours, but this is only due to the tremendous number of calculations that need to be performed. ***Shareware – $10.***

Ray2: By Bill Bond. This program converts temporary image files into Grayview documents and displays them on the screen.

Documentation *f:* **Ray.doc:** The main documentation for Ray.

Readme: Additional documentation for Ray.

About the Mac II Version: A description of both running Ray and Ray2 on the Mac II.

Copying Policy: Description of the policy regarding the copying and distribution of these programs.

Examples *f:* **glass.dat, brick.dat,** and **island.dat** are three example scene description files.

glass.tmp is an example temporary image file created from glass.dat.

Glass and **Brick** are two sample Grayview images created from the above data files.

ray source.sit: is a compressed StuffIt file which may be decompressed with UnStuffit. It includes the following files:

Rayp, ray.h, ray.c, cal.c, hit.c, rnd.c, ext.c, int.c, tex.c, fil.c, mth.c, val.c: By Dean B. Wecker. These appear to be the files required to compile Ray in LightSpeed C.

Ray2p, Ray2.c, Ray2.R, Ray2p,rsrc, Environs.h, Environs.Lib: By Bill Bond. These appear to be the files required to compile Ray2 in LightSpeed C.

ray2.c (Amiga), display.c (Amiga): By Dean B. Wecker. These are the source files for the original Amiga version of Ray2. They are included here in order to document the original author's system. This program was rewritten by Bill Bond for the Mac II.

Disk 20.06A—Mac II 6 Graphics 3

PictDisplay for Mac II: By Jan Eugenides. This program displays both PICT data files and PICT resource files (which are used as startup screens). PICT data files are generated by such programs as Cricket Draw and GraphicsWorks. It will also convert PICT data files into startup screens. This program says it runs only on a Mac II; it does not run on a Mac IIci (and probably not on a IIx or cx either).

PICT files *f:* Files in this folder may be viewed with any application that will open PICT files (such as Image, etc.)

Color MacPaint Girl: A sample color PICT file of a famous Japanese lady.

Frog: The frog from the Pixel Paint disk in color PICT format.

Kim.PICT: A black and white PICT file of young lady named Kim.

USC Girl: A color IPIC (Image) file.

StartupScreens *f:* To use any file in this folder, rename the file "StartupScreen" (no quotes, no space), place it in your System Folder, and reboot your Macintosh.

ProdigalStart *f:* **ProdigalStart:** By Bradley Poulson. A startup screen derived from da Vinci's "The Return of the Prodigal Son." **ProdigalStart** is sized for a standard Apple monitor or the Sony 1302/1304. **ProdigalStart Documentation** tells all.

StartupScreen.Apple logo: By Rice Collins. A full color Apple logo startup screen.

StartupScreen.Bunny: A takeoff of an illustration from Alice in Wonderland; one of the ugliest bunnies you may ever see.

StartupScreen.Garfield: A fun startup screen depicting the philosophy of one of our favorite cats.

StartupScreen.Unicorn: A rending of that mystical and mythical horned horse.

Disk 20.07A—Mac II 7 Miscellaneous

Color Canfield: By Michael Casteel. A colorized version of the popular solitaire card game. A fine example of the not so old adage: Colorize software, not movies! ***Shareware – $10.***

Color Cursor: An INIT file that will change the color of the standard arrow cursor. Just place this file in your System folder and restart.

Colorfonts *f:* **Colorfonts:** By Michael Hauser, et. al., Hummingbird Software. This file contains 5 new color fonts for the Mac II, including Patriot 34, Embossed 32, Shades 31, Zebra 33 and Vice 36. Few programs handle these fonts correctly at this point and there is no apparent way of printing these fonts, but they do look nice on the screen. **Colorfonts** is MacWrite format documentation on the installation and use of color fonts.

DeskPict *f:* **!DeskPict:** By Clay Maeckel. An INIT that will put up a color background picture on a Mac II. It should work on any size monitor, any number, and any depth. **DeskPict README** is the documentation in text format.

Earthplot 3.0: By Black Swamp Software. A neat little application for plotting a map of the Earth as viewed from space. The program will actually run on any Mac, but is painfully slow on anything other than the Mac II family or SE/30. Color is used if present.

Klondike 3.6.c: By Michael Casteel. A nice solitaire game with colored cards on the Mac II. ***Shareware – $10.***

Mac II Icons *f:* **Easy Access • Macintosh™ II, General • Macintosh™ II, Keyboard • Macintosh™ II, Mouse • Macintosh™ II, System • Macintosh™ II:** A set of five customized icons for the Mac II. These icons can be installed into your System file to give it that special look. The icons are documented in the **Read Me (Teach Text)** file. ***Shareware – $1.***

MacinTalk v1.32 *f:* **MacinTalk:** By Apple Computer, Inc. The latest version MacinTalk for the Mac II family.

MaxWrite .970 *f:* **MaxWrite .970:** By Steve Kiene and Rod Magnuson. The first color word processor for the Mac II! A very nice word processor that works in full color on a Mac II. The program will print to any Apple printer and will even print in color on an ImageWriter II. **MaxWrite Info** contains the instructions for using

MaxWrite. It doesn't work on a Mac IIci and may not work on an x or cx either ***Shareware – $30.***

Round Earth Idle: By Black Swamp Software. This program puts a spinning globe up on the screen. A nice demo of both round windows and background processing under MultiFinder.

StarMapper Mac II: By Will and Erv Klein. A star mapping program with a total library of over 1500 stars. You enter the coordinates of the sky that you want to view, your view angle, and the maximum star brightness into a text window. The stars are then displayed on the screen. The interface is not very Mac-like but the program will be of interest to astronomy buffs.

Switch-A-Roo.Fkey *f:* **Switch-A-Roo.Fkey:** By Bill Steinberg. An FKey that will quickly switch all your video monitors from one preset mode to another preset mode. A mode, in this case, is whether the monitor is displaying color or monochrome, and how many colors or grays are displayed. Switch–A–Roo works much faster than the Control Panel and so is handy for moving from one mode to another. This version works with all Mac IIs up to (but not including) the IIci. **Switch-A-Roo.Doc.Wrt** is the MacWrite format documentation.

Tears *f:* **Tears (Mac II):** By Steve Morein. A simple little program that runs in the background under MultiFinder. My only complaint is that the program should have an option to also play that old George Harrison favorite, "While my Mac Gently Weeps" in the background. **readme** is the text format documentation.

Disk 20.08A—Mac II 8 Image 1.26 Program

Image 1.26: By Wayne Rasband. Image can be used for acquiring, enhancing, analyzing, editing, and color coding gray-scale images on the Macintosh II. When complete, it will perform standard image analysis techniques, including densitometry and morphometry. It can currently do histograms, contrast enhancement, density profiling and digital filtering. It also provides many MacPaint-like editing functions, including the ability to draw lines, rectangles, ovals and text. Objects may be drawn either outlined or filled, in any of 256 colors or shades of gray. This application requires at least 2 megabytes of memory and an 8-bit video card. By way of warning, the program will require up to 4 megabytes when using the animation procedure. If you want to try out the animation examples, you must first increase the memory allocation of Image. To change the memory allocation, go to the Finder, select the application and choose Get Info. The memory allocation can then be set by entering the new allocation within the Get Info dialog box. Documentation for Image is included in the files **About Image(MacWrite)** and **ImageStack 1.25**, a HyperCard document.

Bird Movie *f:* Seven animation frames of a bird in flight. Open these files in order from within Image to view the animated sequence. Be sure to increase the memory allocation of Image prior to trying to open all of these files simultaneously.

Gel with Plots: An example Image file.

Palettes *f:* Eleven different gray scale and color palettes for use with Image. Includes: **4 Grays, 8 Grays, 32 Grays, 12 Colors, 32 Colors, blue-yellow, fire, ice, log down, Log up** and **UCLA/NIH.**

Disk 20.09A—Mac II 9 Image 1.25 Source

Image 1.25 Source *f:* **Analysis.p, Camera.p, Edit.p, Ellipse.p, File1.p, File2.p, Functions.p, Globals.p, Graphics.p, Image.p, Image.proj, Image.rsrc, Init.p, LeastSquares.p, User.p** and **Utilities.p:** By Wayne Rasband. Complete Pascal source code and the resources associated with Image 1.25; this is a slightly earlier version than the application on the previous disk.

Molecule Movie.sit: Eighteen animation frames of a molecule rotating in space. Open these files in order from within Image to view the animated sequence. Be sure to increase the memory allocation of Image prior to trying to open all of these files simultaneously.

Ceretec Sagittals and **MRI Scan** are two Image files as examples.

Disk 20.10A—MacII 10 Utilities

Color SnapShot™: By Mark Whittingham. A demo of an FKey which allows you to dump the Mac II screen to a file or the clipboard. This can replace the Command-Shift-3 FKey that comes with the Mac II. It supports multiple file types, large screens and color. This version is crippled and will only work 20 times. ***Shareware – $16 for fully functional version.***

Color: By Bill & Steve Tuttle. A stack containing an External Command (XCMD) for HyperCard. XCMDs are extensions to HyperCard's built-in programming language. **Color** will allow you to control the foreground and background colors of HyperCard. Though **Color** doesn't give you full control of the color capabilities of the Macintosh II, it does give you the ability to use color until HyperCard is upgraded to support it. There are limits to what you can do, but then you didn't have any color in HyperCard before.

Colorize v2: By Neal Trautman. The latest version of an application to colorize other applications. This program is not Multi-Finder compatible. ***Shareware - $5.***

Klutz *f:* **Klutz:** By Bill Steinberg. Version 0.3 of a desk accessory for modifying the Mac II's color lookup table (CLUT). Most of the video cards for the Mac II are capable of displaying 256 colors (or shades of gray) out of a possible 17 zillion colors (well let's just say it's a very large number). The CLUT determines the mapping between pixel values (which can range from 0 to 255) and the color that is actually displayed. Klutz allows you to modify the CLUT. It displays a 16x16 grid of colors, each representing an entry in the CLUT. Just double click on the individual cell you want to change and the standard color picker will appear. Klutz also allows you to load and save CLUT files. A sample continuous gray scale CLUT, **Gray CLUT**, is provided.

Kolor *f:* **Kolor:** By Russ Wetmore. Kolor is a program that allows you to change the default colors associated with buttons, check boxes, scroll bars,

windows, menus, and text hi-lighting. Kolor works in conjunction with the Control Panel, adding its own icon to the Control Panel list. To use Kolor, just drag it into the System Folder, and then access the Control Panel. Refer to the MacWrite file **Kolor instructions** for more information.

Mac2Vax *f:* **Mac2VAX:** By Lou Pecora. A program for converting Absoft FORTRAN programs into VAX-compatible FORTRAN, and vice versa. The program automatically performs several conversions to aid in porting software between the two machines. **MactoVAX.doc** is the MacWrite documentation for using Mac2VAX.

ForCharCount: By Lou Pecora. A utility that counts the number of characters in source code lines and issues warnings in a warning file and (optionally) on screen when the column number exceeds 72 for regular source code statements or 80 for comments. ForCharCount properly treats TABS embedded in the code as being placed every 8 spaces which is the usual standard.

Absoft Fortran Notes: Notes of some bugs and quirks in Absoft Fortran 2.3 (and earlier versions) that you should be aware of.

READ ME FIRST (mactovax): A general description of the contents of this folder.

MacIIBugs *f:* **MacIIBug1MB, MacIIBug2MB, MacIIBug5MB, MacIIBug8MB:** By Apple. Four different versions of MacsBug for the Mac II. MacsBug is the standard Macintosh debugger. These files come with no documentation and are really only useful to programmers.

PictPAL: By Steven Blackstock. A small utility for converting PICT files into Pixel Paint files.

Screen Dump][: By Mike Whittingham. All Macs have built-in function keys for dumping the screen to the printer or a disk file (Command-3 and -4). Unfortunately these keys don't work on large screen monitors, or on the Mac II in color mode. They also rotate the screen image sideways on the Mac II. This program fixes all of that by generating three separate FKeys for dumping large Mac screens (including the Mac II) to either printer or disk. The first FKey, Printer-Dump, will dump any Mac large screen to an ImageWriter or LaserWriter. The second FKey, Disk-Dump, will dump the screen to a MacPaint disk file. The last FKey, Color-Dump, is specific to the Mac II and will dump a color image into a GIF disk file. ***Shareware – $12.***

Screener and **SCREENER:** By Frank Price. A utility that will reduce the size of the standard Mac II screen to the size of a Mac Plus screen. This may be of use when running some programs that were designed for the old screen size and whose authors did not follow the Apple guidelines. Two versions are provided; **Screener** is accessible from the Control Panel after it is first placed in the System Folder and **SCREENER** is an application.

SSSwitcher© v2.2 *f:* **SSSwitcher©:** By Bob Andris. The latest version of SSSwitcher, a "Startup" application that will randomly switch StartUpScreens, BackDropScreens, StartupSounds, BeepSounds, DiskInsertSounds, DiskEjectSounds, BadDiskSounds, DiskRequestSounds, RestartSounds, ShutDownSounds, KeyClickSounds, ReturnKeySounds and SpaceKeySounds in any combination you desire. Also compatible with Mac Plus, SE and SE/30. Documentation is included in the MacWrite file **SSSwitcher©.docs**.

SubLaunch *f:* For historical reasons, MacWrite and MacPaint files are standard ways of transferring text and picture data on the Macintosh. Since early versions of these programs initially didn't work on the Mac II, many Mac II users switched to Microsoft Word and SuperPaint. One thing that has always been troublesome about using Word is that you can no longer open a MacWrite file by double clicking on it. The 3 files contained in this folder will automatically open either Word or SuperPaint when a MacWrite, MacPaint or FullPaint file is double clicked.

MacWrite (?), MacPaint (?), and FullPaint (?): By Randy Ubillos. These three programs look like the real things to the operating system but will actually open Microsoft Word or SuperPaint with the appropriate file. Be sure to read the documentation included in the MacWrite file **SubLaunch.mwrt.** These programs require you to enter the location of Word and SuperPaint on your disk using ResEdit. ***Shareware – $10.***

Disk 20.11A—MacII 11 Sounds

Big Chime: Install this into your System as a beep sound with Sound Mover only if you want to risk your sanity; the length of the sound will drive you crazy if you make many mistakes.

Sound Mover 1.2a *f:* This folder contains a set of four programs for managing sounds. These sounds can be used on the Mac II, within HyperCard and on other Macs using the routines in this folder. ***Shareware – $10.***

Sound Mover: By Riccardo Ettore. A sound resource mover similar in function to the Font/DA mover. This program will handle just about any kind of sound (snd resource), it will play sounds for you, allow you to edit a sound and will convert between Mac II and HyperCard sound resources.

IBeep2: By Riccardo Ettore. A small program that when placed in the system folder of a Mac Plus or SE will allow the user to pick an alternative to the standard Macintosh beep.

Sound->snd: By Riccardo Ettore. This program converts sounds digitized at any of four sampling rates by the MacNifty sound digitizer into standard sound resources (type "snd").

StartupSndInit: By Riccardo Ettore. This INIT file will automatically play one or more sounds at startup.

Sound Mover User Guide 1.2: By Riccardo Ettore. Complete documentation for all four of the sound programs.

Sound->Beep *f:* **SoundOff][™:** By Frederick Computer and Electronics Corp. An INIT file for your Mac II that will play sound resources when the system starts up. The resources in the Sound *f* on this disk are compatible with this program. Brief documentation is provided in the **Sound Docs** file. ***Shareware – $5.***

Sound–>Beep™: By Frederick Computer and Electronics Corp. A program which converts old SoundCap files into sound resources. (SoundCap files are created using a SoundCap digitizer.) Brief documentation is in the **Sound Docs** file. ***Shareware–$10.***

Sound Docs: Brief documentation for the Sound–>Beep™ and SoundOff][™ programs.

Sounds 1 *f:* **Animal** and **Mineral:** Thirty sound resources are included in these two files. These sounds can be used to replace the standard beep sound on a Mac II or they can be used by HyperCard in conjunction with the play command. In either case, just use ResEdit to copy the 'snd' resource into either the System file or HyperCard. The sounds are divided into the two files Animal and Mineral (we really need some vegetable sounds to complete our collection). The included sounds are:

Baby Lamb	Boing	Bowl
Car	Chord	Clang
Click	Clock	Dave
Elephant	Fast hey!	Flute
Gunshot	Harpsichord	Hey!
Hi There	Honk	Lamb
MeepMeep	Monkey	Ray
Sax	Sax Low	Sea Lion
Shatter	Silence	Spam
Spin Cylinder	Twilight Zone	Uuh.

Sounds 2 *f:* More beep sounds for the Mac II. These include **applause, beethoven, firebird, hallelujah, hey, ni, noces, ping,** and **startling chord.** Use ResEdit or another resource copier to place these files into your system file. Then use the control panel to select the desired sound.

Index to Advertisers

Classified advertisements can be placed by calling or mailing copy to the business office of Washington Apple Pi, Ltd., 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814. Ads must be received by the 25th of each month for inclusion in the next issue. Any ads postmarked after that time will be included at the discretion of the editor. Cost is $2.00 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.

CLASSIFIED

FOR SALE

Mac IIcx Desktop System: $MB RAM, 80MB internal drive, Radius two-page monitor, mouse and DataDesk keyboard. Never driven out of the garage. $5,600 firm. Call Frank at (703) 620–8886

FOR SALE

Mountain Hardware Supertalker Speech Digitizer Model MHP-X006 for Apple][+ and][e. $75.00. Call Rich Thayer (206) 630-6081

FOR SALE

Hewlett Packard DESKJET PLUS PROFESSIONAL PRINTER; brand new, original carton. $585. Call Sid (301) 593-5270.

FOR SALE

Complete][e System; enhanced ROMS/ Super Hi-Res, Ramworks with 512K, TimeMaster II H.O. Clock Card, Apple Monitor][e (green), Promethius 1200a (1200 baud internal modem), Duodisk with Controller (dual 143K 5.25"), Apple Mouse][e, Apple Keypad][e, Joystick, Grappler with 64K printer buffer, Epson RX-80 printer. Asking $1000 but will consider any offer, will throw in an Apple 3.5" 800K drive for $50 if system bought.

Miscellaneous Parts;
Apple Super Serial Board $30, Mono (green) monitor $30, Echo][e Synthesizer $40, Miscellaneous Games

Everything comes with original manuals and packing upon request. Phone (703) 450-4233 to make offer or for John Gersic (WAP #2881)

FOR SALE

Apple][GS, 1.25 meg memory; two 5.25" and one 3.5" disk drives, color monitor; ImageWriter II printer; mouse, Software. $2000/obo. (301) 997-0940.

FOR SALE

For Mac II, Mass Microsystems Color Space III &Color Space IIFX Boards. $3750.00 for both. Also available: Sony CPD 1302 monitor. Call Dan 347-7817 (w) or 845-7571 (h).

FOR SALE

Apple][e computer, Apple monochrome monitor, 5.25" disk drive, 192K RAM and mouse. Excellent home or educator starter system. Other hardware and software available. Call Bernie, days (202) 639-3508, or eves (301) 951-5294.

FOR SALE

SuperMac XP40 external HD for $350. Bundled software ($294 worth at MacConnection prices; including SuperSpool 5.0, SuperLaserSpool 2.0, DiskFit 1.5, and Sentinel 2.0.) Original box and manuals. GCC FX80 external HD for $550. Quantum mechanism. (Includes Manager, Backup, Security, and Spooler software.) Original box and manuals.

Call Dennis (301) 229-3466 evenings before 10:30 p.m.

FOR SALE

ImageWriter II. Excellent condition $300.00. Call 323-6098.

FOR SALE

ImageWriter II. Excellent condition with original box and manual. Also, an 8-pin mini-DIN cable, an assortment of ribbons, two large boxes of paper, and box of 5000 pin-fed labels will be included. All for $290. Call Ken or Tracy at 460-6218

FOR SALE

Apple ///, 256K, Serial Card, Amdek amber monitor, and lots of software. Best offer. Call Bob Johnson, (703) 938-8417.

FOR SALE

Enhanced 128K APPLE][e with 2 drives, Superserial card, monitor. $500. Phone (301) 598-6095.

SERVICES OFFERED

Word Processing to camera-ready copy. Resumes, proposals, reports, questionnaires, brochures, etc. Laser output. Can take projects via modem. Located in Northwest D.C. Call (202) 234-1771.

SERVICES OFFERED

The Printed Page
3¢ FOR ALL COPIES OVER 100. 500 Business Cards, only $21.50. 20% discounts on Business Package (letterhead, envelopes, business cards). 6120 Arlington Boulevard, (By the Montgomery Ward, Seven Corners) We pick up & deliver **FREE**. Ph 237-5581.

SERVICES OFFERED

Apple][consultant. Specializing in educational applications. Available for lessons/teacher-training. Phil Shapiro (202) 686-5465.

HYPERCARD HELP WANTED

Customized Hypercard rolodex. Call Ed Wilson, 9 am - 6 pm, weekdays.

HELP WANTED

Individual with Desktop Publishing knowledge needed to assist in publication of bi-monthly tabloid size newspaper. Firm located in Silver Spring, MD. This is a Part Time position, 24 hours per week, 2 weeks per month. Some flexibility possible for right person. Call 598-1090, Monday-Friday 9 am to 4 pm.

HELP WANTED

Clinical Coordinator/Research Assistant position available at the Brain Research Center of Children's National Medical Center, Washington, DC. Clinical protocols include studies examining new drug treatments for pediatric psychiatric disorders such as autism. Duties include coordinating patient appointments for clinical research protocols, managing office related tasks such as ordering equipment and supplies for the laboratory, taking an active role as research assistant in clinical protocols, and some word processing on a Macintosh IIX with Laser Printer. Knowledge of MacWrite II, Cricket Graph and Ready Set Go! helpful but not essential. If interested, contact:

Barbara H. Herman, Ph.D.
Chief, Brain Research Center
Children's National Medical Center
111 Michigan Ave., N.W.
Washington, DC 20010
(202) 745-3413

DONATION WANTED

Non-profit organization working with mentally retarded adults located in Silver Spring is looking for donations of computers. Call Lori 949-7343 between 8:30 am - 4:30 pm.

FOR SALE

H-P Deskjet Plus, new in carton. $550 or best offer. Call Sid (301) 593–5270

DISK LIBRARY

Apple II Disks

DOS 3.3
41 IAC 25 Mach.Lang. Util.
42 One Key DOS***
43 IAC 29 Utilities H
44 Utilities I
45 Diversi-Copy***
46 French Vocab. Tutorial
47 Tic-Tac-Toe in French
48 Boot for l'Hote
49 l'Hote Story
50 l'Hote Quiz
51 French Poetry Tutorial
52 Apollinaire Biography
53 Albert Camus Interview
54 Tic-Tac-Toe in Spanish
55 Rafel-boot
56 Rafel
57 Rafel Quiz
58 Matute
59 Lo Fatal
70 Business/Math/Statistics
71 Music
72 Keyboard Games
73 Text Adventure Games
74 Paddle Games
75 Color Graphics for Fun
76 Education
77 Utilities
90 Spreadsheet C Genl.Bus.
91 Spreadsheet D Investment
92 Spreadsheet E Bus. Recd.
93 VisiPlot & VisiTrend
94 CALCULINK***
95 Spreadsheet F: Coin Collect.
100 Utilities A
101 Utilities B
102 Games A
104 Business A
106 Science Engineering
107 Games B
108 IAC 10(Graphics)
109 IAC 11(Applesoft Tutorial)
110 Personal/Education
111 Games C
112 Utilities C
113 Business B
115 IAC 12/13 Misc.
116 IAC 14 Micromodem II
117 Picture Packer
118 Utilities D
119 IAC 15 Misc.
120 IAC 16 Misc.
121 WAPABBS 1.1 Doc**
122 IAC 17 Misc.
123 French Vocabulary
124 Utilities E
125 IAC 18 Misc.
126 Sights and Sounds
127 Math/Science
128 Games D
129 GLAQ
130 Disversi-DOS***
131 Personal/Educ. 2
132 IAC 19 - Utilities F
133 IAC 20 - Pascal & DOS 3.3
134 New Members Disk
135 WAPABBS 1.1 Disk 1**
136 WAPABBS 1.1 Disk 2**
137 IAC 21 Spreadsheet A
138 IAC 23 Utilities G
139 IAC 24 Education 3
140 Education 4
141 Special Data Bases
142 IAC 28 Pinball Games
143 Sports
144 IAC 27 Applesoft Prog.
145 Apple Logo Tool Kit
146 Logo Documentation
147 Apple Logo Sample Prog.
150 EDSIG1 (Elem. Math)
151 1983 Tax Template
152 IAC 31 Miscellaneous
153 Investments A
154 Investments B
155 IAC 33 Miscellaneous
156 IAC 35 Applesoft-AW//e
157 IAC 36 Arcade Games
158 Apple Logo Programs
159 Recipe Files
160 Utilities & Games
161 Wizard Worker
162 Games E
163 Graphs and Displays
164 Games F
165 Happy Holidays
166 Charts and Graphs
167 IAC 40 - Pilot Lang.
168 IAC 41&47-/AW Util,
169 Hayes Term.Prog.***
170 Love's Follies (Util.)
171 Cat-Graphix
172 Print Shop Graphics
173 Riley's Pers. Instrum..
174 Imageworks
175 No Name
500 Master Catalog Listing
501 Utilities: Beginner's Choice
502 Utilities: Intermediate Users
503 D-Comm***
504 Database***
505 Reading Fun
506 Astronomy Programs
507 Griffith Observatory
508 Educational Games G
509 Educational Games H
510 Education - Math
511 DOS 3.3 System Master
512 DOS 3.3 Tutorial

Eamon Series
180 Dungeon Designer
181 Beginners Cave
*182 Lair of Minotaur
*183 Cave of the Mind
*184 Zyphur Riverventure
*185 Castle of Doom
*186 Death Star
*187 Devil's Tomb
*188 Caves of Treasure Island
*189 Furioso
*190 The Magic Kingdom
*191 The Tomb of Molinar
*192 Lost Island of Apple
*193 Abductor's Quarters
*194 Quest for Trezore
*195 Underground City
*196 Merlin's Castle
*197 Horgrath Castle
*198 Deathtrap
*199 The Black Death
*200 The Temple of Ngurct
*201 Black Mountain
*202 Nuclear Nightmare
*203 Feast of Carroll
*204 The Master's Dungeon
*205 The Crystal Mountain
*206 The Lost Adventure
*207 The Manxome Foe
*208 The Gauntlet
*209 Caverns of Langst
*210 Future Quest
*211 House of Secrets
*212 Sewers of Chicago
*213 Slave Pits of Kzorland
*214 Alternate Begin. Cave
*215 Lifequest
*216 Swordquest
*217 Priest of Xim!
*218 Heros Castle
*220 Utility II
*221 Utility III
*223 Temple of the Undead
*224 Quest for Holy Grail
*225 Caves of Mondamen
*226 Orb of Polaris
*227 Death's Gateway
*228 Escape From Orc's Lair
*229 City in the Clouds

Pascal (See also 133)
300 PIG0: ATTACH 1.1/BIOS
301 PIG1:
302 PIG2:
303 PIG3:
304 PIG4:
305 PIG5:
306 PIG6:
307 PIG7:
308 PIG8:
309 PIG9:
310 PIG10:
311 PIG11:
312 PIG12:
313 PIG13: Guerrilla Guide
314 PIG14:
(PIG0:,PIG2:,PIG4:, and PIG11: are reissues)

CP/M
401 Master Catalog
402 Utilities 1
403 Communications
404 Utilities 2
405 Utilities 3
406 ZCPR2 Install
407 ZCPR2 Documentation
408 ZCPR2 Utilities
409 Modem 730
410 Essential Utilities
411 Text Editor
412 Spreadsheet
413 MDM740AB (SSC&Comm)
414 MDM740CD (7710 & A-Cat.)
415 Orig. 350 Pt. Adventure
416 Kermit Source Code
417 Kermit Documentation
418 Kermit Running Code
419 Utilities: Z83, REZ, VDE
420 Small C Compiler

Forth
700 Assembler/Disassembler
701 Full Screen Editor
702 GoForth Tutorial
703 Fig-Forth
704 Floating Point Arithmetic

ProDOS Volumes
802 Utilities (A)
803 Filecabinet
804 Shareware
806 ZAP
807 Imageworks
808 Comm-Term
810 Haunted House
811 Adventures Disk
812 Toddlers and Kids Game Room
813 TAWUG-1
814 TAWUG-2
815 TAWUG-3
816 TAWUG-4
817 Telecom
818 AppleWorks Tax Template IRS 1987***

Apple IIgs
3 1/2" DISKS

2001 Utilities & Pictures A
2002 Demo Disk A
2003 Freeterm
2004 Slide Show I
2005 Demo Source Code 1
2006 Demo Source Code 2
2007 M18 Courses
2008 Odd Bits I
2009 GS Fonts I
2010 GS Fonts II
2011 GS Fonts III
2012 AppleWorks Tax Template IRS 1988***
2013 Odd Bits II
2014 Sounds I
2015 Sounds II Nostalgia
2016 Slide Show II
2017 Slide Show III
2018 Mean 18 Courses
2020
2021
2022
IIGS Systems Disk

Apple III Disks

WAP /// SIG PD LIBRARY
1000 WAP /// SIG PD Catalog
1001 Games 1
1002 Basic Utilities 1
1003 Footnote ///
1004 System Utilities & Data Disk
1005 New Member Disk
1006 Word Processing and WPL
1007 Games for Kids
1008 The Best of MAUG
1009 The Best of the Source
1010 The Best of TAU
1011 D3.Backup
1012 Sketchpad and Slideshow
1013 A3 Diagnostics
1014 Basic Boot Disk
1015 Best of ///s Company
1016 AppleCon
1017 Pohlman Disk 1
1018 Pohlman Disk 2
1019 Pohlman Disk 3
1020 Pohlman Disk 4
1021 Pohlman Disk 5
1022 Basic XT and Basic Utilities
1023 The Retriever
1024 Power Print ///
1025 Disk Window ///
1026 Source Window and Data Window
1027 Power Cat and Basic XRF
1028 ASCIDIF by Bloom
1029 Ink Well Manual
1030 Ink Well
1031 Basic Extension
1032 TerminALL Manual
1033 TerminALL
1034 Power Keys DM+
1035 Best of Bloom
1036 Ram+3/Two-N-Fro /// 128K
1037 CustomFONT Manual
1038 CustomFONT
1039 Fonts Disk One
1040 Ottalini Articles: Disk 1
1041 Capt'n Magneto
1042 GUCSPAR by Bloom
1043 Apple // Emulation: Disk 1
1044 Apple // Emulation: Disk 2
1045 Disk Maker/AppleSeed
1046 File Cabinet/Sort Directory
1047 Phase /// Conference Plus!
1048 Mail List Manager Utilities by Bloom
1049 Mail List Manager Utilities by Bloom
1050 Mail List Manager Utilities by Bloom
1051 Basic GTO
1052 SOS Drivers
1053 Contributions Disk #1
1054 Pascal Menu.Maker
1055 Best of ATUNC
1056 Programmers Power Tools
1057 Best of ///s Company: Disk 2
1058 Ottalini Articles : Disk 2
1059 Ottalini Articles : Disk 3
1060 3EZP/AW Business Templates
1061 Contributions Disk #2
1062 Graphics Disk #1
1063 Telecommunications Disk #1
1064 Telecommunications Disk #2
1065 Telecommunications Disk #3
1066 Kermit ///
1067 XMODEM ///

Footnotes

* Requires disk #181 to start game
** Set of 3
*** Shareware: Pay author fee to continue using after trial period.

Anti-Virus Utilities
___ 3 disk set
___ 1.01B - AV 1
___ 1.02B - AV 2
___ 1.03B - AV 3

Desk Accessories
___ 10 disk set; $30.00
___ 2.01B - DAs 1
___ 2.02B - DAs 2
___ 2.03B - DAs 3
___ 2.04B - DAs 4
___ 2.05B - DAs 5
___ 2.06B - DAs 6
___ 2.07B - DAs 7
___ 2.08B - DAs 8
___ 2.09B - DAs 9
___ 2.10B - DAs 10

FKeys (Function Keys)
___ 2 disk set
___ 4.01A - FKs 1
___ 4.02A - FKs 2

ImageWriter Fonts
___ 15 disk set; $45.00
___ 5.01 - IW 1
___ 5.02 - IW 2
___ 5.03 - IW 3
___ 5.04 - IW 4
___ 5.05 - IW 5
___ 5.06 - IW 6
___ 5.07 - IW 7
___ 5.08 - IW 8
___ 5.09 - IW 9
___ 5.10 - IW 10
___ 5.11 - IW 11
___ 5.12 - IW 12
___ 5.13 - IW 13
___ 5.14 - IW 14
___ 5.15 - IW 15

LaserWriter Fonts
___ 5 disk set; $15.00
___ 6.01 - LW 1
___ 6.02 - LW 2
___ 6.03 - LW 3
___ 6.04 - LW 4
___ 6.05 - LW 5

INITs & cdevs
___ 5 disk set; $15.00
___ 9.01 - I/C 1
___ 9.02 - I/C 2
___ 9.03 - I/C 3
___ 9.04 - I/C 4
___ 9.05 - I/C 5

Miscellaneous
___ 1 disk set
___ 10.01 - M 1

Paintings (MacPnt)
___ 5 disk set; $15.00
___ 11.01 - P 1
___ 11.02 - P 2
___ 11.03 - P 3
___ 11.04 - P 4
___ 11.05 - P 5

Digitized Sounds
___ 31 disk set; $93.00
___ 12.01 - S 1
___ 12.02 - S 2
___ 12.03 - S 3
___ 12.04 - S 4
___ 12.05 - S 5
___ 12.06 - S 6
___ 12.07 - S 7
___ 12.08 - S 8
___ 12.09 - S 9
___ 12.10 - S 10
___ 12.11 - S 11
___ 12.12 - S 12
___ 12.13 - S 13
___ 12.14 - S 14
___ 12.15 - S 15
___ 12.16 - S 16
___ 12.17 - S 17
___ 12.18 - S 18
___ 12.19 - S 19
___ 12.20 - S 20
___ 12.21 - S 21
___ 12.22 - S 22
___ 12.23 - S 23
___ 12.24 - S 24
___ 12.25 - S 25
___ 12.26 - S 26
___ 12.27 - S 27
___ 12.28 - S 28
___ 12.29 - S 29
___ 12.30 - S 30
___ 12.31 - S 31

Telecommunications
___ 9 disk set; $27.00
___ 13.01 - T 1
___ 13.02 - T 2
___ 13.03 - T 3
___ 13.04 - T 4
___ 13.05 - T 5
___ 13.06 - T 6
___ 13.07 - T 7
___ 13.08 - T 8
___ 13.09 - T 9

Programmer/Hacker
___ 2 disk set
___ 14.01 - PH 1
___ 14.02 - PH 2
___ 14.03 - PH 3

Miscellaneous Utils
___ 7 disk set; $21.00
___ 15.01A - MU 1
___ 15.02A - MU 2
___ 15.03A - MU 3
___ 15.04A - MU 4
___ 15.05A - MU 5
___ 15.06A - MU 6
___ 15.07A - MU 7

System Utils
___ 8 disk set; $24.00
___ 16.01B - SU 1
___ 16.02B - SU 2
___ 16.03B - SU 3
___ 16.04B - SU 4
___ 16.05B - SU 5
___ 16.06B - SU 6
___ 16.07B - SU 7
___ 16.08B - SU 8

Word Processing Utils
___ 3 disk set
___ 17.01 - WP 1
___ 17.02 - WP 2
___ 17.03 - WP 3

Adobe Screen Fonts
___ 16 disk set; $48.00
___ 18.01A - AF 1
___ 18.02A - AF 2
___ 18.03A - AF 3
___ 18.04A - AF 4
___ 18.05A - AF 5
___ 18.06A - AF 6
___ 18.07A - AF 7
___ 18.08A - AF 8
___ 18.09A - AF 9
___ 18.10A - AF 10
___ 18.11A - AF 11
___ 18.12A - AF 12
___ 18.13A - AF 13
___ 18.14A - AF 14
___ 18.15A - AF 15
___ 18.16A - AF 16

HyperCard StackWare
___ 32 disk set; $96.00
___ 19.01A - SW 1
___ 19.02A - SW 2
___ 19.03 - SW 3
___ 19.04 - SW 4
___ 19.05 - SW 5
___ 19.06 - SW 6
___ 19.07 - SW 7
___ 19.08 - SW 8
___ 19.09 - SW 9
___ 19.10 - SW 10
___ 19.11 - SW 11
___ 19.12 - SW 12
___ 19.13 - SW 13
___ 19.14 - SW 14
___ 19.15 - SW 15
___ 19.16 - SW 16
___ 19.17 - SW 17
___ 19.18 - SW 18
___ 19.19 - SW 19
___ 19.20 - SW 20
___ 19.21 - SW 21
___ 19.22 - SW 22
___ 19.23 - SW 23
___ 19.24 - SW 24
___ 19.25 - SW 25
___ 19.26 - SW 26
___ 19.27 - SW 27
___ 19.28 - SW 28
___ 19.29 - SW 29
___ 19.30 - SW 30
___ 19.31 - SW 31
___ 19.32 - SW 32

Mac II Series
___ 14 disk set; $42.00
___ 20.01 - M II 1
___ 20.02 - M II 2
___ 20.03 - M II 3
___ 20.04 - M II 4
___ 20.05 A- M II 5A
___ 20.05B - M II 5B
___ 20.06 - M II 6
___ 20.07A - M II 7
___ 20.08 - M II 8
___ 20.09 - M II 9
___ 20.10 - M II 10
___ 20.11 - M II 11
___ 20.12 - M II 12
___ 20.13 - M II 13

HyperCard Externals
___ 4 disk set
___ 21.01 - HE 1
___ 21.02 - HE 2
___ 21.03 - HE 3
___ 21.04 - HE 4

System Software 6.0.3
___ 6 disk set; $18.00
___ SS.ST
___ SS.PT
___ SS.U1
___ SS.U2
___ SS.LW 6.0
___ SS.32 Bit QDraw

HyperCard Update 1.2.2
___ HC & Stacks - HC.01
___ HC Ideas - HC.02

Serially Numbered
___ Disk 28.1 •
___ Disk 29 •
___ Disk 30 •
___ Disk 31.1 •
___ Disk 32 •
___ Disk 35 •
___ Disk 41 •
___ Disk 45 •
___ Disk 46 •
___ Disk 54 •
___ Disk 55 •
___ Disk 56 •
___ Disk 74 •
___ Disk 75 •

Serially Numbered
___ Disk 76 •
___ Disk 77 •
___ Disk 78 •
___ Disk 79 •
___ Disk 80 •
___ Disk 84 •
___ Disk 85 •
___ Disk 89 •
___ Disk 91 •
___ Disk 92 •
___ Disk 95 •
___ Disk 96 •
___ Disk 104 •
___ Disk 105 •
___ Disk 106 •
___ Disk 108 •
___ Disk 123 •
___ Disk 134 •
___ Disk 143 •
___ Disk 147
___ Disk 150 •
___ Disk 151 •
___ Disk 153

HyperCard Upgrade requires HyperCard proof of purchase; any of original disk, first page of manual, receipt or previous HyperCard Upgrade disk.
Disks marked with a bullet are in 400K single side disk format; all others are 800K double side disk format..

Mail this form with your check to:
Disketeria
Washington Apple Pi, Ltd.
7910 Woodmont Ave., Ste. 910
Bethesda, MD 20814

Are you a member of Washington Apple Pi, Ltd? Yes/No ___. If Yes, Member Number _____.
All payments must be in U.S. funds drawn against U.S. banking institutions.
Non-members add $3.00 per disk to listed prices.

Number of Disks		Member Price each	Extended
	Singles		
___	**4 or less @**	**$ 4.00 =**	_____
___	**5 or more @**	**$ 3.50 =**	_____
___	**Sets (marked above)**	**$ (above)**	_____
	+ Postage - $ 1.00 /disk, max $ 5.00		_____
___	**Disk Catalogs**	**$ 3.00 =**	_____
	+ Postage @ $ 1.50 ea.		_____
	TOTAL AMOUNT		_____

Name

Box Number, Apartment, Suite, etc.

Street Address

City State ZIP Code

Daytime telephone Evening telephone

WAP Tutorials

Washington Apple Pi Tutorials for April

Washington Apple Pi provides training to its members and to nonmembers on a regular basis. We've provided complete course descriptions for the Macintosh tutorials, and a general description for the Apple II courses.

The fee for each session is $15 for members, $20 for nonmembers. Mail or phone in your registration to the WAP Office. You *must* pre-register the class or classes you wish to attend. We urge you to bring your computer with you to class, 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. Tutorials without a minimum of two students registered 48 hours before classes are scheduled to begin will be cancelled; so we recommend you confirm that your class is still scheduled about 24 hours prior to the scheduled starting time.

Occasionally, the WAP class schedule changes due to circumstances out of our control. Please call the office at least 24 hours prior to the class date to confirm that your class will be held as scheduled. We regret an inconveniences that may arise.

Apple IIGS Tutorials for April

We're providing the Apple IIGS Introductory Tutorials, a three part series in March. Please refer to the calendar for times and course titles. You may sign up for just one, or for all three, if you wish. Of course all three course provide you with the most benefit. These classes are designed for beginners, not experienced users.

Macintosh Tutorials for April

More and better Macintosh tutorials are now available! A description for the April classes follows. May classes will include an Introduction to PageMaker, a PageMaker class on designing manuals and reports; June will have classes covering Macintosh viruses, and Excel. Look for further announcements in the May and June issues of the Journal.

Introduction to Macintosh I

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, startup disk, and an unformated disk.

Date:April 9, 1990

Instructor: Jack Crawford

Introduction to Macintosh II

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, startup disk, and an unformated disk.

Date:April 16, 1990

Instructor: John Rogers

Introduction to Macintosh III

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 what a RAM disk is and how to use one, if you wish; how to use *Switcher* or *Multifinder*; and finally, you'll learn about the various RAM configurations possible with each Macintosh.

Materials required: Your Macintosh, external drive, startup disk, and an unformated disk.

Date:April 23, 1990

Instructor: Marty Milrod

Introduction to Microsoft Word 4.0

This class is primarily intended for those who know little or nothing about *Word*. A little bit of word processing is helpful, but not required. Topics include opening and saving documents, outlining, setting tabs, line spacing, customizing menus, using the glossary, defining styles, using and making tables, headers and footers, fonts, sections and columns. *Please note that this class is primarily focused on Word 4.0. If you have Word 3.0, the class may be helpful to you, but many features are specific to this latest release.*

Materials required: Your Macintosh, external drive, startup disk, and *Microsoft Word* 4.0

Date:April 14, 1990

Instructor: TIm Moore

All About Fonts

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* what it won't do for you, and more.

Materials required: None

Date:April 7, 1990

Instructor: Rob Clark

Introduction to MacWrite 4.5

Yes, MacWrite lives. If you're convinced that MacWrite 4.5 is enough of a Word Processor for you, and you'd like to find out more about it, then this is the class for you.

Materials required: Your Macintosh with a external drive, system disk and MacWrite program disk

Date:April 24, 1990

Instructor: Marty Snyderman

Introduction to MORE II

This course is designed to both an introduction to this program, as well an overview to its capabilities. MORE II is *the* premier Macintosh outlining program. In this course, you'll learn how to quickly devise, edit and reorganize outlines, and to turn those outlines into professional presentations. Even if you don't own MORE II, or any outlining program, you might like to take this class to gain an appreciation to the power of this software, and how it can make you a more organized individual.

Materials required: Your Macintosh with a external drive, system disk and MORE II program disk

Date:April 19, 1990

Instructor: Eileen O'Grady

Desktop Publishing Special Interest Group of the Washington Apple Pi March/April 1990 Seminar Series

InfoGraphics: What is Informational Graphics? A seminar and hands-on demonstration and analysis of different kinds of infographics (charts, maps, diagrams,etc.) and their proper use in various media (newspaper, proposals, presentations). How to make the decision about which type of infographic to use and guidelines/tips on what details must be included in order to comunicate with clarity. See how they do it at U.S. News & World Report and offer your work for constructive feedback. *Presenter:* Jeff Glick is Graphics DirectQr at U.S. News & World Report and a specialist in Informational Graphics. His software packages of choice for production are CricketGraph and Freehand. *When:* Saturday, March 10,19901:30-4:30 p.m. and Saturday, April 7,1:304:30 p.m. *Where: U.S.* News & World Report, 2400 N Street, N.W., 3rd Floor, Wash. D.C. 20037

Basic Elements of Newsletter Layout and Design: Understand the importance of readability, how to use elements such as pull-out quotes, columns, etc. Typography - proper typeface choice, kerning/leading and when to use bold, italic or other emphasis. Where and how to use illustrations (B&W & color photos, lineart, graphs and charts). Choosing the right paper and consideration of your budget in relation to design will also be covered. *Presenter:* Karen S. Stiegler is an Editor with the American Association of Homes for the Aging in Washington, D.C. *When:* Thursday, March 15, 7:30-10:30 pm and Saturday, April 28, 9:30-12:30 pm *Where:* March 15 - Electric Logic 2025 I Street, N.W., Washington, D.C. April 28 - Cleveland Park Library, 3310 Connecticut Avenue, N.W., Washington, D.C.

Mac System Management: Inits, CDEVS, DAs and other Gremlins. An overview of the Mac's hardware control facilities and file system is followed by a discussion of the advantages and perils of customizing your computer. How to organize/manage what you've got and streamline your Mac for productivity. What goes where, DOs/DON'Ts, tips and troubleshooting are also covered. Bring a list of what's on your system (and where) and what's in your system folder for review. *Presenter:* Jacques Brierre is a telecommunications Software Engineer at Sprint International. *When:* Saturday, March 24,1:30-4:30 pm, and Saturday, April 211:30-4:30pm *Where:* 1609 Inlet Ct., Reston, Va. 471-0918

Open House at Tools of the Trade Bookstore! Come and Sunday browse through books on layout and publication design, typography, graphic design, desktop publishing, print production, reference, writing/publishing, business communication and much more. Owner Miriam Ross will be answering questions and giving you her opinions from her extensive knowledge of books in this trade speciality area. *Special Fee:* $2.00 at the door or bring danish, cookies, munchies or juices to share! *When:* Sunday, March 18, 2:00-5:00 pm and Sunday, April 29, 2:00-5:00 pm *Where:* Tools of the Trade, 1434 B Duke Street, Alexandria, Va. Inside Round House Square and near Duke Street Metro. Call 823-1919 for directions.

Registration Form: To Register: All seminars are $25.00 for Washington Apple Pi members (and CPCUG members) and $35.00 for non-members. Make checks payable to Washington Apple Pi and send it (or them) and your registration form to Jody Joy, 1609 Inlet G't. Reston, Virginia 22090. You may call 471-0918 with any questions you might have and to get directions for the System Management seminar.

InfoGraphics
March 10,1:30-4:30 pm
April 7,1:30-4:30 pm
Basic Elements of Newsletter Layout and Design
March 15, 7:30 pm-10:30 pm
April 28, 9:30-12:30 pm

Mac System Management
March 24,1:30-4:30 pm
April 21,1:30-4:30 pm

Open House at Tools of the Trade

For headcount purposes, please check if you are planning to attend. March 18 April 29

Name

Addre ss

Phone Number Wk. Hm.

April Tutorials

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	**Apple IIGS GS1490** ***Introduction to the Apple II e/c*** 7-9 p.m. WAP Classroom	4	5	6	Macintosh MF1490 ***All About Fonts*** 9 am - 12 noon WAP Classroom 7
8	**Macintosh M1490** ***Introduction to Macintosh I*** 7-9 pm WAP Classroom 9	**Apple IIGS GS2490** ***Intermediate Skills*** 7-9 p.m. WAP Classroom 10	11	12	13	**Macintosh W1490** ***Introduction to Microsoft Word*** 9 am - 12 noon WAP Classroom 14
15	**Macintosh M2490** ***Introduction to Macintosh II*** 7-9 pm WAP Classroom 16	**Apple IIGS GS3490** ***Other Applications*** 7-9 p.m. WAP Classroom 17	18	**Macintosh MO1390** ***Introduction to MoreII*** 7-9 pm WAP Classroom 19	20	21
22	**Macintosh M3490** ***Introduction to Macintosh III*** 7-9 pm WAP Classroom 23	**Macintosh MW1490** ***Introduction to MacWrite 4.5*** 7-9 p.m. WAP Classroom 24	25	26	27	28
29	30					

Washington Apple Pi, Ltd. 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814 (301) 654-8060

Membership Application

Please type or print:

Name _____ Home phone # _____

Company _____ Work phone # _____

Address _____ Occupation _____

_____ Sponsor's name _____

Please answer a few questions for us regarding your computer use. Circle the computers/ equipment you use on a regular basis.

Apple II
Apple II +
Apple II e
Apple II c
Apple II gs
Apple Other _____
Laser 128
Basis
Franklin
Apple III
Mac 128
Mac 512
Mac 512 e
Mac Plus
Mac SE
Mac SE/30
Mac portable
Mac other

LISA
Mac II
Mac IIx
Mac II cx
Mac IIc+
Mac IIci
Mac II other
_____
IBM or compatible
Non-Apple laptop
Modem 300
Modem 1200
Modem 2400
Modem 9600
Fax modem
Printer, dot matrix
Printer, impact
Printer, laser

WAP has many Special Interest Groups and Activities. Please check boxes of those areas which interest you. You will be contacted by the appropriate group.

	Join Group	Volunteer
Appleworks SIG		
Apple II GS SIG		
Apple III SIG		
AV SIG (Arts & Video)		
CP/M SIG		
Disabled SIG		
Disk Library		
Desktop Publishing SIG		
EDSIG (Education)		
Excel SIG		
Federal SIG		
Game SIG		
HOTLINE		
HyperCard SIG		
Law SIG		
Mac Programmers SIG		
Music SIG		
NeXT SIG		
PIG (Pascal Programming)		
PI-SIG (Program Interface)		
Stock SIG		
Telecommunications SIG		
WAP Journal Editorial Board		
Works SIG		

Enclose check or money order payable to Washington Apple Pi, Ltd.

Basic membership - One Year	$39
Two years	$67
Three years	$92
Student rate * (for one year)	$32
For other options please add correct amounts	
(1) WAP bulletin Board system (TCS)	$ 6
(2) First class mail (U.S.)	$17
(3) Airmail to Canada, Mexico, West Indies or Central America	$20
(4) Airmail to Europe & South America	$38
(5) Airmail to Asia & elsewhere	$48
(6) Surface to Europe, Asia & elsewhere	$18
Total enclosed	$___

*Students please enclose photo-copy of current Student ID

Indicate desired New Member Kit (1 only)

Apple II
Apple IIGS
Apple III
Mac 400k
Mac 800k

Applicant signature and date:

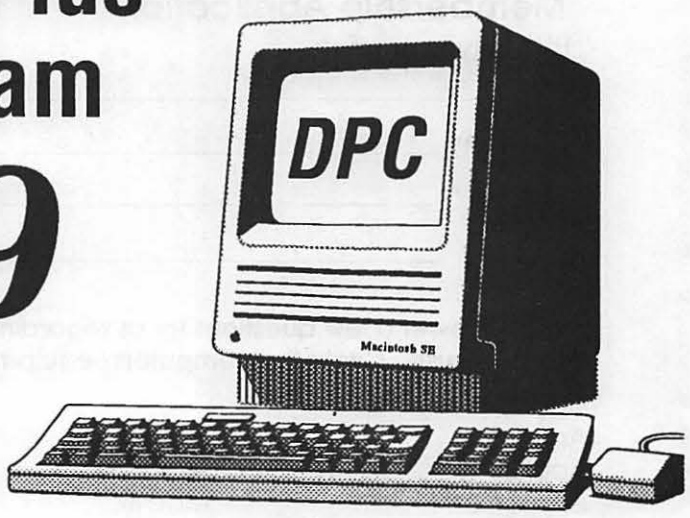
Please circle Yes or No for the two items listed below.

My name, address and phone number may be published in the membership directory. Yes No

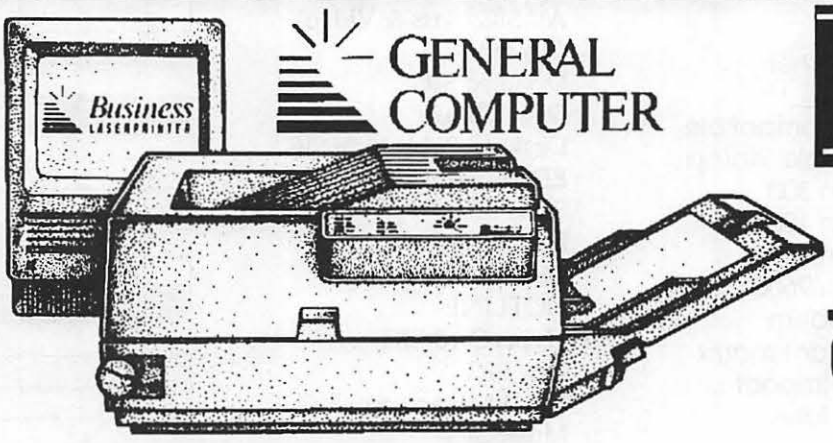
Please leave my name on the Pi mailing list. (The list never leaves the office and all mailings are supervised by the Pi staff). Yes No

Upgrade your Mac Plus or SE to2.5 meg Ram

Only $319



1 meg 100 nsLow Profile Surface Mount SIMMS, installed



GENERAL COMPUTER

$1599

Personal Laser Printer

Quickdraw Based 300 DPI Laser

Christmas Hard Dive Sale

CMS External 20 meg $399
CMS External 30 Meg $459

With 1 year Warranty

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

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

MICROTECH INTERNATIONAL, INC.

NOVA 40 $699
NOVA 80 $999

45 Meg Removable Hard Disk

Only $999

Microtech Drives Have a 5 Yr. Warranty

DESKTOP PUBLISHING CENTER (703) 658-0033

Desktop Publishing Center Doubles Apple's Macintosh Warranty

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

Who Else Can Offer You

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

Macintosh Systems

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

PCPC

PCPC Shadowgraph
Grey Scale Monitor

$1995

With This Ad Only

Qume ScripTen

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

$3495

With This Ad Only

Desktop Publishing Center

5704-G General Washington Dr. Alexandria

TEL (703) 658-0033 FAX (703) 658-0386

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