

June 1994

\$2.95

The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 16, Number 6



Artists on Exhibit p. 18

Bits and Bytes Revisited
p. 21

Mangia— A software
review p.45

Washington Apple Pi General Meeting

4th Saturday, July 23 • 9:00 a.m.

Community & Cultural Center

Northern VA Community College • 8333 Little River Turnpike
Annandale, Virginia

*Computer
Garage
Sale!*

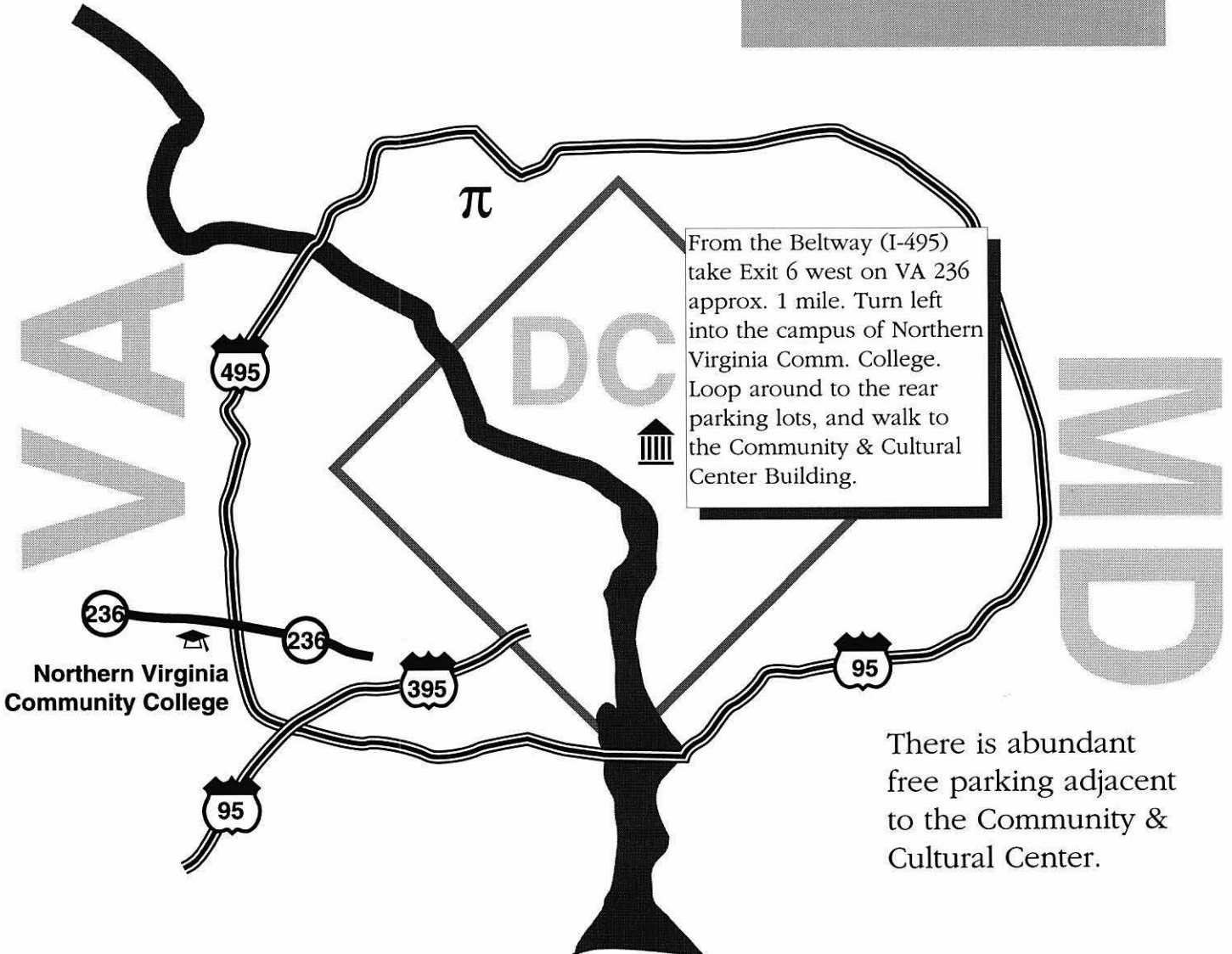
June 11, 1994

Hampton Mall
9185B Central Ave.
Capitol Heights, MD

July 23, 1994
Global Village



Microsoft Home



From the Beltway (I-495) take Exit 6 west on VA 236 approx. 1 mile. Turn left into the campus of Northern Virginia Comm. College. Loop around to the rear parking lots, and walk to the Community & Cultural Center Building.

There is abundant free parking adjacent to the Community & Cultural Center.



New Adobe Illustrator 5.5 is packed with so much value, it'll blow your mind!

Brand new Adobe Illustrator™ 5.5 for Macintosh® is a powerhouse of value! Here's just a taste of what you get:

New text features give you more control. Version 5.5 is just bursting with advanced text features. Like the new Spell Checker that finds and fixes costly typos. And the Tabs filter that instantly turns text blocks into tables. There's even a filter that searches and replaces by font. What a time-saver!

New Trapping filter gives you better results on press.

Now you can instantly trap artwork to compensate for color plates shifting on press. It's an

easy way to save time and money on complex printing jobs.

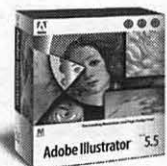
Import any file with Adobe™ Acrobat™ software—an \$890 value!

With Adobe Acrobat software, you can now bring virtually any file into Adobe Illustrator. Then change colors or curves—even edit text. That means you can easily add a pie chart from Microsoft® Excel. And import a layout from Aldus® PageMaker® or QuarkXPress®. Just imagine the possibilities!

Free Deluxe Edition on CD-ROM! You'll discover a world of creative possibilities on the free Deluxe Edition. It includes:

- QuickTime™ movie tips and techniques
- 220 typefaces from the Adobe Type Library
- Hundreds of professional clip art samples
- On-line Adobe Illustrator Technical Notes
- Tryout versions of Adobe Dimensions™, Adobe Photoshop™ and Adobe Premiere™ software, and much more!

So upgrade to Adobe Illustrator 5.5 today. To order, call 1-800-521-1976.



Adobe, the Adobe logo, Acrobat, Adobe Dimensions, Adobe Illustrator, Adobe Photoshop and Adobe Premiere are trademarks of Adobe Systems Incorporated which may be registered in certain jurisdictions. Aldus and PageMaker are registered trademarks of Aldus Corporation. QuarkXPress is a registered trademark of Quark, Inc. Macintosh is a registered trademark and QuickTime is a trademark of Apple Computer, Inc. Microsoft is a registered trademark of Microsoft Corporation. The Adobe Illustrator package is the protected trade dress of Adobe Systems Incorporated. Copyright © 1994 Adobe Systems Incorporated. All rights reserved.

OFFER ID: WA161

Table of Contents

Volume 16

June 1994

Number 6

Club News

WAP Hotline	39, 42
WAP Calendar	40, 41
Index to Advertisers	8
Classified Advertisements	79
WAP Membership Form	80

SIGs and Slices

Newton SIG	
by Andrew Halls	5
/// SIG PD	
by David Ottalini	5
StockSIG	
by Morris Pelham	8

General Interest

April General Meeting	
by Lawrence Charters	9
WAP Bylaw Amendments	
by Jonathan Hardis	10
The ISO OSI Reference Model	
by Roger M. Firestone	14
Bits and Bytes Revisited	
by Lynn R. Trusal	21
Computer Networks and Networking	
by Mauri P. Collins	30
TCS Help Sheet	48

Macintosh Articles

Artists on Exhibit	
by Blake Lange	18
A Taste of Miscellaneous or [C7.B10]	
by David L. Harris	24
Macintosh Tutorials	28
Tutorial Registration Form	29
New Macintosh Files on the TCS	
by Lawrence I. Charters	37
Mangia—Software for managing recipes	
by Greg Price	45

Apple // Articles

Beginners Corner... Hooked on Storage, Part II	
by Steve Weyhrich	49
Golden Oldie Review: Bards Tale	
by Darrel Raines	51
March Apple // Meeting	
by The Jernigans	57

Apple /// Articles

On The Trail of the Apple ///	
by David Ottalini	53
What My Apple /// Needed Was	
A Good Boot	
by Martin Davidson	56

Disk Libraries

Macintosh Disk Library	60
by Dave Weikert	
Macintosh Disk Order Form	65
Apple Disk Library	66
by John Ruffatto	
Apple Disk Order Forms	75-78

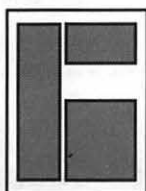
The Journal of **Washington Apple Pi, Ltd.** is an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by Apple Computer, Inc. The opinions, statements, positions and views stated herein are those of the author(s) or publisher and are not intended to be the opinions, statements, positions or views of Apple Computer, Inc.

Advertising in the Journal

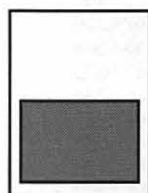
Some Orientation Possibilities



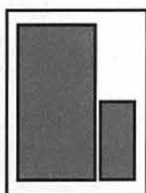
Full Page
7.5" x 10.0"



Third Page (vert.)
2.5" x 9.5"
Sixth Page (hor.)
5.0" x 2.5"
Third Page (hor.)
5.0" x 4.75"



Half Page
7.5" x 4.75"



Two-thirds Page (vert.)
5" x 9.5"
Sixth Page (vert.)
2.5" x 4.75"

No. of times ad runs	1-2	3-5	6-11	12+
Full Page	\$450	\$383	\$338	\$270
Covers	\$550	\$468	\$413	\$330
Two-thirds Page	\$360	\$306	\$270	\$216
Half Page	\$300	\$255	\$225	\$180
Third Page	\$225	\$191	\$169	\$135
Sixth Page	\$125	\$106	\$93	\$75

Special guaranteed positions incur a 10% surcharge

Ad Deadlines

The Washington Apple Pi Journal is published monthly. The ad copy deadlines and ad space reservations are listed below for your convenience.

Copy may be received as traditional mechanicals, rc-paper, velox prints, or film negatives. Negatives will incur an additional \$15.00 strip-in charge.

Washington Apple Pi

This issue of the Washington Apple Pi Journal was created on a Mac SE/30, proofed on an LaserWriter IINT, and produced by electronic typesetting at The Publishers Service Bureau.

The page layout program used was PageMaker 4.2a, the word processing program was Microsoft Word 5.1; the principal typeface is New Century Schoolbook (10/12) for the articles; and Helvetica for headlines, subheads, and emphasis.

Cover Design: New WAP Journal cover design was created by Ann Aiken in collaboration with Nancy Seferian. The Capital artwork was illustrated by Carol O'Connor for One Mile Up, which donated it for use on our cover.

Icon Guide



Macintosh



Calendar Pages



Apple II, IIe, & IIGS



Apple Disk Libraries



Apple III (SARA)



Macintosh Disketeria



Hotline/Phone List



General Interest



TeleCommunications System (TCS)

Editorial Staff

Apple II co-Editors

Stan Palen	(703) 775-7027
Jack Mortimer	(804) 224-0609
Seth Mize	(410) 766-1154

Art Editors

Anne Aiken	(301) 530-1990
Blake Lange	(301) 942-9180

Calendar Editor

Bill Wydro	(301) 299-5267
------------	----------------

Mac Editorial Consultant

Melissa Sprott	(703) 379-2972
----------------	----------------

Mac Software Liaison

Lawrence Charters	(410) 730-4658
-------------------	----------------

Managing Editor

Kathryn Murray	(804) 472-4851
----------------	----------------

Deadlines

Writers' submissions

July	May 22
August	June 19

Editors' submissions

July	May 29
August	June 24

Ad space reservations

July	May 22
August	June 19

Camera-ready ad copy

July	May 29
August	June 24

Postal Information

Washington Apple Pi (ISSN 1056-7682) is published monthly by Washington Apple Pi, Ltd., 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814. Second Class Postage paid at Bethesda, MD.

Annual membership dues for Washington Apple Pi, Ltd., are \$32; of this amount \$24 is for a subscription to the Washington Apple Pi Journal. Subscriptions are not available without membership.

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

Change of Address should reach us 60 days in advance of the move to ensure that your Journals continue uninterrupted.

Officers and Board of Directors

President	Lorin Evans	(202) 543-1248
Vice President-Apple	Joan Jernigan	(703) 822-5137
Vice President-Mac	Lawrence Charters	(410) 730-4658
V.P.-Administration	Tom Witte	(703) 683-5871
V.P.-Community Affairs	Joan Jernigan	(703) 822-5137
Treasurer	Charles Froehlich	(410) 889-9395
Secretary	Grace Gallager	(703) 222-4570
Directors	Ken De Vito	(703) 960-0786
	Anson H. (Bill) Geiger	(703) 237-3614
	Jon Hardis	(301) 330-1422
	Dana Schwartz	(301) 725-6281
	Bob Shaffer	(301) 384-3724
	Paula Shuck	(410) 740-5255
	Jon Thomason	(301) 951-9631
	Tom Vier	(703) 860-4810
	David Weikert	(301) 963-0063
	Tom Witte	(703) 683-5871
	Bill Wydro	(301) 299-5267

Office Staff

Office Manager	Beth Medlin
Office Staff	Ambrose Liao (Tuesday nights only)
	John Ruffatto (Saturday)

Library Volunteers

Apple II Head Librarian	John Ruffatto	(301) 735-4259
Apple IIGS Librarians	John Ruffatto	(301) 735-4259
	Chris Hutmire	(301) 871-1203
Apple II Librarian		Volunteer Needed
Apple III Librarian	David Ottalini	(301) 681-6136
Macintosh Librarian	David Weikert	(301) 963-0063
Mac Library	John DeMarco	Ben Frank
	William Jones	Fred Rodgers
	Tony Salerno	Joe Swick

Washington Apple Pi, Ltd.

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

Office hours: Monday-Saturday 10-2:30*
Tuesday 7-9 p.m.

* The office will open at 1 p.m. on
the day of the General Meeting

Volunteers

Head Reading Lib.	Brian Mason	
Dealer Relations Comm.	John Alden	(202) 686-1656
	Harvey Kaye	(301) 299-8994
Legal Counsel	Richard Wohlman	
Membership	Jon Hardis	(301) 384-3724
SIGs & Slices Coord.	Bob Shaffer	Volunteer Needed
Journal Store Distribution		(301) 831-9166
Telecom SysOp	Paul Schlosser	(703) 683-5871
Volunteer Coordinator	Tom Witte	

SIG Chairs

Annapolis Slice		
President	Richard MacLean	(410) 721-8157
V. President	Phil Scheel	(410) 761-4260
Secretary	Jeff Straight	(410) 643-0868
Treasurer	Mel Benson	(410) 647-6873
Membership	Seth Mize	(410) 766-1154
Mac Programs	Lloyd Olson	(410) 544-1087
	Sandy Bozek	(410) 849-5232
	Seth Mize	(410) 766-1154
Apple II Programs		(410) 761-4260
AAS Membership InfoLine	Seth Mize	(410) 766-1154
Disk Lib., Apple	Bill Derouin	(410) 647-0802
Disk Lib., Mac		(410) 315-8532
CRABBS BBS		(301) 345-3230
Apple Works	Gary Hayman	(301) 345-3230
Apple IIGS	Gary Hayman	(703) 281-5385
Art SIG	Joe Morey	
Columbia Slice		
President	Ellen Baniszewski	(410) 730-4891
Co-V. President, Mac	Ramesh Sardana	(410) 992-9884
Co-V. President, Mac	Tim Helsing	(410) 730-7272
V. President, Apple II	Tom Cook	(410) 995-0352
Editor, Macintosh	Lawrence Charters	(410) 730-4658
Editor, Apple II	Andy Wakshul	(410) 997-0156
Treasurer	Tom Cowley	(410) 730-2319
BBS SysOp	Henry Yee	(410) 964-3706
Disk Librarian, Apple	Bill Campbell	(410) 997-9317
Disk Librarian, Mac	Tim Childers	(410) 997-9317
CAD SIG	Peter Danko	(301) 868-5550
Database SIG	Eric Gutsche	(703) 379-1265
DisabledSIG	Jay Thal	(202) 244-3649
Desktop Publishing SIG	Tom Piwowar	
Excel SIG	Dick Byrd	(703) 978-3440
Frederick Slice		
President	Peter Alvstad	(301) 371-4165
V.P./Newsletter	Roger Musser	(301) 898-7647
Sec./Treas.	J. Russell Robinson	(301) 739-6030
The Cracker Barrel BBS		(301) 662-3131
GameSIG	Mike Dickman	(703) 525-2410
HyperTalk	David Mudd	(703) 683-1746
Mac Programmers	John Barnes	(301) 652-0667
	Greg Bartolett	(301) 762-1311
	Ed Moser	(301) 924-1573
Music SIG	Andy Halls	(301) 990-3725
Newton SIG	Pat Fauquet	(703) 550-7423
NOVA Educators SIG	Gerry Wright	(301) 422-4286
PI-SIG	Ambrose Liao	(301) 530-3255
QuickTime SIG	Morris Pelham	contact on TCS
StockSIG	Allan Levy	(301) 340-7839
Telecomm. SIG	David Ottalini	(301) 681-6136
Three SIG	Paul Campbell	(313) 255-6497
	Gary Hayman	(301) 345-3230
UltraMacros SIG	Ann Aiken	(301) 530-1990
Women's SIG		

© COPYRIGHT 1994, by WAP, Washington Apple Pi, Ltd. User groups may reprint without prior permission any portion of the contents herein, provided proper author, title, and publication credits are given, except in cases where the author has reserved copyright permission. In these cases, the author should be contacted directly. Please send a copy of the article as printed to Washington Apple Pi; 7910 Woodmont Ave., Suite 910; Bethesda, MD 20814.

NewtonSIG

by Andrew Halls

On the first Monday of March an eager group of early adopters (many with old stories from the early days of the Apple // and Macintosh) got together to form the NewtonSIG. Bill Kearney was the featured speaker at this first meeting. Bill is an independent Macintosh consultant who purchased the Newton Message Pad and development tools at MacWorld in Boston last August. He has been diligently pursuing the wisdom of the Newton ROM ever since. Bill enthralled us with his interesting insights on making the transition from a Macintosh to a Newton developer.

At our April meeting we had the opportunity to exchange Newton software and other technical information. Bill Kearney compiled the groups' first Newton Sample Disk and distributed it at the meeting. A SyQuest drive was available for the

exchange of massive quantities of shareware, Newton books and other information. A Newton Connection Kit was available for downloading packages for those without other means. Once the disk swapping and beaming settled down, the meeting reconvened at the Rio Grande Cafe for a more festive technical exchange.

The NewtonSIG has teamed up with MANDA, the Mid-Atlantic Newton Developers Alliance to pool the resources of the small, but growing group of Newton enthusiast in the area. We are currently planning joint monthly meetings to exchange information and software and generally offer mutual support to our fellow technological pioneers. The first benefit we can offer our members is a discount subscription price to PIE Developers, a technical journal for Newton developers. Creative Digital the publishers of PIE Developers is also offering to our members a discount on ViewFrame a Newton debugging and exploration tool. Being the early adopters that we are, all of our members also have EMAIL addresses. We are currently

working on setting up an Internet ListServe mailing list to maintain contact between meetings.

The NewtonSIG meets on the first Monday of each month at 7:30 at the WAP office. For more information please contact, Andrew Halls, at (301) 990-3725 or at ahalls@digex.net. ■

/// SIG PD

by David Ottalini
/// SIG Co-Chairman

As you may have noticed, I haven't been adding any new disks to our library of late. It's primarily because I decided that our PD library was getting a bit unwieldy and needed to be reorganized to make it easier for you to use and enjoy.

Thus began what has become a long-term project to rework and recategorize the library. Moving disks around and creating new sections was actually the easy part. I then had (and still have) to go through nearly every disk and rework the Hello.Text



Tele-Communications System
Washington Apple Pi's "24-hour General Meeting"
Call (301) 654-8060 for registration, passwords
14+ lines, supporting 300 to 14,400 bps modems

System software & updates ☞ Questions & Answers ☞ Vendor Patches & Updates ☞ Macintosh Knowledge ☞ Publicly distributed software ☞ Information ☞ Apple II, III ☞ Announcements ☞ PowerPC ☞ Advice & Hints ☞ Newton ☞ Bad puns ☞ Hot Tips ☞ Usenet Newsgroups ☞ Juicy Rumors ☞ Washington Apple Pi Events Calendar ☞ Want Ads ☞ Special Offers ☞ Repartee ☞ Help ☞ Juicy Rumors ☞ Announcements ☞ PowerPC ☞ Camaraderie ☞ Advice & Hints ☞ Newton ☞ Usenet Newsgroups ☞ Repartee ☞ Help ☞ Juicy Rumors ☞ Washington Apple Pi Events Calendar ☞ Washi ☞ Calendar ☞ Vendor Demos & Special Offers ☞ System software & updates ☞ Questions &

π

files and the Read.Me files so that they reflect the new disk numbers, any updates, etc.

Needless to say, this is not something a working daddy of two children who also wishes to see his wife every once in awhile can do over a few days (Okay, so I *do* have a life outside WAP, but I have to work at it!).

But to get you started, you'll find below the new categories I've created and a short description of what each will contain (some categories have remained the same). At this point, I can't honestly say when this will go into effect— but please watch the Journal, the TCS and ///s Company—WAP for more info.

New Apple /// PD Library and Its Categories

PDS Name: ACCOUNTING

Description: Accounting-Specific Software for the Apple ///.

PDS Name: APPLE SOFTWARE

Description: Formerly commercial software for the /// or third-party software (non-specific to other categories).

PDS Name: 3EZP/AW TEMPLATES

Description: 3EZ Pieces and Appleworks Templates.

PDS Name: BLOOM PROGRAMS

Description: The compiled works of Dr. Al Bloom.

PDS Name: BUSINESS BASIC

Description: Information and programs dealing with Apple /// Business Basic.

PDS Name: DA DATASYSTEMS

Description: The Library of DA Datasystems (Daryl Anderson) and other information.

PDS Name: DISK CATALOG - ASCII

Description: The /// SIG PD Catalog - ASCII Version.

PDS Name: DISK CATALOG - 3EZ PIECES

Description: The WAP /// SIG PD Catalog - 3EZ Pieces Version.

PDS Name: EMULATION

Description: Apple /// Emulation programs and information.

PDS Name: FONTS

Description: Apple /// Font Programs and Fonts.

PDS Name: GAMES

Description: Apple /// Games.

PDS Name: GRAPHICS

Description: Apple /// Graphics/Draw Programs and Fotofiles.

PDS Name: INFORMATION

Description: Apple /// Information - for new users and beyond.

PDS Name: MISCELLANEOUS

Description: Apple /// Disks we had a hard time putting anywhere else!

PDS Name: PAIR SOFTWARE

Description: The library of Pair Software (Frank Moore) and other information.

PDS Name: PASCAL AND OTHER LANGUAGES

Description: Pascal and other languages, programs, etc.

PDS Name: REPAIRS & DIAGNOSTICS

Description: Information about how to diagnose and fix a sick /// or

PDS Name: SHAREWARE

Description: Apple /// Shareware Programs. Please support Shareware by

PDS Name: SOURCE CODE

Description: This category provides the source code, where available, of

PDS Name: SYSTEM SOFTWARE

Description: Apple /// System Software.

PDS Name: TELECOMMUNICATIONS

Description: Telecommunications Programs and Information for the Apple ///.

PDS Name: UTILITIES

Description: Utility Programs for the Apple ///.

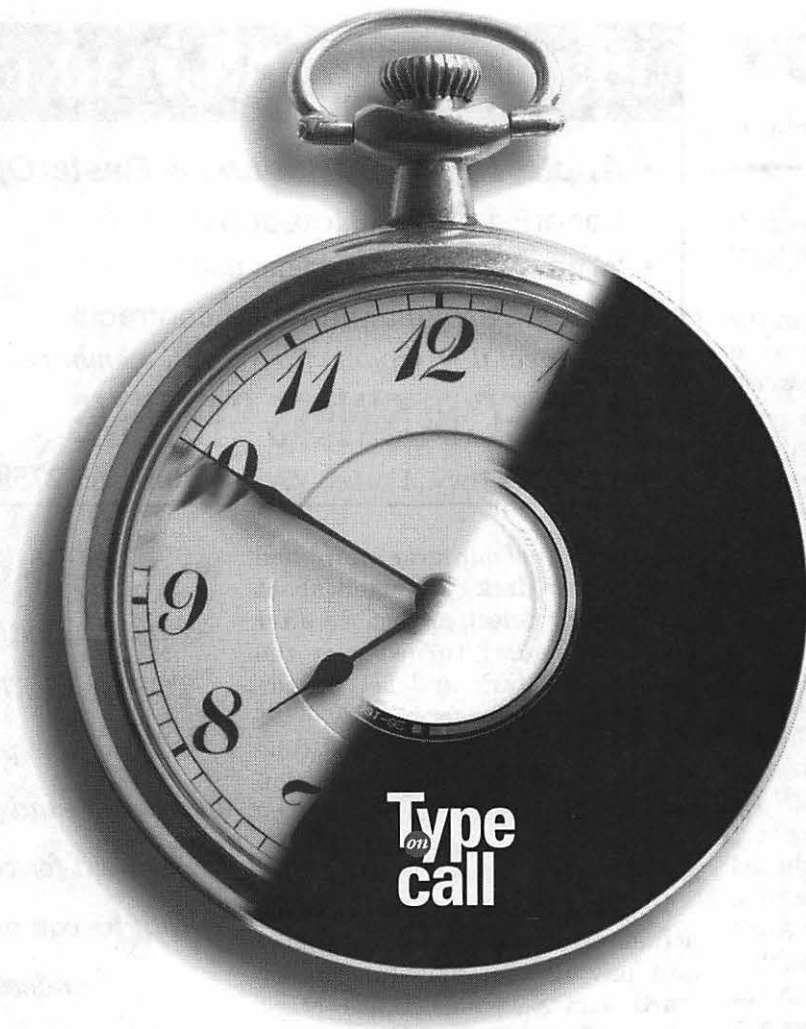
PDS Name: WAP ARTICLES

Description: Compilation of many articles published in the WAP Journal

PDS Name: WORD PROCESSING

Description: Word Processing programs and utilities for the Apple ///. ■





Get Adobe type in real time. With real savings!

The Type On Call™ CD-ROM for Macintosh® gives you the fastest, most economical way to buy Adobe™ typefaces. It includes more than 1,700 encrypted fonts on disc. When you're ready to buy, just call Adobe for the access code to unlock any font you want in minutes, not days or weeks.

6 more reasons to order now:

1. At least 35% off all type purchases.
2. ATM™ software plus its 13 fonts, FREE!
3. Adobe Type Browser. Lets you view

and print any font before you buy.

4. Adobe Acrobat™ Reader. Lets you view and print type technical notes.
5. Buy a single font, like **Tekton™ Bold**, instead of a whole type package.
6. Exclusive font offers every month!

~~\$99~~ **Just \$49!**
until October 31, 1994.
Call 1-800-521-1976.

Order now and pick 2 of these type packages free!

- 249 **AG Old Face™**
- 246 **Albertus®, CASTELLAR™**
- 260 *Bellevue™*
- Berthold Scripts™*
- Boulevard™*
- 53 **Caslon 3, Caslon 540**
- 84 **Concorde®**
- 103 **Franklin Gothic**
- 92 **Post-Antiqua™**
- 122 **ADOBE WOOD TYPE™ I**



Offer good in the USA and Canada only. Offer ends October 31, 1994. Offer not valid in combination with any other special offer. Offer subject to availability. Offer subject to withdrawal. Adobe, the Adobe logo, Acrobat, Adobe Wood Type, ATM, Tekton and Type On Call are trademarks of Adobe Systems Incorporated which may be registered in certain jurisdictions. Albertus is a trademark of The Monotype Corporation registered in the US Pat & TM Off. and elsewhere. Castellar is a trademark of The Monotype Corporation registered in certain countries. Concorde is a registered trademark and AG Old Face, Bellevue, Berthold Scripts, Boulevard and Post-Antiqua are trademarks of H. Berthold AG. Macintosh is a registered trademark of Apple Computer, Inc. © 1994 Adobe Systems Incorporated. All rights reserved.

OFFER ID: WA39F

StockSIG

by Morris Pelham

Our beating the Dow strategy is having a rough year, or at least a rough beginning of the year.

Always, when you invest in the stock market, you first look at what prices used to be yesterday, last week, last month, sometime in the past. Second you decide, based on yesterday's prices, what to buy or not buy today. Third, you find out tomorrow, sometime in the future, whether your investment will go up, down or sideways in price.

Then comes the very important decision of what to do next. If your investment went down, do you sell out in fear that the loss might get larger? Do you freeze like a deer in the headlights and do nothing? Do you buy more at the lower price?

The group of stocks we purchased in December and January have gone down in price, so I began our April meeting by asking the assembled multitudes "What to do now?" Most of us have done nothing—I bought more at the lower prices, but none have sold. So we do not think that prices will go disastrously lower. At least we don't think so yet. We could change our minds and sell at any time, of course. None of us has seen next week's prices yet.

I brought to our April meeting and gave away copies of my spreadsheet showing April prices for the Dow stocks. Mark Pankin brought and passed around his spreadsheets showing the change in prices so far this year. Our beating the Dow strategy is down 8.7% and the Dow 30 are down 4.6% from Dec 31 to Mar 31.

We talked about the wisdom of purchasing shares in a cigarette company, Philip Morris. It could be like purchasing shares in an asbestos company.

PROMPT & RELIABLE REPAIR

- **Apple, HP, NEC, Radius, & RasterOps** authorized
- LaserPrinters & Notebooks
- Warranted repair - original parts
- **AppleCare** maintenance contracts
Special Discounts for W.A.Pi members

FC BUSINESS SYSTEMS

10565 Lee Hwy., Fairfax, VA • (703) 385-2758



**Authorized
AASP Plus
Service Provider**

But most of our large crowd had come to hear Mark Pankin talk about his Fidelity Select project, so after about an hour I turned over the meeting to Mark and set up the overhead projector for him.

This is at least the second time Mark has given us a full presentation on how this project works, how the funds are picked, and what the results can be.

What was new this time was the actual result of investing real money and paying real fees to Fidelity starting in November 1993. Mark has a profit of 3.8% from Nov 15, 1993 to March 28, 1994 compared to the losses in the Dow and our beating the Dow strategy. The Fidelity Select project is not as profitable at the beginning of this year as it would have been at the beginning of other years, but it is profitable.

Thanks, Mark!

At the end of our April meeting I copied my Fidelity Select data onto the floppies of several people who asked for it. Marvin Hass brought me an update that may help my Quicken give an accurate report, we'll see. Otherwise we talked a lot and went home at ten o'clock.

StockSIG meets the 2nd Thursday of each month at 7:30 p.m. at the WAP office. The office may move this fall. ■

TCS Guide
See page 12 for the ad about the TCS Guide. This is a guide that will help answer your questions—and yes, it is written in straight-forward English, so that we can all read it and understand.

Index to Advertisers

A Computerist 16

Adobe 1, 7

AllNet Service Center 79

Arminius 11

Dupont Computers 22

FC Business Systems 8

Greencastle Graphics 15

HyperGlot Software Co. 23

MacUpgrades C4

Publishers Service Bureau C3

TCS Guide 12

WAP Garage Sale Map 13

April General Meeting

by Lawrence I. Charters

APRIL WAS AN interesting month. The Pi made repeated requests, starting late last year, for Apple to stop by and demonstrate the new Power Macintosh computers, and didn't get a response. Then, in March, Apple (Cupertino) said it would have a presentation in April at NASA, in downtown Washington, and invited all DC-area user groups to attend. Nearly 30 people showed up, half of them Pi members — and Apple didn't even have a Power Mac to show off (the airline lost it). Most of the audience left.

That same night a local Apple representative, working out of the Reston, Virginia, office, demonstrated a Power Macintosh 7100 to seventy Pi members at the Columbia Slice meeting. Needless to say, the meeting was a resounding success.

In other words, for those of you wondering why Apple hasn't shown the Power Macintosh machines at a General Meeting yet, we've tried. Apparently someone at Apple thinks it isn't productive to demonstrate new technology to large regional user groups, deciding instead to de-emphasize user groups in favor of less focused presentations to "major markets." Needless to say, I've been highly impressed with their efforts so far...

Burning Issues

With the Pi holding elections in May, the start of the April General Meeting was taken over with election information and statements by officer candidates. Over half the candidates

were either busy with the weekly TCS maintenance or were attending the Apple II meeting, held back at the Pi office. This is, believe it or not, a Good Sign: it is always nice to know that those who would lead are also those who would work.

Problems with last month's projection equipment were solved in splendid fashion through the loan of a wonderful new Proxima projector. This compact unit combines the functions of an overhead projector and a color active-matrix LCD panel in one piece, and is exceptionally bright. It is also a snap to set up; we switched between a Mac IIci, a PowerBook 140 (with external video adapter) and a Compaq portable with only the briefest of pauses.

FoxPro

And why, exactly, did we have a Compaq computer at the April meeting? Andrew Coupe, a database systems engineer with Microsoft, used the Compaq to project Windows-based PowerPoint slides explaining the Microsoft FoxPro database technology. Since the Pi's copy of PowerPoint for the Macintosh (donated by Microsoft) can easily read PowerPoint slides prepared under Windows, Andrew got two points for the slide show but lost about 97 for "inappropriate use of technology."

He redeemed himself once he started showing FoxPro 2.5 in action. FoxPro is an immensely powerful multi-user relational database, capable of reading databases created with the MS-DOS and Windows versions of dBASE and FoxPro

without change. Additionally, it can run virtually all MS-DOS and Windows dBASE and FoxPro programs with little or no editing, making it a powerful cross-platform development tool.

While it has many powerful tools for developers, FoxPro's reputation in the Macintosh world is based on something more basic: speed. No other Macintosh database, relational or non-relational, even approaches FoxPro in terms of sheer speed. To illustrate this point, Andrew loaded a database (in FoxPro terminology, a "table") containing all the street names for the entire mid-Atlantic region of the U.S., with over 100,000 individual records. He then typed in a query for the street outside the meeting site and got an answer back "instantly." He looked up my home street, and again got an "instant" answer. He then looked up all the streets named "Main" in the area, and got a listing of over 2,000 records — "instantly."

What, exactly, does "instant" mean? In this case, it means as soon as Andrew pressed the Return key to enter his query, the Mac started displaying the answer. If you need speed, FoxPro has it.

To demonstrate the cross-platform nature of FoxPro, Andrew switched to his Compaq and showed a sample video store application, complete with a custom entry screen with nice buttons, scroll bars and other user-friendly touches. He then opened the same database on his PowerBook and, except for the screen colors, the database, and the program, looked identical.

FoxPro will be discussed in more detail in a forthcoming review in the Journal but, on the whole, FoxPro looks good. While Andrew offered no special deals to those in attendance, the "introductory" price of \$99 for FoxPro 2.5 might still be in effect by the time you read this. In mid-summer, the price will rise to \$495.

π

May 1994

In an attempt to avoid conflicts with Memorial Day, the May General Meeting is being moved up a week to May 21. This means you will probably read this after the meeting is over, in which case you missed a splendid presentation by Ares Software on their outstanding font technology. Proxima Corporation also had a representative on hand to talk about the wonderful portable projection equipment we've been borrowing over the past year. We probably did something else, too, but the crystal ball is getting a bit murky.

June 1994

Probably the most popular Pi events are the two semi-annual Computer Garage Sales, and the summer Garage Sale is scheduled for June 11, from 9 a.m. to 2 p.m. It will be held at the Hampton Mall in an old Rite Aid store, 9185B Central Avenue, Capital Heights, Maryland. There should be a map somewhere in the June issue, but it is easy to find: take I-495 to Exit 15 (between Landover and Andrews Air Force Base). Exit inside the Beltway onto Central Avenue (MD 214). Hampton Mall is immediately off Central Avenue on the left.

July 1994

Global Village is scheduled for the July 23 General Meeting, showing off their new telecommunications products. Joining them will be Microsoft's Home division, demonstrating their latest consumer offerings (CD-ROMs, games and applications).

August 1994

MacWorld Boston will be held August 2 to 5. This gigantic trade show has a number of attractions: great bargains, the chance to see new products, and the chance to sample Boston's history and restaurants. If you volunteer to work at the

Washington Apple Pi booth, you'll also get an opportunity to sit down — a treat after walking miles and miles through two exhibition halls.

September 1994

Washington Apple Pi will be moving in September. If you have a big truck, a strong back, and some packing boxes, or any combination of these, we can save Big Bucks by moving ourselves. We are moving to save money on rent, and every dime we spend on renovating our new quarters and moving the office will help save even more money. Since no computer expertise is required, it would be Real Nice if we saw something other than the usual band of volunteers.

Drawing Winners

Faux Cowhide Mousepad (Gateway):
Brian P.S. Nielsen
PC Week Inside ballcap: Glenn Paterson
Intel Inside ballcap (for use with SoftPC?): Jay H. Feinstein
T-shirt (Cheyenne): Dave Weikert
Canvas bag (Best Power Systems):
Mark L. Scire

Zap! How your computer can hurt you — and what you can do about it (Peachpit Press): John Rosenberg
Reader Rabbit: Erik Dunham
Supermines (Calisto): Brooke S. Webster
Microsoft FoxPro: Caroline Quant

Credits

Apple Macintosh IICI: donated by Falcon Microsystems
Microsoft PowerPoint 3.0: donate by Microsoft Corporation
Bernoulli 150 drive: loan courtesy Iomega Corporation
Proxima Ovation projection system: loan courtesy Proxima Corporation
Lounging TCS penguin: artwork by Nancy Seferian
Silver Spring Metro penguins: photography by Dennis Dimick
Dr. Fun cartoons: from the Internet via Jon Hardis and the TCS
Setup and worrying: Tom Witte, Lorin Evans, Beth Medlin, Bill Wydro
Send meeting comments to: lcharters@tcs.wap.org

WAP Bylaw Amendments

by Jonathan Hardis

The WAP Board of Directors, at their April 13 meeting, voted to amend WAP's Bylaws to make them comport with existing practice. The Bylaws were last amended on December 8, 1993 (Journal, February 1994.) Deleted material is shown in [brackets]. New material is shown +>set out like this<+. Issues of the WAP Journal giving notice of previous amendment, adoption or repeal of particular sections are indicated in brackets.

ARTICLE II - PURPOSES

WAP +>is formed to function as a charitable and educational computer club organized exclusively for pleasure, recreation and other nonprofitable purposes within the

meaning of section 501(c)(7) of the Internal Revenue Code of 1986<+ is organized for such charitable and educational purposes as may qualify it for exemption from federal income tax under section 501(c)(3) of the

Internal Revenue Code of 1954], as amended (or the corresponding provision of any future United States internal revenue law). More specifically, such purposes include, but are not limited to, mutual learning and education of members of the public who share an interest in computers. +>Substantially all of the activities of the Corporation shall be for pleasure, recreation and other nonprofitable purposes.<+

ARTICLE III - PROHIBITED ACTIVITIES

No part of the net ~~[earning]~~ +>earnings<+ of the Corporation shall inure to the benefit of ~~[or be distributable to]~~ its members, directors, officers +>, <+ or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article II hereof. No substantial part of the activities of the Corporation shall be the carrying on of propaganda or otherwise attempting to influence legislation, and the Corporation shall not participate in, or intervene in (including the publication or distribution of statements), any political campaign on behalf of any candidate for public office. The Corporation shall not carry on any other activities not permitted to be carried on ~~[(a)]~~ by a corporation exempt from federal income tax under Section ~~[501(c)(3)]~~ +>501(c)(7)<+ of the Internal Revenue Code of ~~[1954]~~ +>1986<+, as amended (or the corresponding provision of any future United States internal revenue law) ~~[or (b) by a corporation, contributions to which are deductible under Section 170 of the Internal Revenue Code of 1954, as amended (or the corresponding provision of any future United States internal revenue law)].~~

No member, director or officer of

the Corporation shall be financially interested, directly or indirectly, in any agreement relating to the operations conducted by the Corporation, nor in any transaction for furnishing services, facilities or supplies to the Corporation for compensation, unless the fact of such interest be known to the Board of Directors and unless such agreement or transaction shall be authorized by the Directors who have no interest, direct or indirect, in such agreement or transaction.

ARTICLE V - MEMBERSHIP

SECTION 1. CLASSES OF MEMBERSHIP.

There shall be three types of membership: regular, associate and guest. There shall be ~~[four]~~ +>three<+ classes of regular membership: family, student ~~[, educational institution and corporate patron]~~ +>and life<+. Any member of the immediate household holding a family membership shall be entitled to all privileges of membership, except that the family membership is entitled to a single WAP Journal and a single vote. Student membership may be held by individuals, under the terms and conditions set by the Board of Directors, for less dues than a family membership. ~~[Educational institutions and corporate patrons shall exercise the privileges of membership through a single individual and shall be entitled to a single vote. As determined by the Board of Directors, educational~~

!!REPAIRS!!

- Apple/Mac/I*M Motherboard Repairs from \$45.00 + S&H
- Apple/Mac/I*M Power Supply Repairs from \$45.00 + S&H
- Apple/Mac/I*M Drive Repairs from \$45.00 + S&H
- Apple/Mac/I*M Monitor Repairs from \$60.00 + S&H
- Apple/Mac/I*M Keyboard Repairs from \$12.50 + S&H
- Apple/Mac/I*M Upgrades Available!

Used Apple/Mac/I*M CPUs, Disk Drives, Monitors, Keyboards available for resale

Warranties to one year on most repairs!
Same day turnaround on most repairs!

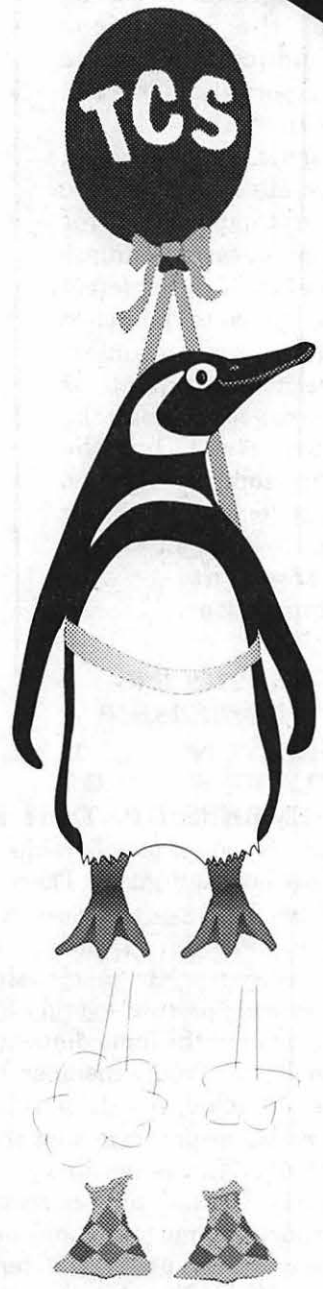
Arminius
8519 Orchard Avenue
Merchantville NJ 08109
(609) 662-3420

~~institutions and corporate patrons may be entitled to multiple copies of the Journal.]~~ +>The Board of Directors may award life memberships.<+ The Board of Directors may create one or more classes of associate membership. Associate membership may be offered to members of other groups and include a limited number of benefits of full WAP membership. Associate members have no voting rights and may not hold office. The Board of Directors may create one or more classes of guest membership to enable other persons to attend an individual WAP function. Guest members have no other rights or privileges. The Board of Directors may prescribe the other rights, privileges and qualifications of all classes of membership. [Amended July 1986 and February 1994.]

SECTION 2. ELIGIBILITY.

π

Membership in WAP is open to any person interested in computers of any manufacturer, size or kind and who satisfies the Corporation that he or she is willing to participate constructively in the Corporation's activities. ~~New +>members<+ {family members, educational institutions and corporate patrons}~~ shall be required to pay an initiation fee under the conditions prescribed by the Board of Directors. [Amended July 1986 and February 1994.] ■



100% Information Superhighway Certified!

**“The Fine Print:
A Guide To
Getting the Most
Out of the TCS”**

Only \$7.50
if picked up in person
at the office or at
meetings
(tax included)

\$9.50
if mailed
(tax included)

Limited Edition
Written in English
(With technospeak subtitles)

**Hold on to your socks:
The TCS is taking off!**

washington  pple pi

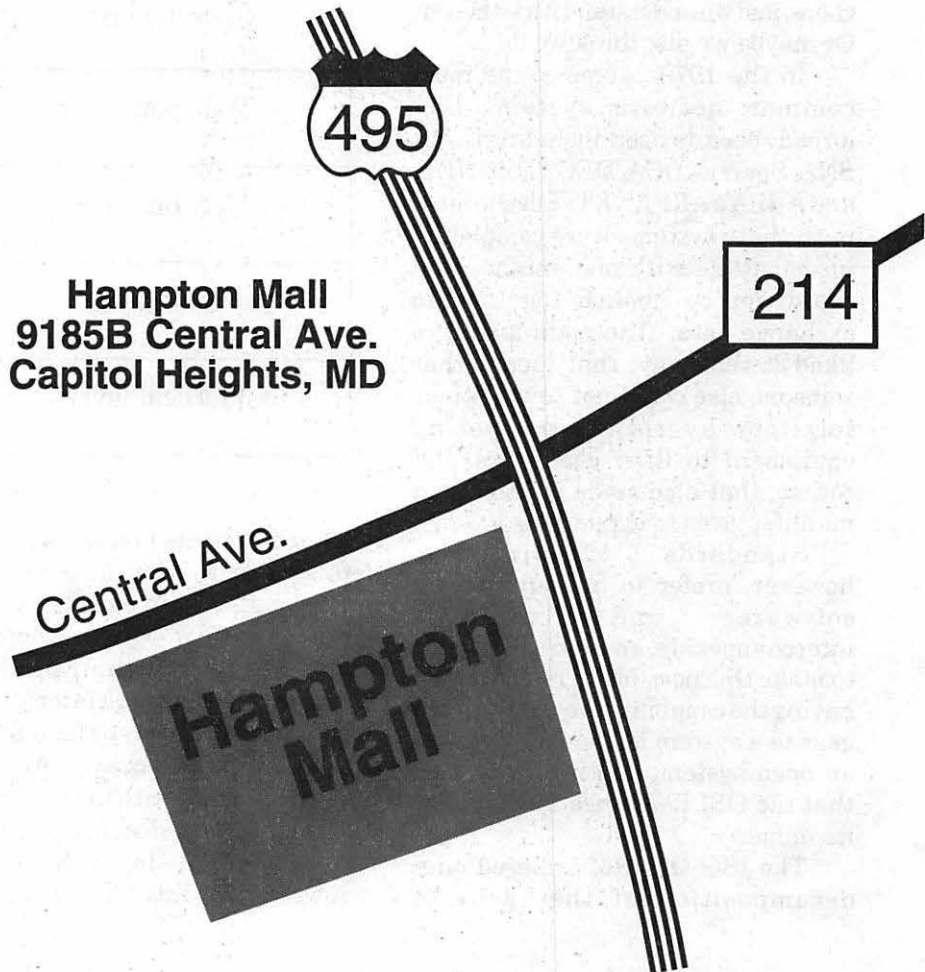
π

semi-annual computer garage sale!

**Saturday
June 11, 1994
9 a.m. – 2 p.m.**

Take I-495 to Exit 15
(between Landover and
Andrews AFB). Exit inside
the beltway onto Central
Ave. (MD 214). Hampton
Mall is immediately off
Central Ave. on the left.

**Hampton Mall
9185B Central Ave.
Capitol Heights, MD**



The ISO OSI Reference Model: Unscrewing the Inscrutable

by Dr. Roger M. Firestone

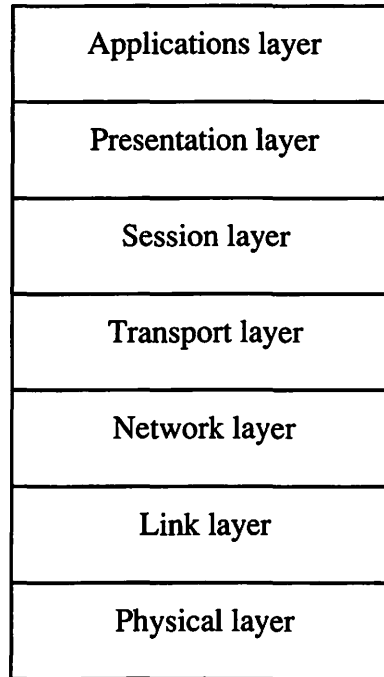
In the late 1970s the International Standards Organization (ISO) began work to bring some order to the continuing chaos that was characteristic of computer networking at the time. One of the results was the Open Systems Interconnection (OSI) Reference Model. We still have chaos in computer networking (as anyone who has to set one up or maintain one will attest), but it is much more orderly chaos, and we understand it a lot better. Or maybe we just think we do.

In the 1970s, some of the most common network systems had already been devised, including IBM's SNA, Sperry's DCA, DEC's DECNET, and ARPA's ARPANET. For the most part, these systems were completely incompatible with one another and could not be hooked together to exchange data. The manufacturers liked it that way; that meant that someone else could not invade their territory by selling competing equipment to their customers. Of course, that also made it hard for a manufacturer to expand his base.

Standards organizations, however, prefer to have parts and software and protocols interchangeable, and the ISO sought to make this possible. The concept of having the capability to attach foreign gear to a system is known as having an open system, and it is from this that the OSI Reference Model takes its name.

The ISO OSI RM is based on a decomposition of the tasks of

networking into seven layers, as shown in the following diagram.



Each of these layers has a well-defined role to play in networking operations. Within each layer there exist conceptual objects known as *entities*. An entity within a particular layer is only allowed to interact with entities of the same type for purposes of any distributed activity. An entity may interact only with the layer below it (except for physical layer entities, which have no layer below) by requesting *services*. The reason for

the existence of each layer (except the applications layer, which has no layer above it) is to provide services to entities in the higher layer.

This last point is sort of crucial: There is no point to networking things just to hook stuff together (at least if you've gotten old enough not to know where your mother put your Tinkertoy set!) but only to accomplish some real-world task. Companies have foundered in the world of networking because they did not have an application-driven viewpoint. Partly, this may have been because people new to the world of networking do not always have a good set of concepts in their mind for understanding what kinds of entities various familiar objects may be and how they are to fit together. The purpose of this article is to provide some guidance to developing a useful intuition about networking that will assist in understanding what networking is about. It will also help provide a way to talk sensibly about networking, and suggest how to do something useful with it, especially now that the TCS is becoming more involved with the worldwide Internet.

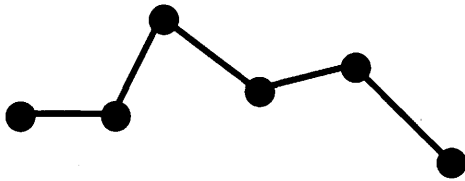
The Individual Layer Concepts

Let's look at the layers individually at first. The physical layer is certainly the easiest to understand, and it is the one that has been the most thoroughly standardized (going back even to the days of telegraphy). The physical layer is responsible for such details of communication as voltage used to represent 0 and 1 bits, choice of am, fm, or pulse modulation, and so on. An example of a physical layer standard is RS-232. The physical layer is the only place in the world of networking where there is something to kick if it isn't functioning.

The link layer uses services from the physical layer to connect two link entities. A link is the simplest

component of a network. When a user with a home computer connects to the TCS, a single link is involved. There are quite a lot of networking applications where the "networking" part is fairly trivial because there is only one possible link. The advantage of using a standard approach, though, is that it will still work when a more complex environment is introduced, whereas a system specialized to a single link may have to be rewritten to accommodate growth.

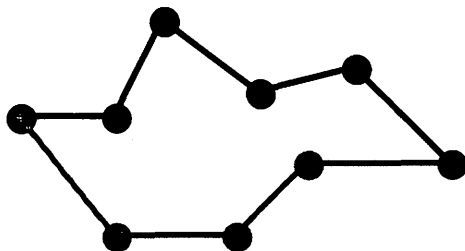
The network layer composes links to create a path from one point in a network to another.



A path created by the network layer

This path may be used to transmit multiple packets of information between the endpoints or just one packet. It is maintained between two network entities for as long as they mutually agree it is needed, unless some event occurs to break the path.

The transport layer makes use of network services to transport information between two points in the network, possibly using more than one network path, possibly by breaking up a packet of information into multiple subpackets.



A transport layer connection showing multiple network paths in use

An important distinction to remember between the network layer and the transport layer is that the network layer may send multiple packets over a single path, while the transport layer may break up a single packet and send it over multiple paths.

Many difficult issues are addressed in the network and transport layers. Primarily, these have to do with ensuring reliable transmission of data. Not only is it possible for data to be garbled due to line noise, but links may disappear,

causing data to be lost, and also, in the case of multiple packets and packets broken up into pieces, the parts may arrive in an order different from that in which they were sent. A great deal of effort has gone into the design of network and transport protocols to ensure that these issues are handled correctly.

The session layer is the first layer that tends to be visible to the everyday user. Unlike transport connections and below, connections between session layer entities are persistent over a long period of time, perhaps hours. An example of a session is a login to a remote computer using rlogin or telnet in the Unix world. There may be periods during a session connection in which nothing is happening (e.g., the user is thinking/daydreaming/sleeping/getting coffee!), and during these periods, no transport services are requested. It would be wasteful to maintain a transport connection when none is needed, so there is none. This is why an Internet connection at a relatively modest speed can support a large number of users. In fact, it is our old friend, time-division multiplexing (that is used heavily in the physical layer) in another guise.

**Desktop Publishing
&
Graphic Design**

Greencastle Graphics
Nancy Seferian

(202) 333-5244

1425 Foxhall Road, NW, Washington, DC 20007

A
C
O
M
P
U
T
E
R
I
S
T
™We service
Macintosh
Computers24
HOURS
ON
CALL

(703) 569-5584

A COMPUTERIST, LTD

services that Mac users might have some acquaintance with would be the conversion of Mac files to MacBinary or BinHex for transmission to other systems that do not understand Mac file formats as ASCII text or other format that can be managed.

Where most people become mystified is in the applications layer. This is because the ISO OSI Reference Model simply does not have much to say about what goes on there; the applications layer is the domain of the user and programmer who have something useful to accomplish. In fact, the human being using a computer is an example of an applications entity. So is any program that wants to interchange data with a program running somewhere else for the purpose of computation. The Model simply cannot tell you what it is that you want to program.

Reasoning by Analogy

The best way to understand all of these pieces and parts is to relate them to something that is already well comprehended. Teaching derivatives in calculus goes more smoothly when the concept is first introduced as a tangent to a curve and then as the position of a moving body.

The presentation layer is another easily understood one: It provides such services to applications as encryption of data, translation among formats (UNIX uses LF characters, where the Mac uses CR characters, and DOS uses both), and so on. Examples of presentation

So what are some examples we already know that are like networking? Consider the problem of going on vacation. This involves, let's say, driving to the mountains. The applications layer entities are, in this case, our vacationers, Mom, Dad, Junior, and Sis. (No letters about sexist names, please, and no complaints that I have left out the dog, either!) Dad is going to use the family car to get everyone to the cabin. To do this, he requests presentation layer services: The presentation layer translates pressure on the pedals to acceleration and braking, torque on the wheel to turning movements, and rotation of the speedometer cable to a display on the dashboard of speed (the presentation layer works both ways, of course). A period of driving comprises a session. The transport layer is trivial in this case, but if the family were big enough to require two cars, they could take different routes to the destination. The network layer composes the links of individual roads and highways into a path that leads from home to the cabin. And the physical layer is the obvious physical phenomenon of rubber meeting the road.

Another way of thinking about the relationship between entities at the same level in the OSI hierarchy and the relationship between an entity and its service provider is to consider the process of making a phone call to finalize a business deal. Perhaps the two individuals are in the US and Japan, respectively, and do not speak each other's language. Therefore, they must hire interpreters. The callers cannot interact directly but only with the interpreter—the presentation layer entity. Note that a responsible interpreter will not inject his own ideas into the business deal but will only represent faithfully what has been said to him. (A really good interpreter will handle idiomatic and cultural differences, but this is not doing any more than increasing the fidelity level of the conversation—just as a really good ASCII comms program will translate the ä character in German or Swedish into ae where necessary, but I have yet to see one that can do it!) And below the presentation layer, the session layer consists of the phone call itself, which had its own protocols for being established, in which, perhaps, Mr. Holton's secretary spoke with Mr. Fujimoto's secretary to be sure that the interpreters were on hand and so on, but neither secretary is privy to information above the session level. Finally, the phone call itself is carried by the telephone systems of several companies and nations; they have no interest in what is said, or even whether the phone is used to carry voice or data. Their job is to provide the transport services to maintain the connection as it is needed.

A last analogy might be that of mail. Again, the Postal Service provides a transport service only. The Postal Service is not allowed to open envelopes and

examine the contents (we'll omit the dead letter office from consideration) but only to get them from source to destination. Again, one could put another envelope inside the first to arrange confidentiality at the destination, and one can write in a foreign language or in mathematics in the letter. The same considerations apply as for our example of the phone call. The important points are the same. The entities at one level are not allowed to examine the contents of information from a higher level (leaving aside such things as checksumming and other forms of error correction which do not really examine the information as such but treat it as a bit stream, anyway). They are allowed to package things together going to a like destination (mail placed in containers at one regional sorting center and sent to another for its various local post offices). And they are required to be highly reliable. (No, I don't want to hear about your missing check!)

Some Real-World Examples

As the TCS user community becomes more familiar with the Internet world, a number of people have jumbled together some of these concepts. (What led to this article being written was someone referring to Usenet as a network, which it is not, anymore than the highway system is the same as the traffic on it, or the people and cargo inside the vehicles.)

Virtually everything that is in use on the Internet by Jane User is an applications layer entity, just as Jane herself is. That's why she uses them, after all; they do something she wants done. On the TCS, we have access to two Internet services, electronic mail (email) and Usenet. Neither of these is a network, each is an application that uses the network. These applications have their own protocols for communicating with peer entities on other systems. The

email protocol is called SMTP (simple mail transfer protocol) and the Usenet protocol is NNTP (net news transfer protocol). These protocols are applications layer protocols; anyone can write a new news reader or mail handling program if armed with a proper understanding of the protocols involved. To dispatch mail or news to the system, the program then must establish a connection through a lower level of services (the presentation layer is transparent for these applications). The details of sessions for exchange of mail and news is beyond the scope of this article, though. But it should be clear that neither email nor Usenet is a "network" in any sense of the word; they are applications that make use of the network (and higher levels of the system).

In the Internet world, applications entities make use of what are known as *ports* and *daemons* to provide for sessions on demand. A port is identified by a number, and the transport system in the Internet world knows how to distinguish messages addressed to a particular port on a particular machine. A daemon is a background program that provides some kind of ongoing service; in the case of networked applications, a daemon is designed to listen to a particular port number and wait for traffic. For example, the popular gopher application has a daemon, *gopherd*, that listens to port 70 as long as the system is up. If *gopherd* crashes, the access to gopher on that system is stopped until the daemon is restarted. There are also daemons for file transfer, login, email, and so on; each of these is an applications layer entity that provides a service to a client application elsewhere in the network.

Conclusion

Networking is still a complicated and challenging part of computer science. A significant part of the difficulty of networking is the lack of

understanding of the essential concepts because one has not developed a satisfactory mental model. By relating the networking definitions of the ISO OSI Reference Model to some everyday life situations (driving, telephoning, mailing letters), it is hoped that this article will provide some guidance to the perplexed. ■

**The
Garage
Sale**

June 11th

Location:

*The Old
Rite Aid Store
at Hampton
Mall*

9185B Central Ave.

*Capitol Heights,
MD*

Artists on exhibit

by Blake Lange

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

Artist Info: George L. Venable is the Senior Scientific Illustrator at the National Museum of Natural History, Smithsonian Institution, Washington, D.C. He has been with the Smithsonian Institution since 1971. George is the founder and past presi-

dent of the Smithsonian Institution Macintosh User Group. He bought his first Macintosh for home use in 1984 and convinced the Smithsonian in 1987 to buy for his use a Mac II which was later upgraded to a Mac IIfx. This was the first official Macintosh in use at the Smithsonian.

Tools: Macintosh IIfx with Mirror graphics accelerator and chargecard, 20MB RAM, 1GB Hard Drive,

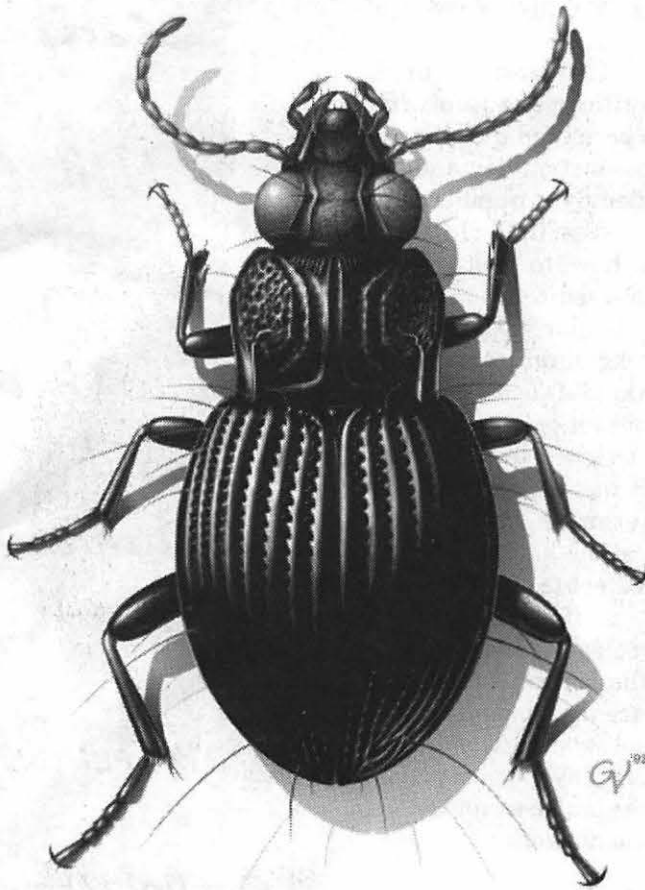
Syquest 44, Wacom Tablet, Adobe Illustrator, Adobe Photoshop.

Although George didn't initially seek a career in Entomology illustrating insects, he has found it rewarding. In his words, "Insects provide an infinite source of variety of colors, shapes, textures and patterns. ... Each illustration I do is of something that has never been illustrated before." He emphasized the computer is a very useful tool for the illustrator but without experience, skill and a willingness to practice, it would be like having a piano without knowing how to play it.

The two traditional techniques used in scientific illustration are pen and ink for line and carbon dust for tone. Adobe Illustrator has replaced George's pens and brushes for most line work, and Adobe Photoshop is used for the tonal pieces. Yet, even with all the computer tools, creating a scientific illustration is no easy matter. Because entomological illustrations are used for specimen identification and must be very accurate, one insect can take from 20 to 40 hours to render.

Before anything is done on the computer, an image is generally created for use as a template. This is most probably a preliminary pencil drawing or it may be one or more photographs that are scanned and imported into the programs. Frequently, because prepared specimens are very fragile and may have damaged or missing parts, several specimens of the same species will be used to create the final illustration.

The computer is a serious tool for creating composite images as well. George has been doing a considerable amount of photo compositing of Scanning Electron Micrographs, and



Batesiana eugeneae: Frontispiece for scientific publication on Peruvian ground beetles by Terry L. Erwin. Published with the permission of the Smithsonian Institution. Adobe Photoshop

Transmission Photomicrographs, often of specimens too small to be seen with the naked eye. One project recently completed was the compilation of a series of microfossil images captured with the electron microscope from a specimen smaller than 1/500th of an inch. Using Photoshop, the images were spliced together to create one continuous image, adjusting for minor variations in scale, brightness

and contrast.

A project George was working on at the time of our interview, was the creation of a composite image of a portion of a tiny nematode from 14 separate photomicrographs at x3000 power. One of the anomalies of microscopy, is the higher you magnify an object, the less depth of field you have. Consequently, you can never see the entire object in one view. For

example, if you were to put a person's face under a microscope, the nose would come into focus first, then when you focused to see the other features, the nose would disappear. By combining images from multiple levels the complete object may be constructed. In this case, it will be the first time scientists will be able to see the complete specimen.

After a drawing is complete it

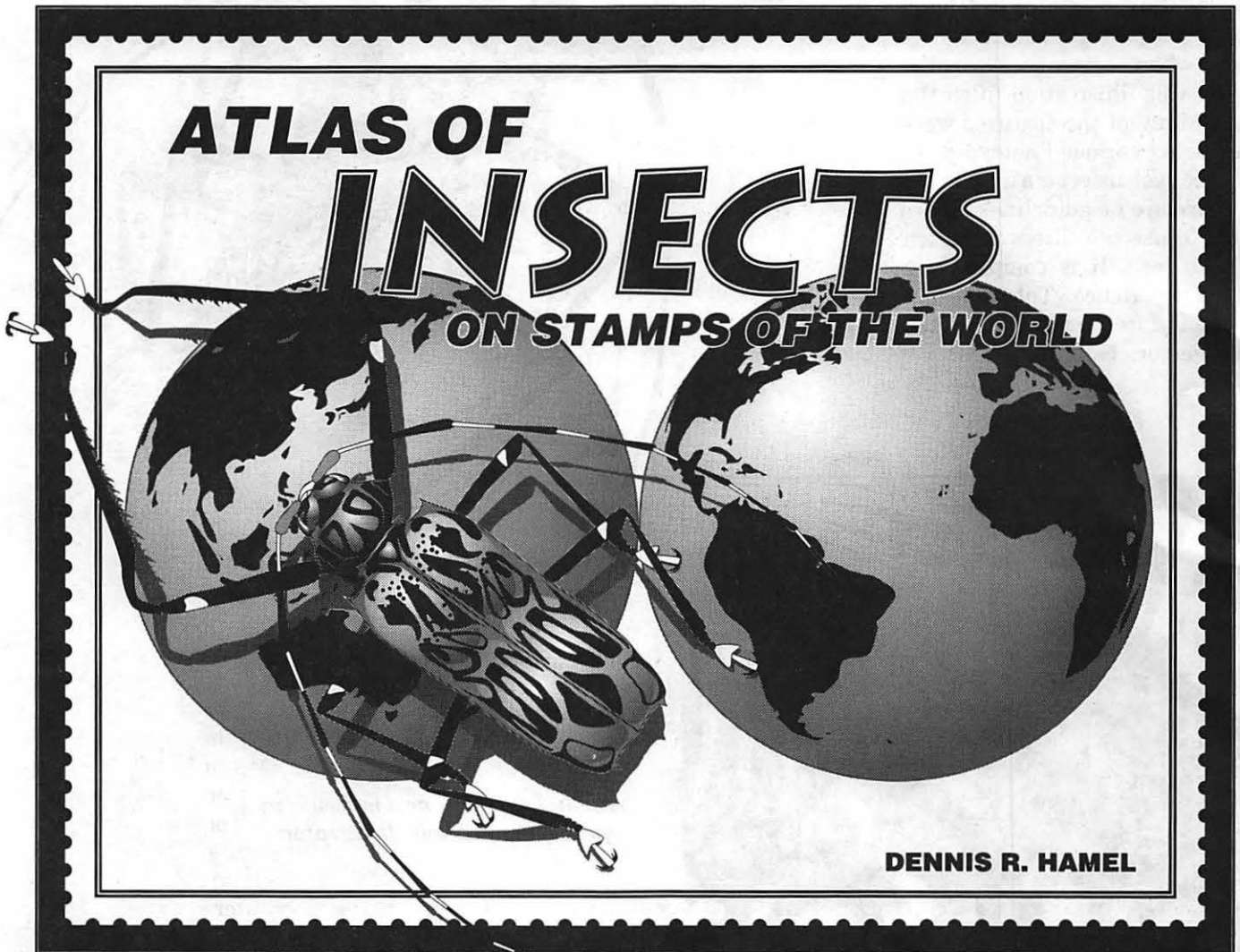
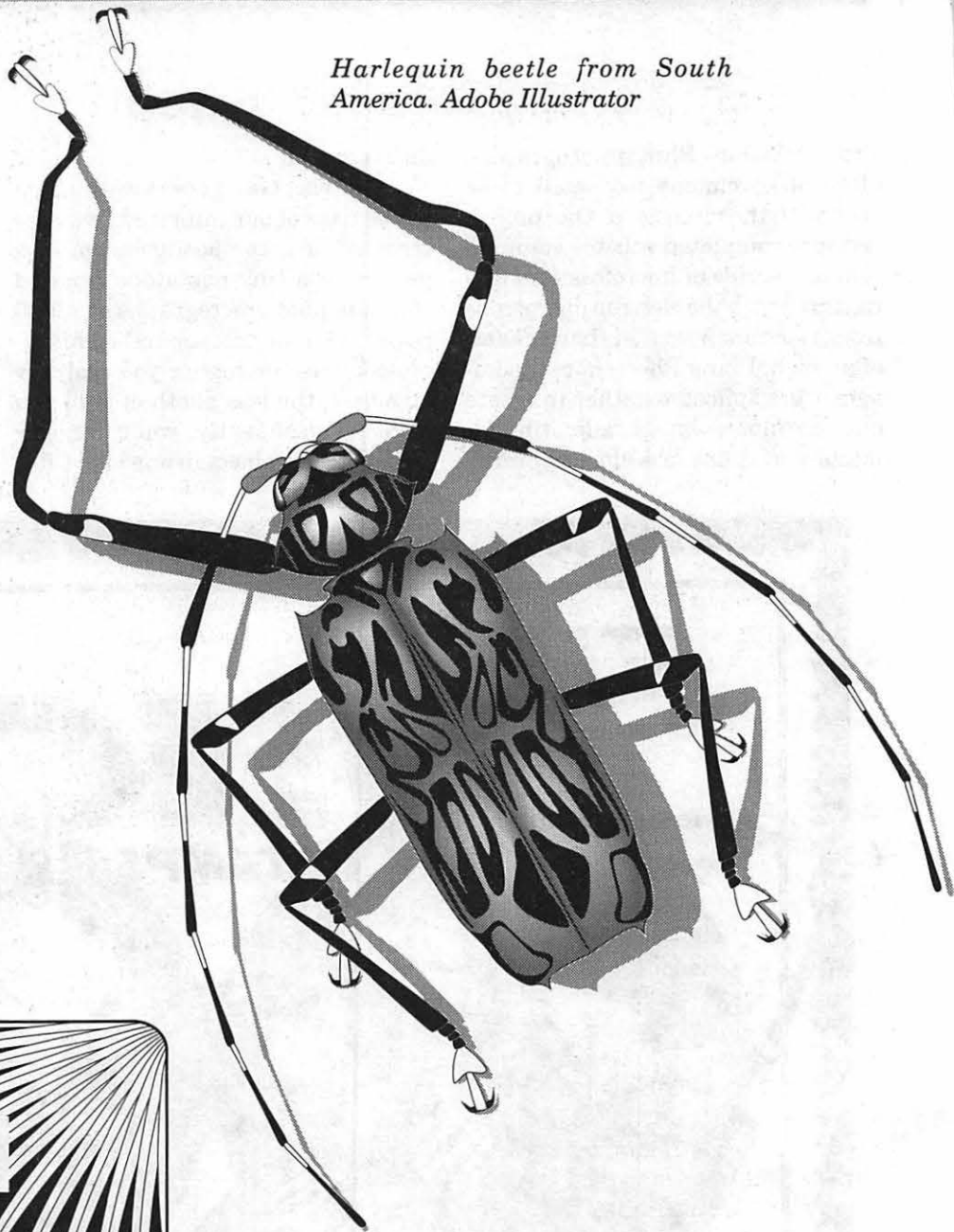


Illustration by George L. Venable © October 8, 1990

Stamp Atlas Cover: Beetle is a harlequin beetle from South America. Adobe Illustrator

Harlequin beetle from South America. Adobe Illustrator

may be hard to appreciate the effort that went into it. I was fortunate that George showed me how he worked on the image of *Batesiana eugeneae* in Photoshop. The drawing was rendered by creating paths using the pen tool similar to that in Illustrator for creating Bezier curves. These paths were named and saved so that masks or friskets could be selected to allow rendering in defined areas, and allowing them to be returned to when necessary. The paths menu for this illustration filled the screen. Many of the textures were created using various Photoshop filters. Since each insect is a unique life form, there are no guidelines for being able to use the filters to match their textures. It is completely a matter of experience. The computer gives one the freedom for unlimited trial-and-error. ■



Aconca: Logo for a new museum in Iquitos, Perú. Adobe Illustrator

*Logo design for new museum in Iquitos Perú
©G. L. Venable 1989*

Bits and Bytes Revisited

by Lynn R. Trusal

Home Again

I RETURNED to the Washington, D.C. area in June 93 after spending the last 3 years in Japan and traveling around Asia. It was fun and educational but I am glad to be back. I can tell you that the Macintosh is alive and well in Japan in a big way. The Tokyo MacWorld is, I believe, the largest in the world with attendance last year at well over 100,000. In fact, Apple reports that within 18 months Macintosh sales in Japan will exceed all of those in the U.S. I regret that my current work hours do not permit me to list a telephone number to field questions from WAP Mac users as I have done in the past, but I continue to "share the knowledge" in other ways. I hope this "Bits and Bytes Revisited" column will help in that effort.

Remembrances

First, I would also like to add my condolences to Mrs. Bernie Urban and Mrs. Marty Millrod on the death of their husbands during my absence. Both gentlemen contributed in immeasurable ways to the birth and growth of the WAP and both were truly dedicated to the "sharing the knowledge" philosophy I have talked about over the years. Their contributions to the WAP were many and their love for fellow users and sharing their knowledge in many different ways will never be forgotten.

Company/Product Fact Faxes

More and more companies have established "Fax Fact" lines to provide

an instant way of disseminating product information and technical information, but I am sure it also decreases direct person to person technical support and customer service needs. I see nothing sinister in this trend as long as companies also provide the person to person help that some users still occasionally need.

So far I have discovered four companies that have set up Fax Fact telephone lines. They are Apple, Aldus, APS and NEC. By now you are probably saying what is "Fax Facts." Basically, these companies (except Aldus) provide a toll free 800 telephone number that informs the caller about their fax facts system and offers various touch tone choices. You can have the system explained to you, order a general catalog, or order specific documents if you already know their catalog number. You first order the catalog which is faxed back to you and which is usually 3-6 pages long. Once you identify the specific documents you want, you call back and order them with touch tone choices. You must also enter your fax number and some other basic information. When you hang up, within seconds to several minutes, your phone will ring and you will begin to receive the documents you have ordered.

The best part of this system is that it does not cost you a dime except in the case of Aldus. The phone call is free and the company pays to send you the fax. It doesn't get any better than this and for a Type A person, this is heaven! I predict that in the

future most of the major companies will adopt this means of providing product and technical support information.

What things do you need to take advantage of this service you ask? You will need a touch tone phone line and a fax machine which is either a dedicated one or a computer fax modem. It must also be set to answer the phone. I prefer a computer fax/modem since you can store the file on the computer and print it out on a laser or ink-jet printer which significantly improves the quality of the output over a thermal paper based fax.

The Fax Fact phone numbers for these companies are as follows: Apple 800-462-4396, Aldus 206-628-5737, NEC 800-366-0476, APS 800-374-5802. Give them a try!

Apple Talk Remote Access

I recently got a Powerbook at work and one of the programs that came with it was Apple Talk Remote Access (ATRA). I had read about the program in several publications but really had no idea if it would be useful to me. I soon found out just how useful it could be.

ATRA permits remote users to actually log onto a remote Macintosh and to use applications or download files in an unattended manner. In other words you do not have to use a separate telecommunication software program or have a second party physically present at the time you are using ATRA.

Sounds easy but there are some limitations. First, the remote computer must be turned on, connected to a modem, be set to answer the phone, and have ATRA correctly installed on both machines.

ATRA version 1.0 came on two disks with the usual Apple self-installer. Various files for different types of modems are placed in the extension folder. In addition, other files must be in the control panel

MAC REPAIR CENTER

DCI Dupont
Computers
Inc.

1761 S Street, NW
Washington, DC
202-232-6363

Computers • Monitors • Printers

MAC REPAIRS

MAC UPGRADES

**MAC PARTS &
ACCESSORIES**

On-Site and In-House Repairs
Service Contracts Available

Special Discounts for W.A.Pi Members

folder, chooser, etc. You will need the file sharing files such as "Users and Groups" and "Apple Share" that come with Apple System software version 7.0 or greater. "Remote Access Setup," and a "Sharing" menu item that appears in the File menu once Users and Groups is selected are also necessary and part of the setup.

Proper setup can be somewhat tricky and reading the manual is recommended. You can give another user access to your entire computer network, just your Macintosh or even just one folder on your hard disk. Access is password controlled and you can also limit access by time or disconnect anyone at anytime if you are sitting at the computer.

Security concerns are an issue for consideration and such installation and access should not be

taken lightly. The major use of ATRA seems to be for corporate workers who are on the road a significant portion of the time and need to access their own computer at home or the main- or mini-frame computer at work.

As I see it, the biggest advantage is the ability to access programs or download files with no user present on the remote end. The biggest drawback is the need for 24-hr computer access, a modem set to answer the phone and possible security concerns.

While ATRA was provided free with initial Powerbooks, version 2.0 is now available and it is no longer free. I do not know the upgrade or mail order price, or if the new features are a significant improvement over version 1.0.

America Online

Before going to Japan, I belonged to GENie, but upon returning decided to give America Online (AOL) a try. I received a free AOL new member packet at a Pentagon Mac User Group meeting and signed up for 5 free hrs usage.

I was surprised at how user friendly the on-line services have become. They are almost idiot proof to use. The cost is \$9.95 a month for 5 hours of on-line time and \$3.95 for each additional hour. There are a lot of phone numbers to use but unfortunately it is a long distance call for me which adds to the hourly cost.

I have decided to stay with the service and have found more and more useful things on AOL as I have explored the various offerings.

They also have solved the access slow down brought about by a large influx of new subscribers and I have not experienced any more delays except during a one week period.

So far I have found the travel

section, investment section, software libraries for many of the software vendors and the on-line magazines to be the most useful.

If you are not already a subscriber to America Online perhaps it is time to jump on a portion of the "Information Super Highway." The phone number for AOL is 800-827-6363.

Don't Cry For (Me), John Scully!

By the time this issue of the Journal reaches you this will be old news, but once again John Scully is looking for a new job. He resigned from *Spectrum Information Technologies* which he joined as CEO after leaving or being forced out of Apple, depending on who you care to believe. He claims he was misinformed about the company and was used by the company owner to boost the stock price in order to enrich himself.

Whatever the story, John is looking for work but don't feel sorry for him. From *Spectrum Information Technology* he got a \$1 million salary and stock options as CEO.

More importantly, from Apple he received or will receive the following— He is being paid \$750,000 to ensure his cooperation with Apple over some pending lawsuits such as the Microsoft appeal and a shareholder suit. He also earned \$1.47 million in salary and bonuses from Apple in 1993, and got a \$1 million severance payment based on years of service. In addition, Apple is buying his Lear 55 jet for \$2.8 million and his California house for \$3.1 million.

When you add all that up you come up with over \$10 million in compensation, salary and bonuses from both companies in the space of 1 year. Who knows what other benefits we haven't heard about. Forget Golden, can you spell "Platinum Parachute", boys and girls!

John, my advice, is give it a rest for awhile and don't jump into something so fast this time. The next

time you may find yourself up in the air without even a silk parachute. You'll price yourself out of the marketplace.

NEC 3Xe CD-ROM

Having wanted a CD-ROM for some time, I finally purchased the new NEC triple-speed version from *Club Mac* where I have purchased several hard disk drives in the past.

There is now a 4x speed on the market but at a significantly higher price. The Multispin 3Xe model is \$589 while the 4X Pro sells for about \$935 by mail order. As with most CD-ROMs there is a bundle offer for \$100 additional to receive 5 CDs and a small pair of speakers. The drive also comes with some software extensions including, foreign file access, high sierra file access, ISO 9660 file access, and audio CD access.

The drive also included CharisMac's software to permit playing of music CDs on the drive. The music comes out of the pair of bundled speakers but music and speech emanates from the on-board speaker in the Macintosh when commercial CDs are used.

A recent article in *MacWorld* or *MacUser* only gave the NEC 3x CD-ROM a 2.5 star rating since the speed of the drive was largely the same as the Apple double speed CD-ROM. This apparently can be addressed by a new software driver but I don't know if NEC has done so.

One of the most useful CD-ROMs that came with the drive was the "Mayo Clinic Family Health Book" which provides a wide range of family medical information in an easy to access format. I also purchased the "Mayo Clinic Heart Book" which has a wealth of information about this most important body organ.

Although I have never been a game player, there were two bundled game CDs with the drive. The one with Indiana Jones proved to be more than a match for me and I guess I am

too long in years to be a successful computer game player.

If you purchase any CD-ROM, I *strongly* recommend that you take advantage of the various CD bundle offers that exist. Examine the list of available CDs carefully and buy as many as you find useful at the same time as you purchase the drive. There is no cheaper price for CDs than the ones available when you purchase the drive. In fact don't purchase a CD-ROM unless you can find a number of useful existing CD's that would be of direct benefit to you.

Helix Express

I have been a long time user of *Double Helix* one of the original programs for the Macintosh. It has undergone many changes not the least of which is a new company and new name. The original developers went bankrupt and the new Helix Technologies, Inc. was spun off with some of the same principles in charge.

Helix Express (old *Double Helix*) is now available in version 2.0. Although I still like the database and its unique icon driven architecture, I have some problems with the company itself.

For some reason only known to them, they have developed the bad habit of charging credit cards before shipping products and in some cases months before shipment. Most software companies and wholesalers have abandoned this practice and for good reason. Good companies just don't do that any more.

I paid for the upgrade to version 2.0 in August 93 and after several delays, finally received it in December. Of course my credit card was charged back in August. More recently, I had to wait for several more months to receive a separate purchase of the complete

LEARN A FOREIGN LANGUAGE!

It's EASY with Software from HyperGlot!

The most complete line of foreign language software for the Macintosh available anywhere. Our products are used extensively in universities and by individuals throughout the world!

SPANISH-FRENCH-JAPANESE-GERMAN
RUSSIAN-ITALIAN-ENGLISH-CHINESE

To Order, or to receive a free catalog, call
1-800-800-8270
or write:
P.O. Box 10746
Knoxville, TN 37939

HyperGlot the foreign language software company.

new documentation, but my credit card was charged as soon as the order was received.

Such practices lead one to believe that the company is still having financial trouble, but I have no way of knowing that for sure. I would recommend that Mac users decline to do business with software or hardware companies that charge credit cards upon receiving the order instead of when the product is shipped. ■

Lynn R. Trusal is currently serving as a U.S. Army Medical Research, Development, Acquisition, and Logistics Command, Staff Officer in the Pentagon.



A Taste of Miscellaneous, or [C7.B10]

by David L. Harris

To clear this up right away, [C7.B10] refers to Conference 7, Board 10 of the TCS. It is also known as comp.sys.mac.misc, General discussions about the Apple Macintosh. I am going to try to give you a taste of the kinds of things that can be found on the Usenet areas (Conferences 5 - 8) of the TCS. Conference 7 contains Macintosh topics from items for sale to HyperCard to games. It also contains a Power Macintosh board. Board 10 of Conference 7 is a bit of a catchall area of Mac-related topics. To get an idea of the kinds of messages you will find there, here is an example of entering a TitleScan All command at Board 10:

```
TitleScan: All
Msg # 11529 Subject: An interesting
problem...
Msg # 11530 Subject: Re: Request for
advice on RAM Disk
Msg # 11531 Subject: Re: Apple CD-ROM Set-
up 5.0.1 #*$&@
Msg # 11532 Subject: Re: PPC SoftFPU
Msg # 11533 Subject: Ready, Set, Go files
and Ventura Publisher
Msg # 11534 Subject: Re: Review: LineLink
144e $99 Modem, part 2 of 2
Msg # 11535 Subject: Re: LineLink 144e/
problems
Msg # 11536 Subject: Re: Is Stacker a good
thing?
Msg # 11537 Subject: Postscript and
offending command error message from Print
Msg # 11538 Subject: Another RAM doubler
conflict
Msg # 11539 Subject: Re: HELP!!! I need
to know some MAC ftp sites
Msg # 11540 Subject: WANTED: s/w to drive
Sharp JX-100 serial port scanner
Msg # 11541 Subject: Re: America On Line
has p
Msg # 11542 Subject: Re: Another RAM
```

```
doubler conflict
Msg # 11543 Subject: Inverting the mouse?
Msg # 11544 Subject: Re: Another RAM
doubler conflict
Msg # 11545 Subject: Re: NEW APPLE T-
SHIRTS!!!!
Msg # 11546 Subject: Re: WHAT DO YOU NAME
YOUR HARD DISK?
Msg # 11547 Subject: .au files on Mac???
Msg # 11548 Subject: Re: program that
shrinks window to just menubar
Msg # 11549 Subject: Re: LCIII upgrade:
how long will it be available?
-More-
```

The —More— prompt appears when one screenful of text has been received (if you haven't changed your User Profile); typing a <spacebar> continues the listing. Messages with Re: after Subject: are replies to earlier messages. And as you can see, spelling and grammar are not necessarily strong points of Usenetters! (I got the spelling checker to work on *my* text!)

Okay, which of the messages above interested you? Probably not the ones I chose. Here's how a message actually looks:

```
CS-ID: #11534.c7b10/msgs@pro-applepi, 892
chars
Date: 22 Apr 1994 23:13:02 -0400
From: njmaugbill@aol.com (NJMaugBill)
Subject: Re: Review: LineLink 144e $99
Modem, part 2 of 2
Newsgroups: comp.sys.mac.misc
Message-ID:
<2pa3nu$q5v@search01.news.aol.com>
Lines: 6
```

```
In article
<2of09a$mua@search01.news.aol.com>,
richrauch@aol.com (RichRauch)
writes:
```

The LineLine 144e works just fine with an Apple IIGS. I have it sitting on the Classic hooked to both with a switch box. bill

This is quite a short message about the LineLink high speed modem. It was posted from America Online (aol.com). Usenet regulars will be familiar with the opening line of the message body — 'In article...soandso writes:' to refer to the text of a preceding message. Most people use it, as it is a feature of their newsreader. I personally find it stilted after seeing it a few dozen times.... In this case, the writer does



not seem to have included the text he was referring to.

Here's another one. This one does quote (>) a previous message:

CS-ID: #11553.c7b10/messages@pro-applepi, 1277 chars
Date: Sat, 23 Apr 1994 12:34:27 -0800
From: jwd@uclink.berkeley.edu (jwd)
Subject: Re: Inverting the mouse?
Newsgroups: comp.sys.mac.misc
Message-ID: <jwd-230494123427@momokuri.hip.berkeley.edu>
Followup-To: comp.sys.mac.misc
Lines: 16

In article <yjc-230494130054@b61539.student.cwru.edu>, yjc@po.cwru.edu (Jerome Chan) wrote:

> Is there a utility that would -invert- the mouse? Whenever I move up, the > cursor would go down? When I move left, the cursor would move right? I've > got a friend who seems to be able to use the mouse only when it's inverted. > It's difficult to click on a Mac mouse button when it's inverted.
>
> Can anyone help?

Turn your screen upside-down. Actually if you can find an older style mouse with the button closer to the middle it may help. Have you thought about a trackball or other sort of pointing device? I suppose the final option is to invert your friend, but that would not be very nice...

-
jwd@uclink.berkeley.edu

Here's one that includes a 'signature' at its end:

CS-ID: #11557.c7b10/messages@pro-applepi, 1785 chars
Date: 23 Apr 1994 20:30:27 GMT
From: atlauren@uci.edu (Andrew Laurence)
Subject: Re: Another RAM doubler conflict
Newsgroups: comp.sys.mac.misc
Message-ID: <atlauren-230494132931@dialin33514.slip.nts.uci.edu>
Followup-To: comp.sys.mac.misc
Lines: 23

In article <Coq2rq.r4L@mozo.cc.purdue.edu>, alfarogx@expert.cc.purdue.edu (gabriel alfaro) wrote:

> In article <2061000005@cdp> McAldon International Inc. <mcaldon@igc.apc.org> writes:
> >The American Heritage dictionary, etc. won't run with
> >RAM doubler, at least not on my 650. DMcKenzie
>
> I'm not sure if this has been mentioned, but Now Fun! FunPictures > utility won't work on my C610 until I turn off RAM Doubler. Anyone else > have this problem? alf.

FunPictures works great for me. Are you using FP v1.0.1? Also, RamDoubler 1.0.1? If not, updaters for both are available at your friendly neighborhood ftp site.

Andrew T. Laurence | America Online:
DrewsterTL
Apple Student Rep | AppleLink:
Drewster
UC Irvine | Internet:
atlauren@uci.edu

| Mama always told me not to look
into the sights of the sun |
| Oh but mama that's where the fun is
-Bruce Springsteen |

Here are a few more messages. For brevity, I have removed most of the headers and signatures:

Subject: How to DOWNgrade a Classic to 6.0.8?

A friend of mine wants me to downgrade her Mac Classic (4/40, I believe) from System 7 to System 6.0.8. Is there anything special I should know about this, or can I just go ahead and use the 6.0.8 installation disks and remove the System 7 files?

Oh, and is there any compelling reason we



shouldn't do this? I realize there are lots of nifty features about System 7 that you'd lose in downgrading, but damn, is it slow.

Subject: Re: LCIII->PMac Upgrade?

In article <2p47mh\$fdb@carbon.denver.colorado.edu>, aerineha@ouray.Denver.Colorado.EDU (Eric at CU-Denver) writes:

> I saw a picture (don't remember if it was MacWorld or MacUser) of a > "prototype" PowerMac that was pretty clearly in an LC-style case, so > evidently it *can* be done. (The cover was off to show the logic > board, but it looked like an LC case, it wasn't big enough to be a > 610-style case...)

Apple has promised an upgrade path to Power PC from the Performa 475/Quadra 605/LC-475 style, which uses a case similar to the LC-III. Is that what you're referring to?

Subject: Re: Mac Plus - Is there any point?

A Plus is still a good little machine. If you put a min of 2.5 MB ram and get a 40MB external HD it can run a lot of software. I have seen used 40MB drives for as little as \$75. 2MB Ram will cost \$80 or so

Subject: Re: The Best Way to Encourage Better Shareware

In article <2pdjpc\$og4@golem.wcc.govt.nz> (comp.sys.amiga.audio,comp.sys.amiga.programmer,c omp.sys.amiga.misc,comp.sys.mac.programmer,com p.sys.mac.apps,comp.sys.mac.misc,alt.binaries.sounds.mocs,com p.sys.ibm.pc.demos,comp.sys.ibm.pc.soundcard), watts_g@ix

.wcc.govt.nz writes:
> Personally, I'll start sending in shareware fees a damn sight more regularly, > when authors make available bank account numbers for payment via International > Money Transfers.

I get about 30% of my shareware registrations from overseas. My reg fee is US\$19.95 so I often get a US\$20 bill sent through the mail. Sometimes I get a postal moeny order in US funds - most of my Japanese registrations are in this form, though almost all the registrations from other countries are US\$20 bills.

So, shareware authors, ask for either US\$10 or US\$20 to make it easier for your overseas supporters...

___ Michael Peirce ___
peirce@outpost.sf-bay.org
___ Peirce Software, Inc. ___ 719 Hibiscus
Place, Suite 301
___ San Jose,
California USA 95117-1844

Subject: NEW APPLE T-SHIRTS!!!!

New from Plan B in Little Rock, AR [A top-flight studio :-)]!!!!!!

Apple T-shirts designed by us for the masses out there who want somthin' a little different....

"Apple: The power to beat up the little guys"

This slogan is emblazoned on the screen of a 660AV on the shirt in color in APPLE's Garamond typeface. The computer is in grey-scale, an illustration in postscript from APPLE itself. This shirt looks great, like it came from APPLE, only they would never say this!!

ALSO.....

"Newton...O.K., so we made a @\$#&*ing mistake!"

The Newton logo is huge on the front in yellow and black with APPLE's typeface making this look like a factory original shirt...with a twist!

HOW MUCH?

Only \$10.00 prepaid (and we pay shipping!) MONEY BACK GUARANTEE! We have sizes up to XXL and the shirts are 100% cotton Hanes BeefyTee from one of Little Rock's best screenprinters.

To order, e-mail us or send the amount of



tee shirts you need a check to:

Plan B Consulting
5620 W12th Ste. 8
Little Rock, AR.72204
501-666-8010

THANK

And a follow up:

Well, you obviously chose to ignore the previous email message I sent to you about this advertisement. I wasn't sure if it was just a joke but since I am now reading it again in the comp.sys.mac.misc Usenet group I'll have to believe that it isn't a joke.

I have sent a message to the system administrators at AOL complaining about your inappropriate post.

Subject: Re: elementary school on internet?

John Hesterberg (jph@cray.com) (John Hesterberg) wrote:

- > My daughter's elementary school is interested in getting access to
- > the internet. They currently have Macs, so a mac-based solution
- > is probably in line.
- >
- > - What is the best way to go about this?

Send e-mail to jensen@informns.k12.mn.us. He helps run the TIES Internet services (InforMNs), which offers Internet access to all Minnesota schools for a small (relatively) charge. The system isn't great (i.e. it's all menu driven, so you can't drop to a Unix prompt and do whatever you want) but it offers USENET, e-mail, FTPing, and (don't get too excited!) KERMIT file transfer!!! It's a good start for most schools, 'cause it's got a decent gopher server will all sorts of education related stuff on it.

It isn't as good as getting your own T1 or leased line (like I heard Stillwater was thinking about), but it's a good start.

For my last entry, here's one of a type I seldom see:

CS-ID: #11708.c7b10/msgs@pro-applepi, 845 chars
Date: Mon, 25 Apr 1994 10:15:47 GMT
From: meier@ira.uka.de (Joerg Meier)
Subject: An alle c't-Leser
Newsgroups: comp.sys.mac.misc
Keywords: VT-Karte
Message-ID:
<1994Apr25.101547.9214@eiss.ira.uka.de>
Lines: 13

Hallo Leute,
ich habe mir die c't-Videotextkarte aus Heft 7/92 f"ur meinen Apple Macintosh gel"otet und ben"otige die entsprechende Software aus Heft 4/92. Falls es jemand geschafft hat, das Listing zu compilieren oder sich die Software aus der c't-Mailbox beschaffen konnte, w"urde ich mich freuen, wenn sie mir jemand mailt (hqxd oder uencoded).

J"org Meier.
e-mail: meierj@ira.uka.de

Here are a few hints about using the TCS Usenet boards. Board 10 contains 200 messages maximum. When new messages are received by the TCS, old ones scroll off and are no longer available. Other boards may have as many as 350 messages or as few as 100. When you read messages, the TCS remembers, and the next time you log on, you will be given the number of new (unread) messages on each board. Unless you return within a day or two, however, on many boards all your old messages and some new ones will have scrolled off, and you may miss messages. Do I sign on frequently enough to see all the new messages? No...

There are so many messages coming into the TCS Usenet conferences that I find it impossible to read them all. A strategy that has worked for me is to do a TitleScan New on each board, record the numbers of messages that seem of interest, and then read those. (So if you post, submit a catchy Subject.) When I have done that for all the boards I have selected on a Conference, I do an Adjust Pointers to set the TCS so that it thinks I have read all the messages. Then the next time I go to the conference I only have to TitleScan for new ones...

From these messages I hope you have a taste for what is found on comp.sys.mac.misc. Maybe you even learned something useful about a particular subject? Much more is to be found on this and other TCS boards. And if you sign up for TCS Premium service you can post replies to Usenet messages which will zoom around the known world... scary, isn't it? ■



Macintosh Tutorials

VOLUNTEERS AND INSTRUCTORS—You can't have training without teachers. If you have expertise in any subject useful to Mac or Apple users, please consider teaching. Instructors have an opportunity to work with students in small groups and informal settings. The teaching process is truly rewarding. Besides the spiritual and intellectual, rewards also include compensation; you will be paid. We especially need someone who can offer training in *Excel*. Call me if there is a subject that you are qualified to teach.

I am very pleased with the response to our requests for volunteers. We have a very bright and enthusiastic group of volunteers working to bring you the best possible classes and programs. We encourage and welcome additional support for the training program. Graphic designers, desktop publishers, and illustrators—we could use your help in promoting our program with brochures and fliers. For further information call Beth Medlin at the Pi office, (301) 654-8060.

Macintosh Tutorials— The Macintosh introductory tutorials are a three-part introductory series designed for beginning users or those desiring to brush up their skills. The primary focus of these courses will be on the System, Desktop, Icons, Windows, and basic concepts in System 7, but System 6 hangers-on are welcome and encouraged to participate. Their

Some specifics

■ **Where:** Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 7910 Woodmont Avenue, Suite 910, Bethesda, Maryland.

■ **When:** Unless otherwise stated, all tutorials are three hours in length and begin at 7:00 PM on the date listed. The office building is secured at 6:00 PM. To gain access, pick up the telephone located by the glass entry doors and tell the operator where you are going.

■ **Fees:** \$25.00 per class for

members and \$35 per class for non-members. Pre-registration and payment must be made to hold a seat.

■ **Class Size:** Class size is limited to 6 students per class.

■ **Bring my computer?** All classes are taught seminar-style with the instructor using a computer and an overhead display. We encourage students who wish hands-on training to bring their computers.

■ **Instructor Cancellation:** If a class is cancelled by the instructor, all students will be notified of the cancellation. Please

issues and concerns will be addressed. Please try to take all three parts; this is the most beneficial arrangement.

Introduction to the Macintosh, Part I (Course # M061394)

You should go through the Guided Tour disk that comes with your computer or system upgrade kit before you come to class. You'll learn: how to safely turn your Macintosh on and off; what the basic dos and don'ts are; how to understand common Macintosh terminology found in manuals and other documentation; and how the basic components of your Macintosh system, hardware and software, work. You'll also learn why the Macintosh user interface is consistent across all applications, and how this makes learning and using software easier.

Materials Required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.

Date: Mon., June 13, 7-10 pm.

check your home answering machine if you have not given a work number for notification.

■ **Student Cancellation:** A cancellation must be received by the office 72 hours before a class is scheduled. The only exception to this is a cancellation due to illness.

June Tutorials are the 4 basic ones;

- **Intro to Mac 1** 06/13/94 (M061394)
- **Intro to Mac 2** 06/20/94 (M062094)
- **Intro to Mac 3** 06/27/94 (M062794)
- **Maintaining the Mac** 06/22/94 (M062294)



Introduction to the Macintosh, Part II (Course # M062094)

Part II will continue the exploration of the basic components of your Macintosh system, hardware and software. You'll learn more of the dos and don'ts; the finer points of the Menu Bar, Error Messages, Dialog Boxes, Icons, Folders, Keyboard Shortcuts, Scrapbook, and Clipboard will be discussed. You'll learn the basics of installing software, as well as about the Chooser, peripheral devices, and how they are connected to the Macintosh.

Materials Required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.

Date: Mon., June 20, 7-10 pm.

Introduction to the Macintosh, Part III (Course # M062794)

Part III will follow up the concepts in Parts I and II. You will learn more advanced Macintosh skills and terminology; about the system software and using, installing, and updating system files; about managing

memory, hard disk space, fonts, sounds, and other resources, the Apple menu, aliases, launching applications, inter-application communications (Publish and Subscribe), and Balloon Help. You'll also learn about how to buy hardware and software, how to upgrade, and what kinds of software are available for your Macintosh.

Materials Required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.

Date: Mon., June 27, 7-10 pm

Maintaining Your Macintosh (Course # M062294)

How to maintain and troubleshoot your Mac. Topics will include: organizing and managing your hard disk; backing up and back-up strategies, archiving, disk formatting, defragmentation and optimization; managing start-up resources (including System 7 extensions or System 6 INIT's); avoiding conflicts and in-

compatibilities; virus protection; memory management; upgrading or replacing the operating system; system enhancements; customizing software installation; cleaning your mouse; and Macintosh "housekeeping" philosophies.

Date: Wed., June 22, 7-10 pm.

Other Educational Opportunities

Desktop Publishing & Graphics tutorials are given by Clockface & Creole Communications Inc. Please contact Manolo Almagro at 301-718-0612 for details.

Washington Apple Pi Tutorial Registration Form

Washington Apple Pi
7910 Woodmont Ave., Su. 910
Bethesda, Maryland 20814
301-654-8060

Name _____

Address _____

City/State/Zip _____

Phone (day) _____ (evening) _____

Member Number _____ Non-member _____

Number of Classes _____ x Class Fee \$ _____ = Total Fee \$ _____

Check/Money Order Credit Card

Card Number _____

Card Expiration _____ Signature _____

Can you bring your own computer to the class? Yes No

Please fill in the course number of the class(es) that you wish to attend.

Class #1 _____

Class #2 _____

Class #3 _____

Class #4 _____

Class #5 _____

Class #6 _____

WAP Form #CL006 (mod. 7/90). Mail registration and payment to the above address.

Computer Networks and Networking: A Primer

by Mauri P. Collins,
Pennsylvania State University

[Note: This article is re-printed from the Interpersonal Computing and Technology Journal, published electronically by the Center for Teaching and Technology, Academic Computing Center, Georgetown University, Washington, D.C. The editor of this scholarly journal, Gerald Phillips, can be reached via Internet electronic mail at: GMP3@PSUVM.PSU.EDU]

The director of the Center for Teaching and Technology is Zane Berge, who can be reached via Internet electronic mail at BERGE@GUVAX.GEORGETOWN.EDU]

"It would be nice," I thought, "If I could just understand what they are saying!" The earnest young person at our academic computer services helpdesk had, from the tone of her voice, answered my question. And I heard all the words, but it sounded almost like a foreign language. I had recently bought a modem for my home computer and had been told that a whole new world would be opening up to me—but it was turning out to be a world with a baffling language that didn't make very much sense to me.

I was asking the consultant what I thought was a relatively simple question. I needed just enough information to get my computer at home connected to my account on the university's mainframe computer. And that was all I needed to know right then. I was looking for an answer in terms of "Put this disk in your drive, (or load this program on your hard-drive) and type this..." But they insisted on explaining to me far more than I could possibly understand. I was bewildered by the complexity of their information and quite lost in their language. They seemed to be assuming that, because I was asking the question, I could

understand their answer.

And I wondered how many of our readers had the same problems with the technical terminology, and the acronyms that it seems almost impossible to avoid. I have progressed in my understanding since I started and thought to share, in simple terms, some of the basics I have learned about networks and networking.

A Modem

A modem is piece of equipment that turns characters into sound and back again, so that I can send messages that I have typed, or am typing, out over a phone line to communicate with other computers and other computer users. My modem processes information at 2400 bits per second. (A "bit" (binary digit) is the smallest piece of information that can be processed and is actually an on or off electrical pulse. It takes a series of these bits to represent a single character.) This is fast enough for my needs, although the computer I use at work has a hardwired connection (a direct line from the back of my computer to the mainframe computer) that transmits information back and forth at 9600 baud (four times faster than at home).

Networks and Networking

Of all the terms a new user of computer-mediated communication has to deal with, "network" may be one of the most confusing. One use of the word refers to the permanent, physical connections between and among computers: the wires, fiber optic cables, microwave links, phone lines etc. that connect computers together, and allow their users to communicate with one another.

Another, more general use of the word refers to all those computers, while not physically linked together, that circulate messages with a particular set of headers (like Usenet NetNews articles). This kind of network can be referred to as a "virtual network". This means that the computers carrying the messages may not be permanently linked together in a network that physically exists, but are made by software to appear so (like "virtual" reality and "virtual" memory). It is in this sense that many people use the word "network".

The permanently connected networks comes in all sizes from local area networks (LANs) of 2 or 3 machines linked together in a single room to international, composite wide-area networks (WANs) that span the globe and include satellites and microwave transmission to move the information. The physical set up of networks can be likened to a variegated patchwork of independent telephone companies serving their own areas and yet linked together so that they can exchange the virtual equivalent of long-distance phone calls between distant locations.

The Internet

The very first wide-area computer network in the United States was known as the ARPANET and linked research universities and military installations together so researchers could communicate with one another

and expensive resources (like computers and databases) could be shared. Over the years this initial network was joined by an ever increasing number of regional and local networks. The Internet is made up of over 10,000 of these individual networks connecting over 20 million users worldwide.

TCP/IP

With as many different kinds of computers and operating systems and software that are in use, it has taken a great deal of cooperation to come up with a common language and set of standards that could be used to exchange information.

One of the most commonly used standards is TCP/IP (Transmission Control Protocol/Internet Protocol). "Protocols" are specific sets of instructions followed by computers for the transmission of data among them. THE TCP/IP protocols also provide several useful services to users, including FTP and TELNET.

Physical networks of permanently connected computers like BITnet (Because It's Time Network), which use another set of protocols, are connected to the Internet by "gateways" (computers that translate alternative protocol languages into something TCP/IP can understand, and they do it in a way that is transparent to the user).

Transmission Lines - T3

The backbone of the Internet network in the United States is made up of what AT&T calls their "T3" communications lines. These are high speed data transmission lines permanently connecting the major routing computers in the network. These T3 lines can be considered as the super highways of data transmission. They have recently been upgraded from T1s which carried 1.544 megabits (million bits of information) a second to the T3s, carrying 44.736 megabits a second.

This has significantly increased the available "bandwidth", which translates to the number and complexity of messages that can be carried simultaneously. Initially all messages transmitted were just text: characters and words. Now data sent over these lines encodes everything from plain text to interactive, two-way audio/visual teleconferencing.

IP Numbers

Each computer, large or small, which can connect to any of the national networks has its own address or IP (Internet Protocol) number. Each site with a national network connection is given a specific range of numbers that it can use for its internal machine addresses. The numbers are in the format of 123.456.789.123 with the last one or two sets of numbers pointing to a specific machine, perhaps on a faculty person's desk, or in a public computer lab. This is done so that mail and other traffic can be routed correctly, and machines can be identified when their user logs into other computers. We rarely use the IP numbers in addressing mail or anything else, usually preferring to use machine names in our addresses. I use a SUN SparcStation with the friendly name of Wilbur, but who is known to the network as 128.118.058.011. "Nameservers" are computers that hold the lists that match the IP numbers to computer names and locations and make these translations transparent to the user.

Moving Traffic

When messages and files are passed through permanently connected networks of computers like BITnet, the message "hops" from one computer to another which "store and forward" messages in a linear fashion, rather like a bus that stops at every bus stop on its route. If a machine is temporarily off-line (broken in some way, or being fixed or upgraded) then the messages just sit patiently until

the way is open again. Despite the fact that electronic communication can move at the speed of light, I have sometimes had messages take 16 hours to get from Virginia to Nevada, and 4 hours from Washington, DC to Pennsylvania, and yet at other times transmission appears to be instantaneous.

Some sites have Internet connections, some have BITnet connections, some have both and some have neither. But there are an increasing number of "gateways" from one to another and to the commercial service providers. Some sites have leased telephone lines that tie them to the nearest major switching center. The lines are always open and available for traffic and their cost is usually shared by the connected institution and various governmental organizations.

FIDONET

Some sites run software that dials the nearest switching center during the early morning hours, collects all the files and mail that are waiting and delivers all the mail that it had collected during the day. That one phone call may be the only connection with the outside, networked world. "Fido" is one example of this kind of software. "Fidonet" is the collective name for the over five thousand computers owned by amateur computer hobbyists throughout the world that use the Fido software.

Each computer is again assigned its own specific address so that messages can be routed to the correct place.

The existence of Fidonet is not dependent upon universities or government funding. There are no permanent, fixed connections between these computers; all traffic goes over ordinary phone lines and the cost is usually paid out of the individual system owner's pocket. It doesn't matter where you are in the world, there is probably a Fidonet node within easy dialing distance.



Fidonet provides person-to-person electronic mail, file sharing, and hosts a large number of discussion groups/conferences called "Echomail".

A brief introduction to Fidonet can be found at

FTP: lilac.berkeley.edu

File: /help/cat/mail/net/fidonet

and read on to find out how to get that file!

File Transfer Protocol and Anonymous FTP

As I mentioned above, the TCP/IP protocols provide users with FTP (File Transfer Protocol). This service is most often encountered in the phrase 'anonymous FTP'. Many sites worldwide have set aside disk space on their computers to archive (store) files and computer software and by using 'anonymous FTP' these files can be retrieved almost as easily as if they were on a local machine. You don't have to have an account at an archive site nor do you don't have to pay for them, but you do have to have FTP capability from your site (check with your local computer gurus to find out if you have). Computer usage at most sites is heaviest during the daytime, so please be polite and FTP your files in the evening, night or early morning hours.

There are lists of 'anonymous FTP sites' which give some indication of the kinds of files they have stored. To retrieve the file via anonymous FTP:

FTP: pilot.njin.net

File: pub/ftp-list/ftp.list

That is the kind of cryptic instructions that just did not translate into anything I could use...let's take it slowly:

To retrieve such a list, at your system prompt type "FTP pilot.njin.net". (Only don't type the "", they are just there to make the things you have to type easier to see in this text.) And case-sensitivity is

important (unix machines need you to type "ftp pilot.njin.net"). Another important reminder is that file names are case sensitive. You have to ask for files by exactly the same name as they have in the directory listing. If it says "ftp.list" or "KERMIT.help" or "Kermit.HELP", that is what you must type.

Once you are connected it will ask for your name. You type in "anonymous" and you have to spell it out and spell it correctly! The machine will then tell you that "Guest login ok, send e-mail address as password". Here you type in your full e-mail address. This is often difficult, because what you type for a password does not show on the screen. If you get it wrong, the machine will chide you, but usually lets you in anyway. And leaves you sitting staring at:

```
Guest login ok, some restrictions
apply
ftp>
```

The file you are looking for is called pub/ftp-list/ftp.list. This means that the file is called "ftp.list" and is in a directory called "ftp-list" which is in a directory called "pub". If you type "ls" at the first ftp> prompt you will see a list of names. The top one is "pub", the directory you are looking for. Typing "cd pub" at the ftp> will get you into the public directory (it tells you that you have changed directories) and leave you staring at another ftp>. Typing "ls" again will give you another list of names, with "ftp-list" about halfway down. Type "cd ftp-list" to get into that directory, and to another ftp>. You can type "ls" again and a list of filenames about fills your screen. About the middle of the screen is a file called "ftp.list".

To bring a copy of the file home, type "get ftp.list" and the archive machine will send a copy of the file to your machine. You can, of course, type "cd pub/ftp-list/" at the first ftp> to go right to that directory, but it is

often interesting and productive to browse on your way to the file you are looking for. And if you type "dir" instead of "ls" you will get a directory listing that shows you how big the files are, and when they were last updated. To get back to your own machine again, when the archive machine tells you it has successful deliver your copy to you, type "bye" at the ftp>. That usually works, but sometimes it needs to be "quit" or "exit". Just try until you hit the right one.

Different kinds of files are stored in different kinds of formats. Text files are often stored in ascii (American Standard Code for Information Interchange) and require no special instructions to the machine before you ask that it be sent to you. Some text files have special formatting so they can be printed from a laser printer. They are perhaps labeled something like "<filename>.ps" indicating they are Postscript files. Those you would want to get just exactly as they are (as you would a computer program, too) so you have to do one more step before you ask the machine for the file. Because you want the file exactly the way it is stored with no changes at all, you need to type "bin" or "binary" at the ftp>, before you say "get <filename>". If there is any question about what kind of file you are dealing with, use binary transfer (the file comes in machine language—the equivalent of ones and zeros—makes no sense to you, but the computers can understand them perfectly).

In order to save space on archive sites, files are often compressed in a number of different ways. The programs needed to uncompress them are usually stored at the same site, or your local computer guru could help you. If files have any of the following after their names, it is a clue they have been compressed: .tar; .tar.Z; .tar.uu; .hqx; .sit; .zip; .arc; .Z. Use binary transfer for these kinds of files.

A brief description of FTP is

available from:

FTP: nic.sura.net

File:/pub/nic/network.service.guides/how.to.FTP.guide

If your site does not have an internet connection, BitFTP is a mail interface that allows BITnet/NetNorth/EARN users to FTP files from sites on the Internet. Most of the Internet FTP commands can be used with BitFTP except the commands are sent in a mail message, instead of interactively. This service tends to be slow and your requested files may take hours or days to reach you, so be patient. To get a brief guide to BitFTP, send a message in the following form:

To: BITFTP@PUCC (or BITFTP@PUCC.Princeton.edu)

HELP

This service is also available at no charge from Digital Electronics Corporation's western regional mainframes. You can receive information by sending a message in the following form:

To: FTPmail@decwrl.dec.com

help

TELNET

TELNET is another basic TCP/IP service that allows an interactive connection with another machine. TELNET is both a protocol (TCP/IP remote login protocol) and a program. TELNET is used for two major purposes: to remotely login to a machine that you have access to (i.e. a userid and a password) so you can use it as if you were actually at that site; and to remotely login to public access catalogues and databases.

I use TELNET to log into my accounts in Nevada and Washington, D.C. from my computer account here at Penn State. When I am travelling (with laptop computer in hand), I usually arrange for login access at a local system so I can then TELNET back to my home machine and keep up with my mail. How? You find the e-mail address of a university or college nearest to where you are going to be and send an email message to postmaster@<that sitename>. You ask, very politely, for a guest account that you can use temporarily. Sometimes you get one, sometimes you are given the access information to get to a point in their system so you can TELNET out, sometimes you are invited to come to their public computer labs and sometimes they just say "No". It all depends on the administrative rules of the particular system. Getting a guest account may be a mixed blessing, because the kind of computer in use at the site may not

be the one you are used to.

When I am working online, I no longer reach over to the shelf for my venerable and battered dictionary. I TELNET to hangout.rutgers.edu, and following their menus through Library and Reference and Dictionary, find the Short Oxford Dictionary (8th edition, 1991) that they have made available online there. Check them out, they have a lot of useful reference materials, and a helpful set of easy to use menus. A tip: when you have finished looking up your words hit the return once at the "Word(? for help):" prompt. That will take you back to a menu screen. From there typing "quit" gets you back to the main menu, and typing "quit" again returns you to your own system.

Some of the remote sites you can telnet to, like library catalogs and computers holding public access databases, need a login name but it is usually published with information about the service. These login names are case-sensitive, so type they exactly as they are listed. There are two documents listed at the end of this article that give the electronic addresses from which you can retrieve lists of libraries, worldwide, who have made their catalogs available for searching online.

A brief description of TELNET is available from:

FTP: nic.sura.net

File:

/pub/nic/network.service.guides how.to.TELNET.guide

Electronic Mail

And as soon as I had my modem set up, I immediately used it to become an emailer i.e. to send and receive electronic mail (email). In my own case, I used my modem to reach my account on one of Penn State's computers. However, I could have just as easily (but for a fee) used my modem to dial the local access number for any one of a number of commercial computer communication service providers, like CompuServe, America Online or Prodigy. Electronic mail is referred to as "asynchronous" messaging because both parties do not have to be in contact at the same time in order to communicate.

The first thing you have to know when you want to send email to someone is their address, and always the easiest way to determine that is to ask the person you want to send mail to. Electronic mail addresses look very different from ordinary post office addresses (called "snail mail" by email users). How an address looks depends on what network the computer that their account is on is connected to. I have accounts on machines that access two different networks, the Internet and BITnet.

To send mail to my home address you need to know:

my name mauri collins

my house number & street Calder Square, P.O. Box 10002

my city State College



my state and zip PA 16805-0002

To send electronic mail to my Internet address you need to know:

a login name (or userid)	mmc7	fay
a machine	@psuvm	@archsci.arch
a location	.psu	.su
a domain	.edu	.edu
a country code (outside US)	.au	

ie: mmc7@psuvm.psu.edu or fay@archsci.arch.su.edu.au (Fay is in the architecture department at the University of Sydney, Australia)

Remember the periods or 'dots' between the different parts of the address (it reads out loud as "mmc7 at psuvm dot psu dot edu"). Computers are confused by blank spaces in email addresses so you will see the underscore or hyphen sometimes used as a spacer as in mauri_collins@machine.location.domain.

Some addresses from other networks require an exclamation point (!, called a "bang") between the parts of the address as in psu!psuvm!mmc7 You just have to remember to copy addresses carefully, or use the 'reply' feature on the mail program on your computer. It can generally be relied upon to take the correct information from the "header" on the mail you have received, but it is always an excellent idea to check.

Different Internet address domains you may see are .com for business or industry, .mil for military address, .gov for governmental addresses, .org for non-profit organizations, and .edu for educational organizations. Addresses outside of the United States often require a country designation. While Internet email addresses generally go from the most specific to the most general, mail going to the United Kingdom, and onto their Jnet network needs to have the address turned around. If I were in the United Kingdom my address might look like mauri@UK.edu.psu.wilbur

On BITnet, each computer has its own distinct name, which may or not be the same as its Internet name. My BITnet address is now MMC7@PSUVM. However, when I was at another site, my Internet address was collins@helios.nevada.edu or just collins@nevada.edu, but my BITnet address was COLLINS@NEVADA3. When sending mail from a computer that does not have a direct connection to BITnet, it is usually necessary to add additional routing information to the address as in: COLLINS@NEVADA3.BITNET.

Discussion Groups

One of the more popular uses of networks, after the exchange of electronic mail between individuals, is to join and read the incredible variety of discussion lists or

groups and news groups that are available. Discussion groups come in many forms. Some are like the bulletin boards in the local grocery stores. Messages are posted and left for people to read and comment on; some groups focus around particular topics, others are strictly for announcements; while others read like the transcript of a cocktail party.

Discussion groups have been likened to newspapers or talk radio. Many people read or listen or, to use the networker's term "lurk", and a relatively small number of people contribute. However, readership in a discussion group can bring people together from all over the world, who might never have a chance to meet and talk; it fosters the exchange of ideas and information, and engenders a sense of co-operation and friendship.

LISTSERV

Many of these discussion groups are handled by a program called LISERV, written by Eric Thomas, that runs on IBM mainframe computers. The groups are often called discussion lists, because essentially what the LISERV software deals with is a subscription list of electronic mail addresses. When a message is received LISERV, depending on the instructions it has been given, will forward it to the moderator/listowner, or, if the list is unmoderated, copies the incoming message to each of the addresses on its subscription list.

If the list is moderated then the moderator will check the message against whatever formal or informal criteria exist that govern what goes to the list's readership and either send the message on, edit it, or return it to the sender. Most moderator's see their primary role as 'controlling the signal- to-noise ratio'. This involves making sure that the discussion is kept within the limits set forth in the group's charter, and that discussion is conducted in a civil manner.

To join a discussion group, send mail to the LISERV at the address given for the discussion group (e.g. LISERV@...) with a single line in the body of the message, e.g.

TO:LISERV@guvm

SUBSCRIBE IPCT-L YOURFIRSTNAME
YOURLASTNAME

You need to substitute your own name as in: subscribe ipct-l mauri collins

A complete listing of the over 4000 LISERV groups can be obtained using anonymous FTP from

FTP: FTP.nisc.sri.com

File: /netinfo/interest-groups.

Beware before you get it, the file is HUGE (over a megabyte).

A list of discussion groups in the humanities (over 800 of them) is maintained by Diane Kovacs. The full list is available as are grouped subsets of the whole list. Information on the available files is available by anonymous FTP from

FTP: ksuvxa.kent.edu

File: library/acadlist.readme.

One unfortunate and often unpleasant aspect of discussion and NetNews groups is the occurrence of "flaming". With no available indication of tone or mood (except for the ubiquitous smilies :-)) (tip head to left shoulder to see the grin) it is very easy for misunderstandings to arise and to escalate with alarming rapidity. Free from the sanction of others' immediate presence (and the fear of a pop on the nose for running off at the mouth), there are those who tend to run off at the finger tips and whose language becomes hostile, vulgar and profane. And then there are those who chose to communicate in that tone all the time. If a reasoned attempt to clear up the misunderstanding is unsuccessful, a gracious exit from the communication situation is often the best remedy, as censure or argument often seems to exacerbate the problem.

USENET/NetNews

Usenet can be defined as computers that exchange messages with Usenet headers. It is no longer refers to the physical network of UNIX-using computers that it started as. Much of the Usenet traffic is carried over the same computers that also handle BITnet and/or Internet traffic. There are currently over 2000 different usenet newsgroups. The usenet groups are divided into a number of major streams e.g. alt (alternative) comp (computer) soc (social) rec (recreation) etc. There is no central authority for usenet groups, although protocols have grown up that govern the creation of new groups. No matter what your interest you can probably find a Usenet group that discusses it; if not, you can gather some like-minded correspondents and start one. Some newsgroups are of local interest, like psu.jobs that advertises employment available on Penn States' campus to soc.women which is carried world-wide.

A complete list of NetNews groups is available via anonymous FTP from:

FTP: rtfm.mit.edu

Files: List_of_Active_Newsgroups,_Part_I

List_of_Active_Newsgroups,_Part_II
Alternative_Newsgroup_Hierarchies,_Part_I
Alternative_Newsgroup_Hierarchies,_Part_II

Differences Between LISTSERV and NetNews

There are some significant differences between Usenet NetNews and the LISERV discussion groups residing on BITnet and the Internet, most of which show up from the computer user's perspective. A user subscribes as an individual to LISERV and similar discussion groups and the messages that LISERV forwards are received in their personal mailbox.

In order to read the NetNews newsgroups one's site has to receive some part of the "feed", the stream of NetNews messages which can be measured in tens of megabytes each day. This is stored at a central location on the site's mainframe and accessed by some kind of reader software. Sometimes NetNews messages are available on campus through the same system that handles on-campus discussion groups. Messages are held for whatever period of time the site administrators decide is appropriate and this is often dictated the amount of storage space available. A site may receive some, all or none of the newsgroups.

The first word in the name of the newsgroup is kind of a 'family' name, to indicate which of the main divisions the group belongs to: comp.misc is a computer-related group, soc.women is from the social science grouping, rec. deals with recreational topics, talk. indicates discussion groups, bit.LISERV indicates groups that are mirrors of BITnet/Internet LISERV groups.

Guides To More Information

Always the very first source of information on anything that pertains to access to the computers at your site, how they are set up, what programs are installed and how to run them, is your very own site computer gurus. They are most knowledgeable about the idiosyncracies of their equipment and programs and can provide you with instruction, written guides, access to training classes etc. Often your own site will have an FTP server set up, or a public directory from which information, files, and programs can be downloaded (copied from the mainframe to your personal computer).

There are a host of extraordinarily good guides to the use of computer mediated communication, and lists of such guides. One comprehensive beginner's guide is the work of John December at Rensselaer Polytechnic Institute and is available via anonymous FTP from

FTP: ftp.rpi.edu



File: pub/communications/internet-cmc.

Another is Scott Yanoff's "Internet Sources Guide", This is updated bi-weekly and is posted to the NetNews group alt.internet.services, or is available by anonymous FTP from

FTP: csd44.csd.uwm.edu
File: pub/internet.services.txt.

I have been thoroughly enjoying my wanderings around in the networks, and have found a wealth of knowledge and a host of friends. But I will warn you—it can become a time-sink—with all your spare moments disappearing off into cyberspace.

Biographical note: ms collins is pursuing a Ph.D in Instructional Systems at Penn State, after having earned both BA and MA in Sociology at the University of Nevada, Las Vegas. She is currently a research assistant in the Center for the Study of Higher Education working on a national study of the use of instructional technologies in higher education, funded by the Corporation for Public Broadcasting.

Interpersonal Computing and Technology:
A Journal for the 21st Century Copyright
1993 USA.

All articles in this publication may be cited under the fair use provision, provided proper bibliographic information is used including name of author, title of article, date and journal identification. Authors retain the copyright for all articles in this publication. Any commercial use of this journal in whole or in part by any means is strictly prohibited without written permission from the author(s) and IPCT-J. Contributions to IPCT-J, can be submitted by electronic mail in APA style to: Gerald Phillips, Editor IPCT-J
GMP3@PSUVM.PSU.EDU

More Info about the Interpersonal Computing and Technology Journal

A message from the publisher:

Welcome to the first issue of IPCT-J! It is almost one year ago this week that the idea for this electronic journal was first conceived.

I was hired by Georgetown University in January 1992, in part, to direct the Center for Teaching and Technology (CTT) at the Academic Computer Center. Simply stated, the mission of the Center is to promote the integration of computers and other instructional technology in the higher education classroom. Within that framework is included the vision of tapping the expertise available from scholars throughout the world, to discuss their common interests, to learn from one another, to share their expertise and to pool their experience toward the solution of common problems.

In the course of discussion we decided that a scholarly peer-reviewed journal could be a valuable part of promoting the mission of the CTT. As we continued to articulate this idea, we thought that an electronic journal distribution might be the most immediate and practical way of implementing this goal. To that end, a scholarly discussion group (SDG) was created to help in finding of an editorial board, potential contributors and subscribers. The original list announcement commented on this goal:

Besides creating a forum for the topics of interest noted above, another interest of the CTT is to publish a scholarly, refereed international journal. To that end, the IPCT-L will develop a subscription list and act as a resource to develop the community necessary to review articles and recommend editorial policies as these publishing goals move forward.

It is with pride and a sense of accomplishment on the part of many persons that I announce this first issue of the Interpersonal Computing and Technology Journal.

Submissions for future issue are requested on topics including: the use of electronic networks in the classroom; electronic publishing; the use of electronic networks and information exchange; library applications of electronic communication; professional relationships carried on via electronic communication; and perspectives on the use of electronic communication in higher education, business, industry and government. Technological articles will be considered to the extent that they are intelligible to the bulk of the readers and are not specific to any particular hardware configuration.

The editors hope you find this and future issues of IPCT-J useful. Please do not hesitate to contact me if you have questions or comments.

Regards,

Zane Berge

Director, Center for Teaching and Technology Georgetown University
BERGE@GUVAX.BITnet or
BERGE@GUVAX.GEORGETOWN.EDU



New Macintosh Files on the TCS

by lcharters@tcs.wap.org

APRIL WAS A watershed month for the TCS: one of our users managed to generate an original error. This user, who shall remain nameless (but we know who you are) uploaded a file which managed to fill the gigabyte drive used to store all downloadable files. "What does this error mean?" was his innocent question. For those keeping score, the gigabyte drive had its public debut in late August, 1993—and was full by second week of April, 1994.

April was also the month that Internet mail had its public debut, and it has been enthusiastically received. World-wide E-mail has spawned a minor sub-cult on the TCS as hundreds of users have taken a sudden interest in the "Information Superhighway," filling the various bulletin board areas with countless questions, answers and observations. Even The Washington Post joined the April onslaught with the premiere of a weekly column on the Internet.

But the *real* news was the conversion of two more phone lines from low-speed to high-speed. For technical reasons (meaning some of the computers we support cannot connect to a 14,400 bps line), we may never convert all lines to high speed, but the speed-demons among us appreciate having more opportunities to burn rubber. Blast bits?

An important reminder

Read the long file descriptions. There are thousands of files on the TCS, all of them divided up according to machine type and general classifications within machine type.

Additionally, each file has a short file description that appears on the same line as the file name, but it *also* has a longer file description, and this longer description often includes important details on compatibility, installation and other key issues. Over half the questions asked about files on the TCS could be answered if people would just read these longer descriptions.

Speaking of descriptions, one common question is: why don't the file descriptions printed in the *Journal* match those on the TCS? There are a number of reasons. First, this monthly column doesn't list all the files. Second, a file may have been updated during the time lag between when this column is written and when you read it on the TCS. [note that the column usually covers new files posted from the 15th of one month to the 15th of the next month] Third, why not make changes, particularly in grammar and spelling? Fourth, it's all a plot to drive you crazy (which seems to be the most popular speculation).

New, improved fine print: a recent decision of the Washington Apple Pi Board of Directors has opened the TCS to all Pi members. But if you want to *download* something, or have E-mail (electronic mail), you must have a TCS subscription. Call the Pi Office at 301-654-8060 for information on how to fully participate in the Washington Apple Pi Telecommunications System, the Pi's "24 hour a day General Meeting."

Area 3: Apple System Software

- APPLEDOCVIEWE.SIT:** Apple DocViewer
1.1.1. Adds Power Macintosh compatibility.
- GEOPORT.SIT:** GeoPort for the Power Macintosh v.1.0. Do Not install if you have an -av Mac even though the Installer will let you.
- MACSBUG65D6.SIT:** non-final version of MacsBug, Apple's 680x0 object-level debugger. Adds support for the Modern Memory Manager, introduced with Macintosh on PowerPC. It now supports disassembling and breaking on selector-based A-Trap calls. It supports machines with multi-bit displays, such as the 165c/180c. Not an official quality-assured release, it is not guaranteed to work reliably on all configurations. Note possible compatibility problems on 68000-based machines.
- NSI1.44.SIT:** Network Software Installer 1.4.4, Updates to AppleTalk, Network Control Panel, AppleTalk Internet Router 2.0, EtherTalk.
- PMACSOFTDIR.CPT:** List of Power Macintosh native software; electronic version of a free booklet distributed by Apple which points fingers and names names.
- POWERTALKIN.SIT:** PowerTalk for the Power Macintosh v.1.03. Replacement "Install Me First" disk.
- SW2DISK1.SIT** (disks 1 to 4): StyleWriter II, Version 1.2, Driver/Font Set.
- SYSTEMENABL.SEA:** Latest System 7 Enablers as of 3/24/94.

Area 7: GIF Graphics

- APOLLO.16.GIF:** Visible-light image of Apollo 16 landing site on the moon, taken by the Clementine spacecraft.
- APPLE1.GIF:** before there was the Apple II, there was just the Apple computer motherboard. Drooling techies would take these motherboards, add their own keyboards, power supplies, tape recorders and televisions, and some even built special housings. Those few people whose engineering skills were sophisticated enough to be able to complete this task, generally spent the following several days playing Pong.
- CONCEPT.GIF:** collage of three views of the proposed VW Beetle revival car called the "Concept 1" by Volkswagen.
- CONCEPT2.GIF:** another view of the "Concept 1" by Volkswagen — a concept car that's been making the auto show rounds, and getting lots of press, but Volkswagen says they won't build it unless there's enough demand. This view is from above the left rear quarter looking down into the driver's seat. [But where are the running boards? What is a VW without running boards?]



CONCEPT3.GIF: proposed Volkswagen Concept 1 car.

FULL.EARTH.GIF: visible-ultraviolet light image from the Clementine spacecraft in lunar orbit.

GAUZE.GIF, RAKASHA.GIF, SI1990.GIF, SI9108.GIF, SIELLE.GIF: pinups, and easily the most popular pictures in this listing, with the VW photos ranking second. Tells you something, doesn't it?

IDAMOONI1.GIF: picture taken by Galileo of Ida's moon.

MARSICE.GIF: Viking 2 lander view of Mars surface

PLATO.GIF: Large nearside moon crater Plato taken in visible-uv light by the spacecraft Clementine. Shows only part of crater.

TOILET.GIF: if you read the article in Air & Space Smithsonian on the Apollo 8 flight to the moon in 1969, with 'stuff' floating around in zero g, you might see why NASA spent so much money on the space shuttle toilet.

TRITON.GIF: Voyager 2 image of Neptune's moon Triton

Area 8: JPEG Graphics

DR. Fun, the Internet daily cartoon in 24-bit color: Inconsiderate Things to Say in Hell; Instant St. Paddy's Day Parade; Products that Prey on Pre-Adolescents; Mr. Spock's Effective Vulcan Nut Kick; Polar Bears Finally Migrate to Antarctica [Note: The TCS Crew finds this cartoon particularly offensive, but it is posted in the spirit of artistic freedom.]; "Does the Microwave Work?"; Planning Ahead; Wilbur shows his fake half-digested rat; Easter Bunny in Black Explains his Art; The Easter Amoebae; A Climactic Scene from EGGRUNNER; The Mighty Eggzilla Destroys Yolkyo; Next Year @#! Barney can Deliver Eggs; Drinky Nerds; Sidewinder Sam Enters the Saloon; Fresh Squeezed Caviar; When Lint Traps aren't Cleaned Regularly; The Right to Keep and Arm Bears; Trauma Center; You Are (not supposed to be) Here; Wrong Turn in the Carwash; Scene from "Benji the Tax Evader"; The Painful and Annoying Skeetersquirrel; Dog Sports

Area 12: PowerPC

PPC.BASIC.2.9B2: Chipmunk Basic, v 2.9b2, is a simple Basic interpreter for the Power Macintosh. It is similar to the line-number based MumbleSoft BASIC interpreters of circa 1980. It's a line-number based BASIC interpreter similar to the Applesoft BASIC that came with the Apple II+ (that's Apple II, not Mac II). Every real personal computer should come with a BASIC interpreter!

TRAPCHECK10.SIT: Which Power Macintosh traps are still emulated? This

program examines your Power Macintosh to see which toolbox and operating system traps are written in native code, and which are being emulated. It generates a tab-delimited text file of what it finds, for your perusal. Use this for curiosity's sake, or use it to track down extensions and control panels which might be seriously detracting from your Mac's performance by patching their own emulated code onto the front of existing native traps, causing heavy switching.

Area 21: Mac Essentials

DISINFECT35.SEA: Disinfectant (Virus Protection) Ver. 3.5. If you only download one file, this one should be it. This is a superb free program that finds and protects your Mac from many computer viruses. This version adds protection from the INIT 29B virus.

Area 22: Mac Applications

EASYVIEW244.SIT: program allows you to conveniently browse the contents of text files which are in any of several structured formats. Read the Mac TIDBITS newsletters in the TCS's Mac Information area. Or read your electronic mail from here on the TCS.

LAUGHINGBIR.CPT: Colorful and cleverly created California cuisine, compacted—with cartoons!

ORBITRACK2.1.4: artificial satellite tracking program. Will calculate look angles to selected satellites, plot satellite positions on a world map and display visible passage of a satellite against background stars.

SPACECURVSE.CPT: Mathematicians, statisticians, business presenters and students will love this mathematical function plotter. Display these geometric, 3-D, linear graphs, or manipulate the settings to create your own forms.

Area 23: Mac Utilities

ALIASDRAGON.SIT: when you rebuild your desktop, aliases will lose their drag-and-drop links to other volumes. Use this program to reconnect any cross-volume connections.

CATFINDER1.12: a disk management tool that catalogs your disks and provides an intuitive Finder-like interface for browsing the catalogs. Floppies, hard disks, CD-ROMs, any disk can be cataloged with CatFinder. Will print diskette labels.

DEEPDISCHAR.SEA: Discharges NiCad batteries on PowerBooks to help avoid "memory effect."

DROPPS1.1.SIT: select a PostScript printer with this utility and drag a PostScript file to it..

EDNORTON.CPT: why pay big bucks for a diagnostic utility or for repairs when you can use this jewel?

ENSCRIPTOR3: prints TEXT files in a multi-column format that looks nice and is very presentable.

FASTERAPP.CPT: an application version of the RAM disk called Faster.

HDSC722PTCH.SIT: Apple's HD SC Setup utility only works on hard drives which were shipped out of Apple's factories with a particular ROM signature. Some third-party hard drives, however, are otherwise identical to the ones Apple modified. If you have one of those drives, and HD SC Setup version 7.2.2, and this patching utility, you might be able to get one to format the other.

MACBENCH1.1.SIT: controversial benchmarking program used by PC Week in a lengthy series of highly complimentary articles on the new Power Macintosh computers.

MACGZIP.021.SIT: the GNU's gzip — file compression and decompression program — for the Macintosh.

MYBATTERY2.SEA: Latest version 2.2.3 of MyBattery

OCLOCK1.0.2.SIT: a simple freeware analog clock that lives in a real, live circular window!

PREFSCLEANE.CPT: cleans up obsolete preference files, identifying them and tossing them in the trash if the user so desires.

QUATROSPEED.CPT: a nice benchmarking utility. Convince the boss you really need a Power Mac 8100 for writing memos.

RENAMEJRESC.SIT: a little utility put out by Apple that will aid in renaming balky disks and folders under System 7.

TECHTOOL.SIT: version 1.0.4 allows you to easily and more completely rebuild your desktop and ZAP your PRAM.

Area 24: Mac Extensions

AD.PYTHAGOR: After Dark module: Pythagoras (Pythy) designed with one goal in mind: creating a near-endless variety of intriguing visuals based exclusively on real-time plotting of mathematical functions.

AD.THE.SWARM: After Dark module: The Swarm is a very simple, but surprisingly elegant and mesmerizing line animation, in which a number of small line segments (the 'bees') chase one other segment (the 'queen bee') across the screen.

AOLAIDI1.2.0.CPT: extension lets you do other things on AOL while you download in the background.

Continued on page 43

The Hotline service is only for members of the WAP. Please do not call after 9:30 pm or before 8:00 am.

Apple II/III

Apple II*

GENERAL

Dave Harvey (days only) (703) 578-4621
 Leon Raesly (days; 5 am-5pm) (301) 868-9554
 Ken De Vito (703) 960-0786

ACCOUNTING PACKAGES

BPI Programs
 Jaxon Brown (301) 350-3283
 BPI & Howardsoft (Tax)
 Otis Greever (615) 638-1525
Dollars & Sense
 Barry Fox (717) 566-6709
Home Accountant
 Leon Raesly (days; 5 am-5pm) (301) 868-9554
Quicken
 Gary Hayman (301) 345-3230
Apple SSC
 Bernie Benson (301) 951-5294
AppleWorks
 Ken DeVito (703) 960-0786
 Ray Settle (301) 647-9192
 Harry Erwin (before 10 pm) (703) 758-9660
 Gary Hayman (301) 345-3230
 Leon Raesly(days; 5 am-5pm) (301) 868-9554
 Bill Campbell (301) 498-6380
 Allan Griff (301) 654-1515
AppleWorks Database
 Roger Burt (301) 424-6927
 Morgan Jopling 1 (301) 721-7874
 Milt Goldsamt (301) 649-2768
 Dan White (301) 449-3322
 Allan Griff (301) 654-1515

COMMUNICATIONS

ProTerm
 Allan Levy (301) 340-7839
 Ray Settle (301) 647-9192
Talk is Cheap/Pt. to Pt.
 Barry Fox (717) 566-6709
DataBases
DBMaster, Pro IIe
 Bob Sherman 1 (305) 944-2111
dBaSe II
 John Staples (703) 255-6955
dBaSe II&III,Data Perfect. Db Master-PRO
 Leon Raesly(days; 5 am-5pm) (301) 868-9554
Profiler 3.0
 Barry Fox (717) 566-6709

HARD DISKS

CMC (not CMS)
 Barry Fox (717) 566-6709
Corvus & Omninet
 Tom Vier (112N-6PM) (703) 860-4810
Corvus
 Leon Raesly (days; 5 am-5pm) (301) 868-9554
Sider
 Otis Greever (615) 638-1525

LANGUAGES

General
 Dan White (301) 449-3322

AppleSoft

Louis Biggie (301) 967-3977
 Peter Combes (301) 251-6369
 Leon Raesly (5 am-5pm) (301) 868-9554
Pascal
 Michael Hartman (301) 445-1583
C and TML Pascal
 Harry Erwin (before 10 pm) (703) 758-9660

OPERATING SYSTEMS

ProDOS 8 and 16
 Barry Fox (717) 566-6709
 Dan White (301) 449-3322
Print Shop
 Thomas O'Hagan (301) 593-9683

SPREADSHEETS

General
 Walt Francis (202) 966-5742
MagicCalc/SuperCalc2.0
 Leon Raesly (5 am-5pm) (301) 868-9554
Telecommunications
 Dale Smith (301) 762-5158
 Allan Levy (301) 340-7839
 Ken De Vito (703) 960-0786
 Dan White (301) 449-3322
TimeOut Series
 Morgan Jopling 1(301) 721-7874
Utilities:ProSel
 Barry Fox (717) 566-6709

CROSS-PLATFORM TRANSLATION

MS/DOS-Apple-Mac Transfers
 Ken De Vito (703) 960-0786

WORD PROCESSORS

General
 Walt Francis (202) 966-5742
Apple Writer 2
 Ron Evry (703) 490-1534
 Dianne Lorenz (301) 530-7881
 Leon Raesly (5 am-5pm) (301) 868-9554
AppleWorks GS
 Roger Burt (301) 424-6927
 A.D. (Bill) Geiger (703) 237-3614
 Andy Gavin (703) 734-3049
Letter & Simply Perf
 Leon Raesly (5 am-5 pm) (301) 868-9554
Mouse Write
 Barry Fox (717) 566-6709
Publish-It!
 Gary Hayman (301) 345-3230
 Ray Settle (301) 647-9192
ScreenWriter II
 Peter Combes (301) 251-6369
 Gene Carter (202) 363-2342
Word Perfect
 James Edwards (301) 585-3002
 Henry Donahoe (202) 298-9107
Word Star
 Art Wilson (301) 774-8043

Apple IIGS*

Neil Laubenthal (703) 691-1360
 A.D. (Bill) Geiger (703) 237-3614
General
 Barry Fox (717) 566-6709

Ile Upgrade

Morgan Jopling (301) 721-7874
APW
 Andy Gavin (703) 734-3049
 Leon Raesly (5 am-5pm) (301) 868-9554
Deluxe Paint II
 Rich Sanders (703) 450-4371
GS BASIC
 Barry Fox (717) 566-6709
Multiscribe GS
 Ray Settle (301) 647-9192

TELECOMMUNICATIONS (MAC & APPLE)

Dale Smith (301) 762-5158
 Allan Levy (301) 340-7839
 Bob Sherman (305) 944-2111
TCS Help
 Dale Smith (301) 762-5158
 Nancy Seferian (202) 333-0126
 Paul Schlosser (301) 831-9166
MouseTalk
 Dale Smith (301) 762-5158
 Ray Settle (301) 647-9192
TimeOut Series & Utilities: ProSel
 Ray Settle (301) 647-9192
 Barry Fox (717) 566-6709
816 Paint/Writ'rs Ch.El
 Andy Gavin (703) 734-3049
Apple II Hardware Epson printers, hard drives,
 Guy Durant (202) 363-0366
Apple II laser printing
 Bob Sherman 1(305) 944-2111

Apple III*

General

Paul Campbell (313) 255-6497
 Dave Ottalini (9-10:30 pm) (301) 681-6136
3 Easy Pieces
 Robert Howe (916) 626-8198
 David/Joan Jernigan (before 9 pm) (703) 822-5137
 Steve Truax (304) 267-6429
Word Juggler
 Tom Linders (408) 741-1001
 J. Carey McGleish (evenings) (313) 332-8836
Pascal
 Dr. Al Bloom (703) 951-2025
Apple Speller
 Robert Howe (916) 626-8198
AppleWriter
 Eric Sheard (908) 782-6492
Stemspeller
 Steve Truax (304)-267-6429

Beagle Buddies

MARYLAND

Ray Settle (Annapolis) (301) 647-9192
 Scott Galbraith (Frederick) (301) 865-3035
 W. T. Cook (Columbia) (301) 995-0352
 Gary Hayman (Greenbelt) (301) 345-3230
 Lee Raesly (Adelphi) (301) 599-7530
 Dan White (301) 449-3322
 Don Avery (Bethesda/DC) (202) 362-1783

VIRGINIA

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

June 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Mac Program- mers SIG DTP SIG	2 Columbia Slice Game SIG	3	4 Frederick Slice
5	6 Newton SIG PI SIG	7 TeleComm SIG	8 DB SIG WAP BoD	9 Stock SIG	10	11 Annapolis Slice DTP Seminar
12	13 <i>Intro to the Mac-Part 1</i>	14	15 Excel SIG	16	17	18
19 <i>Writer's Deadline</i> W	20 <i>Intro to the Mac-Part 2</i>	21	22 <i>Maintaining Your Mac</i> NoVa EdSIG	23	24 <i>Editor's Deadline</i> E	25 DTP Seminar
26	27 <i>Intro to the Mac-Part 3</i>	28	29	30		

July 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
July 31					1	2
3	4 Office Closed PI SIG Newton SIG	5 TeleComm SIG	6 Mac Programmers SIG DTP SIG	7 Columbia Slice Game SIG	8	9 Annapolis Slice Frederick Slice
10	11 <i>Intro to the Mac-Part 1</i>	12	13 DB SIG WAP BoD	14 Stock SIG	15	16 DTP Seminar
17 <i>Writer's Deadline</i> W	18 <i>Intro to the Mac-Part 2</i>	19	20 Excel SIG	21 Women's SIG	22	23 <i>NoVa ComCol</i> WAP General Meeting 
24 <i>Editor's Deadline</i> E	25 <i>Intro to the Mac-Part 3</i>	26	27 <i>Maintaining Your Mac</i> NoVa EdSIG	28	29	30

Meeting Notices

Unless otherwise noted, call the SIG chairs or Slice officers for meeting information. A list of the SIG and Slice chairs is on page 4 of every Journal. Calendar events in italics are tutorials, workshops, or seminars.

Annapolis Slice

2nd Saturday; 9:30 AM; Severna Park Library on McKinsey Rd (off Rt 2), Severna Park, MD.

Answering Machine: (410) 761-4260

CrabApple BBS: (410) 315-8532

Apple IIGS SIG

Meetings at various locations and on various dates. Looking for new chairperson. Call Gary Hayman (301) 345-3230, for details.

Apple III SIG

Quarterly on 2nd Saturday; 10:00 AM; WAP Office.

AppleWorks SIG

Meetings at various locations and on various dates. Call Gary Hayman (301) 345-3230, for details.

CAD SIG

Call SIG chair.

Columbia Slice

1st Thursday; 7:00 PM. Call for location.

BBS (410) 964-3706.

DataBases (Mac) SIG

2nd Wednesday; 7:15 PM; FHWA R&D Labs, near McLean, VA—from GW Parkway, exit at the interchange marked CIA HQs, then make a right turn to the FHWA gate, and check in with the guard.

DeskTop Publishing (DTP) SIG

1st Wednesday; 7:30 PM; PEPCO Auditorium, 1900 Pennsylvania Ave. NW, DC. For further details, we encourage you to attend the monthly DTP meeting. Information can be found elsewhere in the Journal. (See page 5 this month.)

Excel SIG

3rd Wednesday; 7:30 PM; WAP office.

Frederick Slice

General meeting time, 2nd Saturday; 10:00 AM; United Methodist Church; 22 Main Street in Walkersville.

Game SIG

1st Thursday; 7:30 PM; Call for location.

HyperTalk SIG

Call SIG chair for information.

Mac Programmers' SIG

1st Wednesday; 7:30 PM; WAP office.

Newton SIG

1st Monday; 7:30 PM; WAP Office.

NoVa Education (Ed) SIG

Last Wednesday; 7:30 PM; Walnut Hill Ctr., 7423 Camp Alger Ave., Falls Church, VA.

Programmers' Interface (PI) SIG

Meetings are announced on the Announcements Board of the TCS. Call Gerry Wright at (301) 422-4286 for details.

QuickTime SIG

Quarterly; 7:30 PM; WAP Office.

Stock SIG

2nd Thursday; 7:30 PM; WAP office.

Telecomm SIG

1st Tuesday; 7:00 PM; WAP office.

UltraMacros SIG

Meetings at various locations and on various dates. Call Gary Hayman (301) 345-3230, for details.

WAP Garage Sale

June and December.

WAP General Meeting

4th Saturday; 9:00 AM; Northern Virginia Community College, Annandale Campus, Community Cultural Center Auditorium.

Women's SIG

Usually held every quarter on the fourth Thursday of the month at the Pi Office at 7:30 PM. Call SIG Chair, Ann Aiken (301) 530-1990 for details.

Notice: Plans change! Anyone with calendar information please call the Calendar Editor, Bill Wydro (301) 299-5267 or Beth Medlin at the WAP office (301) 654-8060.

The Hotline service is only for members of the WAP. Please do not call after 9:30 p.m. or before 8:00 a.m.

Macintosh

GENERAL

Tom Witte (703) 683-5871
 Jon Hardis (301) 330-1422
 Dan White (301) 449-3322
Art & Video
 Nancy Seferian (202) 333-0126
Borland Products
 Doug Ferris daytime only (800) 826-4768

DATABASE PROGRAMS

Fourth Dimension
 Bob Pulgino (301) 474-0634
 Peter Yared (301) 564-1560
FileMaker Pro
 Tom Parrish (301) 654-8784
 Mort Greene (703) 522-8743
Foxbase
 Rick Shaddock (202) 829-4444
Helix
 Jim Barry to midnight (703) 662-0640
 Harvey Levine (301) 299-9380
MS-File
 John Spencer (301) 730-1084
 Mort Greene (703) 522-8743
Omnis 7
 Jeff Alpher to midnight (301) 630-2036
OverVue
 J.T. Tom DeMay, Jr. (301) 461-1798
 Tom Parrish (301) 654-8784
Pro-Cite
 Elizabeth Mangan (703) 750-2710

DESKTOP PUBLISHING

General
 Jay Rohr (301) 655-0875
 Freddi Galloway (V/TTY) (410) 268-5793
ReadySetGo
 Jim Graham (703) 751-4386
 Freddi Galloway (V/TTY) (410) 268-5793
PageMaker
 Mort Greene (703) 522-8743
Quark Xpress
 Ron Mann (202) 333-3409

GRAPHICS

General
 Bill Baldrige (301) 779-8271
 Jay Rohr (301) 655-0875
Adobe Illustrator
 Ling Wong (703) 803-9109
Aldus FreeHand
 Nancy Seferian (202) 333-0126
Canvas
 Bill Baldrige (301) 779-8271
 Tom Parrish (301) 654-8784
MacDraw
 Tom Parrish (301) 654-8784
 John Spencer (301) 730-1084
ImageStudio
 Mort Greene (703) 522-8743
Studio/1
 Jamie Kirschenbaum evenings (703) 437-3921
SuperPaint 2.0
 Mort Greene (703) 522-8743
VideoWorks
 Mort Greene (703) 522-8743

PROGRAMMING

Ada
 Harry Erwin (before 10 pm) (703) 758-9660
C
 Harry Erwin (before 10 pm) (703) 758-9660
Fortran
 Harry Erwin (before 10 pm) (703) 758-9660

Inside Mac

Jon Hardis (301) 330-1422
 John Love (703) 569-2294
Pascal
 Harry Erwin (before 10 pm) (703) 758-9660
 Michael Hartman (301) 445-1583
SMALLTALK-80
 Harry Erwin (before 10 pm) (703) 758-9660

SPREADSHEETS & CHARTS

General
 David Morganstein (301) 972-4263
 Bob Pulgino (301) 474-0634
 Tom Cavanaugh (301) 627-8889
Excel
 David Morganstein (301) 972-4263
 Mark Pankin (703) 524-0937
 Jim Graham (703) 751-4386
 Dick Byrd (703) 978-3440
 Bob Pulgino (301) 474-0634
 Tom Cavanaugh (301) 627-8889
 Paula Shuck (before 10 pm) (301) 740-5255
 Kirsten Sitnick (301) 750-7206
 Mort Greene (703) 522-8743
 Rick Shaddock (202) 829-4444
WingZ
 Kirsten Sitnick (301) 750-7206

TELECOMMUNICATIONS

General
 Allan Levy (301) 340-7839
CompuServe
 Michael Subelsky (301) 949-0203

VIRTUAL REALITY

Virtus Walkthrough Pro
Virtus VR
Virtus Voyager
 Jaque Davison (703) 644-7354

WORD PROCESSORS

Microsoft Word
 Harris Silverstone (301) 435-3582
 Tom Cavanaugh (301) 627-8889
 Freddi Galloway (V/TTY) (410) 268-5793
 Kirsten Sitnick (301) 750-7206
ThinkTank-More
 Jim Graham (703) 751-4386
 Tom Parrish (301) 654-8784
Hebrew Word Processing
 Tim Childers (301) 997-9317
Microsoft Works
 Amy Billingsley (301) 622-2203
WordPerfect—Mac
 Curt Harpold (202) 547-8272

MISCELLANEOUS

Ile Card for the LC
 Bernie Benson (301) 951-5294
MacProject
 Jay Lucas (703) 751-3332
 Norbert Pink (703) 759-9243
HyperCard
 Rick Chapman (301) 989-9708
 Tom Witte (703) 683-5871
HyperTalk
 John O'Reilly (703) 204-9332
 Tom Witte (703) 683-5871
File Transfer
 Mort Greene (703) 522-8743
Backfax
 Mort Greene (703) 522-8743
HyperCard Scripting
 Jamie Kirschenbaum (evenings) (703) 437-3921
 Richard Kozloski (703) 352-1523
SoundEdit
 Jamie Kirschenbaum (evenings) (703) 437-3921

MAC DISKETTERIA LIBRARY

Dave Weikert (301) 963-0063

General

Assistive Tech
 Missy McCallen (703) 323-6079
Games-Apple II
 Charles Don Hall (703) 356-4229
 John Wiegley (after 2:15) (703) 437-1808
IBM
 Leon Raesly (301) 599-7530
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
Printers-General
 Walt Francis (202) 966-5742
 Leon Raesly (days; 5 am to 5 pm) (301) 868-9554
MX-80
 Jeff Dillon (301) 662-2070
Stat Packages
 David Morganstein (301) 972-4263
Stock Market
 Robert Wood (703) 893-9591
MS/DOS
 Tom Cavanaugh (703) 627-8889
Dvorak Keyboard
 Ginny & Michael Spevak (202) 244-8644

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	A2, GS	Doug Tallman (Frederick)	663-3268	Mac
Dick Grosbier (Frederick)	898-5461	A2, GS, Mac	Scott Galbraith (Monrovia)	865-3035	A2, GS
Harold Polk (Frederick)	662-6399	A2	J. Russell Robinson (Hagerstown)	739-6030	Mac
Tony Svajlenka (Frederick)	694-6209	A2	Ken Carter	834-6515	A2, GS

Annapolis Slice Help Line

Area Code 410 Call in the PM unless you have an emergency.

Mac			Gini Waters (Crownville)	410-923-0139	Mac+, DTP
Richard MacLean (Crofton)	410-721-8157	MacIci	Bill Derouin (Seems Park)	410-766-1154	Centris 650, DTP
Steve Toth (Edgewood)	410-956-6557	Mac+	Bill Waring (Seems Park)	410-647-5605	Mac, Excel
Bob Peterson (Crofton)	410-721-9151	MacSE	Helen Hamerstrom (Seems Park)	410-647-1720	Mac, CD-ROM
Sandy Bozek (Annapolis)	410-974-6062	MacII, Scanner			
Lou Sapienza (Crownville)	410-923-3415	Mac Ili, Canvas, DTP	Apple II		
Barry Conner (Annapolis)	410-573-7140	Mac Telecomm	Seth Mize (Glen Burnie)	410-766-1154	II GS, II+, III
Brian Bassindale (Annd)	410-757-9541	Mac Ili, CAD	Helen Hamerstrom (Seems Park)	410-647-1720	II GS, Ile, DTP, HS



**New Macintosh Files
on the TCS**
continued from page 38

BARTENDER.SIT: ancient extension that adds features to the scroll bar, like Shift-clicking on the scroll bar to jump to a relative location in a document (instead of having to drag the thumb there), double-clicking on the thumb to jump to a previous location, and other Shift-Option features.

BUGOFF.CPT: simple access protection; owner and guest password options, activity log, "number of logon attempts" control, startup password protection option, protected folders. Network features: messaging, remote control, folder watch (simple mail system). Other goodies: screen saver, auto shutdown, selectable/modifiable sound effects, reminder package, balloon help.

CHRONO.SEA: sets your Mac for daylight savings time on startup and at 2 AM so you don't have to worry about it. It also corrects the clock on the Mac for the amount you think it is running fast or slow.

ECLIPSE2.2.CPT: tiny screensaver (uses approx 5K of memory). Automatically dim your screen after a specified period of time. Import and display your favorite picture during this "twilight" period.

FILEINFO.SIT1.2: shareware control panel that shows codes for the file type and file creator, and also various file attributes in the Finder's "Get Info" window.

GREGSBUTTON.SIT: latest version of a control panel that let's you replace the standard flat b/w push buttons, check boxes, and radio buttons with 3-D color ones.

ORACLE2.1.0.CPT: each time you start your computer, Oracle presents you with a new inspirational message. These unique messages are chosen at random from a library of 1,000 profound sayings.

PICTPOCKET1.1: captures windows, screens in QuickDraw form rather than bitmaps to make for smaller PICTs and resizeable without the jaggies!

POPCHAR2.7.SIT: pops up a chart of all the characters in a font, allowing you to select a character without remembering the obscure key combinations.

POPUPFOLDER.CPT: shows contents of folders hierarchically, in Finder, in dialog boxes, within programs.

SCROLLLIMIT.SIT: control panel that lets you set a scroll rate for your windows.

SHUTDOWNFX1.SIT: does some special effects on shutdown or restart.

VIRTUALDESK.SIT: a 'virtual desktop' for the Macintosh that works on all types of

Macs and all types of monitors.

Area 25: Mac Fonts

BANDERSNATCH1TT: TrueType version of BanderSnatch 1 sampler of Novelty fonts.

Area 26: Mac Sound

GUITARTUNER2.0: small but accurate guitar tuner with nice interface.

PLYRPRO4152.SIT: MOD music editor/player. A few features (notably Save) are disabled pending payment of the shareware fee. All the playback features are enabled, however, as are nearly all of the editing features and the many whimsical oddities scattered therein.

SNDTREK201E.SIT: English version of SoundTrekker, the gracefully powerful MOD music file player for Macs. Options include stereo panning and SurroundSound, real-time curve smoothing during playback (to remove some subtly-jarring quality, particularly when sound is output to external speakers), and a variety of playback rates and bit depths. Requires a 68020 or better.

Area 27: Mac Graphic Images

APOLLO.LOGO: shows eagle clutching olive branch descending towards moon, with earth in background.

JUSTMACIT.SIT: Mac Plus/SE/Classic owners: place this file in your System Folder. It will replace your Welcome to Macintosh screen with a similarly-placed but very unique logo, complete with a Banana Jr. 2000 from Bloom County.

PETESWORLD.GIF: GIF version. The drawing was done using the Infini-D demo that shipped with the first Power Macs.

PETESWORLD.SIT: Look, mom, no Cray! Take two average guys and a brand new RISC Macintosh late at night, and you're bound to wind up with some peculiar results.

POWERMACPD.SIT: Power Macintosh Period color startup screen.

POWERPC601.SIT: PowerPC 601 chip startup screen

Area 28: Mac Graphic Utilities

GRAPHICCONV.SIT: version 1.7.8 translates to Mac formats a HUGH number of graphics formats found on other platforms.

JPEGVIEW321.SIT: a fast image viewer for JPEG, PICT, GIF, TIFF, BMP, MacPaint, and Startup Screen files. Use it to view the Doctor Fun cartoons! Requires System 7. JPEG decompression requires QuickTime. Fat Binary works with "ordinary" and PowerPC Macs.

KODAKPHOTOC.SIT: Photoshop/NIH

Image plug in for PhotoCD acquisition.

LIGHTNIN.CPT: Lightning Paint, a black and white painting program, has quite a collection of features, including multiple painting modes (reverse, transparent, opaque, erase), lots of special effects (blend, shadow, flip, rotate, stretch, trace, mask), and flexible implementations of tools seen in some commercial programs (polygon, mirror, spray can, up to 16:1 zoom), plus "Fisheye" and "Snapshot" options.

NIH.154.DOC.SIT, NIH.154.FPU.SIT, NIHIMAGE154.SIT: documentation, floating point and non-floating point versions of NIH Image, the freeware image processing utility from The National Institutes of Health. Cheap alternative to Photoshop.

REPTILE.SIT: an interactive Mac application that allows you to design and construct patterns that resemble M.C.Escher's famous paintings.

**Area 29: Mac
Telecommunications**

AOL2.1.SEA: America Online software supports 9600 baud.

ARA.LINELINK144: AppleTalk Remote Access (ARA) script file for LineLink144e modem.

CTER22.SIT: Communications Toolbox-based 3270 (IBM mainframe) emulator.

FETCH212.SIT: "fat binary" version of the famed Internet file transfer program works on both "ordinary" and PowerPC-based Macs.

MACHHTTP124.SIT: HTTP server 1.2.4 for WWW and Mosaic. HTTP is recognized by WorldWideWeb clients such as NCSA Mosaic. MacHTTP is a server for hypertext information (actually multimedia, including hypertext) on a Mac with MacTCP and an Internet connection.

MACHHTTPHC.CPT: sample documents helping to illustrate the MacHTTP to HyperCard connection for hypertext searching and retrieval.

PICT.SIT: sick of looking at the black and white PICTs while the Hayes Modem Tool is dialing? This Resedit file contains replacement PICTs. So I got bored — but Ted Turner loves me.

QWK130.SIT: Rudimentary offline QWK reader. QWK is an encapsulated message scheme through which various DOS-based BBS's communicate with each other, and with which you can grab your messages all at once in a compressed format, then read and respond to them offline at your leisure.

RNMAC12B.CPT: Usenet News reader. Use UUPC, ToadNews, MacSlurp or some such to gather Usenet news to your local hard drive, and then use this program to browse through it.



Area 30: Mac Product Demos

- CACRICKETGR.SIT:** demo of CA-Cricket Graph III, Version 1.5.
- GEOPOINTBASEMAP:** demo version of GeoPoint's BaseMap personal mapmaking tool, demonstrated at the March 1994 General Meeting. Very easy to use interface, very well designed.
- HUBSTACKDEMOINS:** demo showing how a Cisco Hubstack (an Ethernet hub for networks) is superior to every other networking box on or off the planet.
- SPWAY2KD11A.CPT:** Spaceway 2000 is a unique action game which takes full advantage of the Mac Plus up through the Power Mac series. Version 1.1 of their demo contains 68000 and PowerPC native code, and 1-, 4-, 8-, 16- and 24-bit graphics.
- ZMODDEMO1.01.SI:** update of the Mark/Space Zmodem Demo Comm. Tool Box transfer tool.

Area 31: Mac Product Support

- DROPSHADOW.SIT:** nice drop shadow filter for Photoshop, allows you to set the X and Y offsets, color, opacity and amount of blur for your drop shadow.
- MACTOOLS30A.SIT:** update MacTools v.3.0 to versions 3.0a or 3.0b, depending upon the module. This update requires you to have MacTools Backup 3.0 installed.
- MSZMODUP.SIT:** Mark/Space Zmodem CTB transfer tool updater. For non-Demo versions ONLY. Updates the M/S Zmodem tool from 1.0 to 1.0.1.
- NU4.0.1PUPD.SIT:** updater to update Now Utilities v4.01 to v4.01p.
- PATCH2WP.SEA:** WordPerfect 3.0 patches from the WordPerfect BBS in Orem, UT.
- PSHOPPOWERM.SIT:** plug-in replaces the image-processing engine in Adobe Photoshop 2.5.1 only (not Photoshop LE) with a version native to the Power Macintosh. Using this engine with your existing filters will typically boost your performance 1.5x to 4x, depending on the filter.
- SAM33094FOL.CPT:** SAM Virus Definitions as of 3/30/94. Contains virus detection and repair capabilities for the INIT-29-B virus.
- SC60.7.FULL.CPT:** set of patches to update from THINK C 6.0 or Symantec C++ 6.0 directly up to Symantec C/C++ 7.0. Do not use this if you already have 6.0.1. The Symantec C++ 7.0 package ships with many new features which are not included in this archive — this is merely an update to your existing software which takes care of many of the bugs present in 6.0.
- SC601.7.MPW.CPT:** updates the MPW add-in version of Symantec C/C++ 6.0.1 to 7.0.
- SC601.7FULL.CPT:** set of patches to update

from THINK C 6.0.1 or Symantec C++ 6.0.1 to Symantec C/C++ 7.0. It will not give you C++ if you purchased only C. The Symantec C++ 7.0 package ships with many new features which are not included in this archive — this is merely an update to your existing software which takes care of many of the bugs present in 6.0.1.

- SITCOMM.101.SEI:** updates Aladdin System's SITcomm to v.1.01. Bug fixes, faster transfer tools, direct script support and more.
- VENDORDBAW.SIT:** latest release of the standalone database written up in Oct '93 MacUser as one of the best shareware products of 1993. Lists 1245 Macintosh (and related) product vendors and their Main, Sales, and Support phone numbers. This release adds 338 new vendors and almost 100 changes/updates to the previous release.
- VENDORDACOL.SIT:** latest release of the standalone database written up in Oct '93 MacUser as one of the best shareware products of 1993. Use this version with any Macintosh with a color/grayscale display of 640x480 resolution.
- VENDORTC.SIT:** a database of Macintosh types & creators in a standalone document viewer application. It contains 58 pages (screens) of information on document, application, INIT/CDEV/RDEV types & creators. Handy for when you may get one of those "The document ___ cannot be opened, because the application that created it could not be found" messages.

Area 32: Mac Games

- CHECKERMANI.CPT:** be the first on your block to play checkers with ghosts, with bombs, with un-jumpable pieces, or even the old boring regular way.
- CHESS.SIT:** chess game written in Zedcor's FutureBASIC. Is in B&W, and should work on any Macintosh Plus or greater. Has sound to make wise cracks when you're losing.
- DESPAIR1.3.SIT:** don't you just hate those games where you have to rescue innocent people who mill around like sheep? Don't you wish you could just zot the little buggers? Now you can! Drop bricks on them! Fry them with lightning bolts! Blow them up! Suck them up with a cyclone! A great game when you're having a bad day at work.
- MILLEBORNES.SIT:** lush version of the classic card game, Mille Bornes, or 1000 miles, in which you try and win a car race while simultaneously sabotaging your opponent.
- MYSTIQUE1:** first issue of MYSTIQUE the MYST Fan Club Mag-Not for MYST Fans Only! Massive, Multi-Media extravaganza

Contains mucho graphics, music and a demo version of MYST.

Area 35: Mac Multimedia/ QuickTime

- BEAUTY.SEA:** cool four-window QuickTime movie of how Beauty and the Beast was made.
- HENDRIX.SIT:** promo for a film? record? something? featuring music by a bunch of new wave bands, with clever graphics, lots of sound clips. Even if you didn't like Hendrix's music, you should give this a look.
- NAKEDGUNINTER.S:** very funny promo for the movie with sound, clips, hilarious notes on the writers, producers, actors, etc. Requires a color Mac, probably with a 13" screen.
- Not sure what this is supposed to be, but it is too short.
- SMLRCL.SIT:** a Pi member gets his 15 seconds of fame playing a homicide forensics expert in a TV series.
- THROB.SIT:** Sexy rock video clip

Area 36: Mac Information

- AVFAQ3.SIT:** must have for all AV owners. Important new information on topics ranging from new Geoport software to AV Easter eggs.
- MACSCRIPTDI.SIT:** MacScript Digest, 20 Feb-1 April, a compendium from the Internet mailing list of all sorts of tips and tricks for AppleScript (mostly) and Frontier.
- PPC.VS.PENT.SIT:** Apple tells why the PowerPC is superior to the Pentium.
- TidBits #217 to TidBits #221 (March 14, 1994 to April 11, 1994):** the famed on-line weekly magazine (and one of the most popular features on the TCS).
- WORDMACDGST.SIT:** Word-Mac Digest 207-293; tips and tricks (and MS support answers) about using MS Word 4 and 5.

Area 37: Mac Programming

- GTQLIB1.1.SIT:** Gregory T. Quinn's scripting externals; makes several updates in deference to the Scriptable Finder, and adds new commands such as several for controlling of audio CD-ROMs. All of these scripting additions require AppleScript.
- ST201MODLIB.SIT:** your game or application can play MOD files using these libraries, developed for SoundTracker 2.0.1.
- TCFS.SIT:** booklet in HyperCard form, discussing C and C++ using the THINK C compilers. No prior knowledge of C is assumed, according to the documentation. ■



Mangia—Software for keeping track of your recipes

by Greg Price

this window you are able to do the following of things:

■ Create a New Recipe—You can create new recipes by selecting “New Recipe” from the Recipes Menu or by clicking on the “New Recipe” icon in the lower left corner of the Browser window (see Figure 1). Mangia’s versatility comes from the amount of detailed information you give it. Under the Editing pop-up menu, you are asked to enter several items of information about your recipe (see Figure 3). You can fill in all or several items.

ONE OF MY favorite hobbies is cooking. I’m no culinary wizard by any stretch of the imagination, but I do like to experiment with various types of dishes. Over the past several years, I have been collecting recipes from books, magazines and BBS boards. To keep track of my growing collection of recipes, I have tried a number of shareware programs that are specifically tailored to storing recipes. The shareware programs I have used were neat but very basic in their abilities. I thought nothing else could interest me. That was until I had a chance to try a new program called Mangia (pronounced Mahn-ja, an Italian imperative meaning “Eat!”) from Upstill Software. Mangia uses

including the Recipe Browser, Recipe Clipboard, Shopping List, Pantry, and Recipe Finder.

Recipe Browser

This tool is used when you will view and work with the recipes you have within the file. To view your recipes, you first must open the file they are located in. You can open this from the Browser by

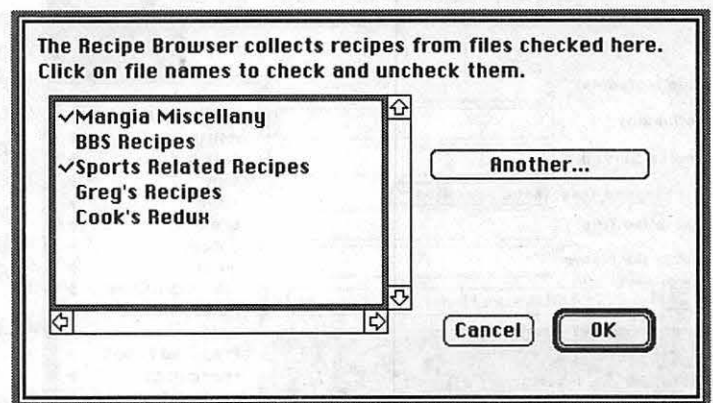


Figure 2

■ Sort into different dividers. For example in Figure 1, I view the recipes by main ingredients.

■ Send ingredients to the shopping list (more on this later).

Recipe Finder

When using a program like Mangia, you expect to accumulate a number of recipes over time. After awhile it becomes nearly impossible to remember all those recipes. Don’t fret, Mangia has a Finder option, which is pretty powerful. First you click on the “Match What” button in the upper right side of the browser (see Figure 1). Mangia returns with its Quick Recipe Finder window (see Figure 4). Using the Quick Recipe Finder, you can look for food by

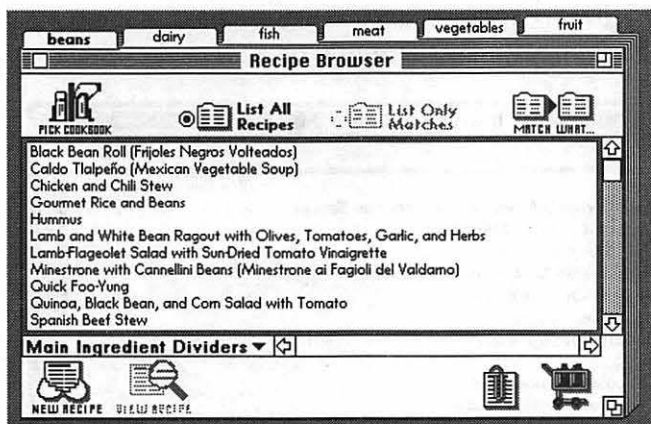


Figure 1

your Macintosh to store, categorize, view, and use recipes.

Mangia has five major areas that are the heart and soul of the program,

total of 340 recipes.) After choosing your recipe file, you will see the list of recipes in the Browser window. From

clicking on the button titled “Pick Cookbook” located in the upper lefthand corner (see Figure 1). You will get the following dialog box (see Figure 2). From here you will open the desired file. (Please note that Mangia comes with two files of its own, Mangia Miscellany and Cook’s Redux, which contain a

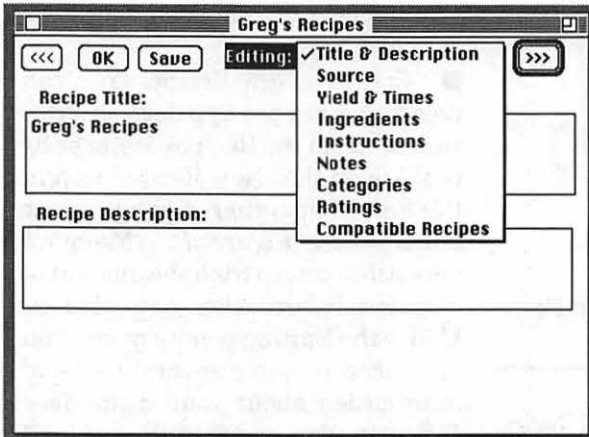


Figure 3

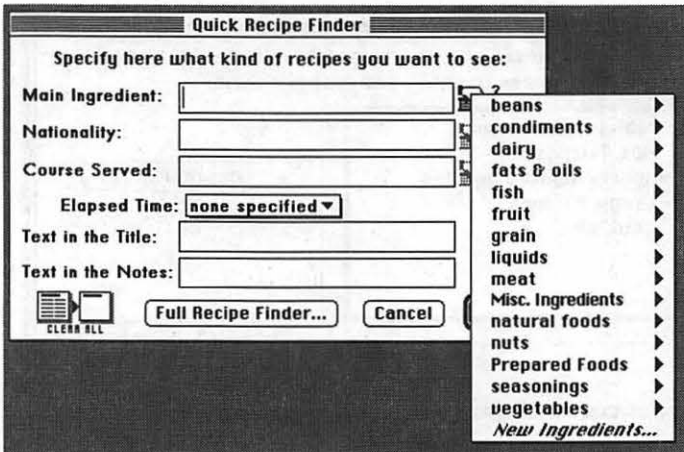


Figure 4

specifying certain criteria. Note the Dictionary button which is located to the right of title. If you are not sure of the actual item, you may click on the Dictionary button to see all ingredients under that title. (For example, in Figure 4, I would like to see the choices of Main Ingredients). If the ingredient is not located in the Dictionary, you may add it if you wish. If you need more versatility in the finder option, Mangia also provides a Full Recipe finder (see Figure 5), which works the same way as the quick finder but with more power.

Recipe Clipboard

This feature is used to store

you have selected (see Figure 7). If you see ingredients in the shopping list you already have, you may delete them from the list before printing. Those ingredients with an asterisks next to them are found in

recipes that you may want to use while browsing through your collection of recipes. You may store as many recipes you like on the clipboard by using the shift-click method to select more than one recipe. With your recipe(s) on the clipboard, you have the option of "scaling" the amount of people you are going to serve. You may also modify and/or create a new menu. As with the Browser, you may save the ingredients to your shopping list (see Figure 6).

Shopping List

This feature allows you to keep track of all ingredients needed for the various recipes

your pantry (the pantry will be discussed later).

Pantry

The pantry holds and keeps track of all ingredients you currently have. This is extremely helpful when writing your grocery list. You may maintain the list of ingredients you do have in the pantry in a couple of ways. First, you can view the pantry and delete or add items. Second, which I find the best and easiest, you can use your shopping list. You first view all the items in the shopping list. Those items with an asterisks next to them can be deleted because they are already in your pantry. Next, you select all the items you will need by using the shift-click method if multiple items, and select "Add to Pantry" from the shopping list menu. Doing this on a regular basis will go a long way toward keeping your pantry up-to-date.

Mangia is packed with a number of other features like: linking recipes together, modifying printouts of recipes (font size, and type), search for different recipes (20 different ways), scaling recipes and creating "meals" (meals are a collection of recipes with a common title).

Verdict

Mangia is a very impressive

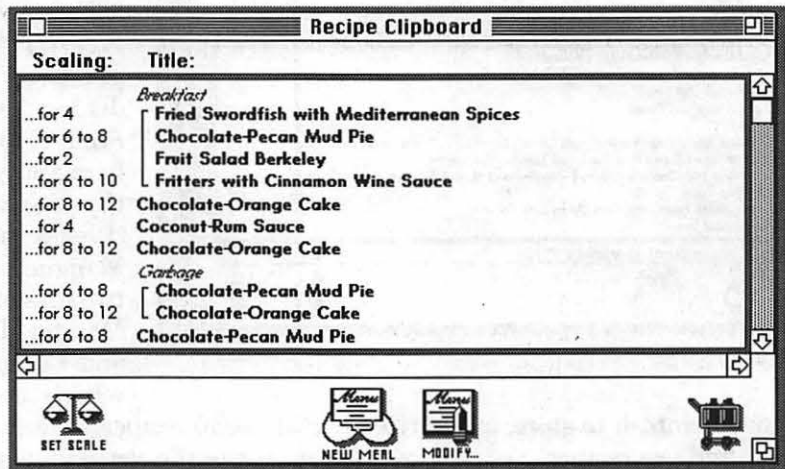


Figure 5

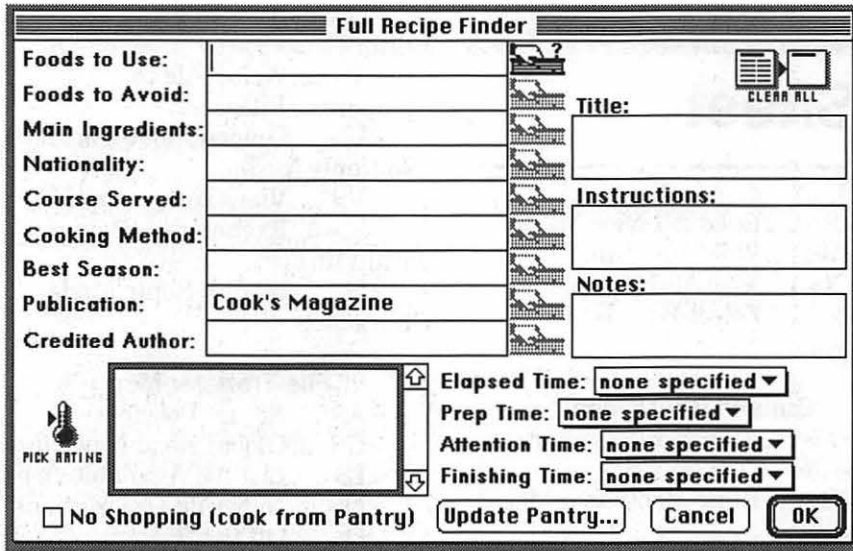


Figure 6

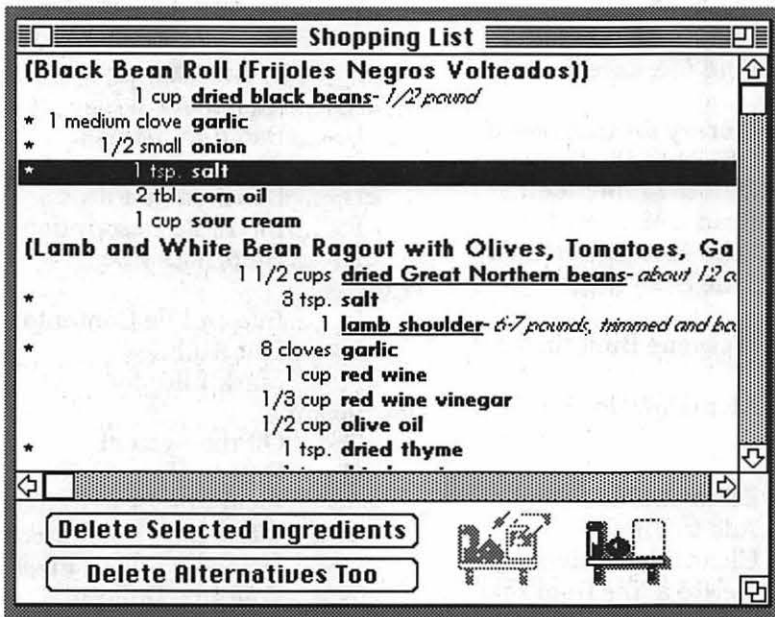


Figure 7

program. I found it easy to enter and retrieve data. When I first saw the various items to use in describing recipes (see Figure 3), I was a little intimidated. But I had the flexibility to skip most of the items and use the ones that works best for me. The various print options were great and allowed me to modify my printouts. My favorite feature was the Shopping List and Pantry. I was able to maintain the food items in the Pantry

with no fuss and was able to be more judicious in creating my shopping list. In addition, the manual is easy to follow and offer an abundance of examples.

The downside to Mangia was its lack of an export or import feature. As I mentioned earlier, I currently have a list of recipes that I have collected over the past several years. Most of them are stored in shareware I downloaded from a BBS board. I was not looking forward to typing or

cutting and pasting all those recipes into Mangia. I have, however, been informed by Upstill Software that this is one of the first items they plan to include in their next upgrade. Also planned are two cookbooks supplied by Upstill Software, Edward Espe Brown's *The Tassajara Recipe Book* (a classic of contemporary vegetarian cuisine) and Miriam Ungerer's *Good Cheap Food* (a venerable volume of recipes "for the skinflint gourmet,"). Other cookbooks will follow that will focus on health-oriented cooking and various ethnic dishes.

This program is well worth trying if you are at all interested in maintaining your favorite recipes. You may tailor it to suit your particular needs, and it's rather easy to input your data. The next version of Mangia, which will offer its import and export feature, will be an even better program. Bon Appetite!!

System Requirement:

- Any Macintosh
- System 7 compatible
- Discount available for Washington Pi members ■

TCS Help Sheet

TCS Phone Numbers:

—301-986-8085 (for 300, 1200, 2400 bps)
 —301-986-0706 (for 9600, 14400 bps)

Main Menu

 Bulletin Boards
 <C> Change Conferences
 <F> File Transfer
 <L> General Library
 <M> Membership Search
 <N> Now On System
 <O> Off the System
 <P> Public Library
 <T> Time and Date
 <U> User Preferences
 <W> ... Read Welcome Bulletin
 <X> ... eXamine Weather

Forecast

Change Conference Menu

<1-8> .. Choose Conference Number
 <L> List Conferences Available
 <Q> Quit to Main Menu
 <1> General Conference
 <2> Apple II Conference
 <3> Macintosh Conference
 <4> Classified Conference
 <5> Global General Conference
 <6> Global Apple II Conference
 <7> Global Macintosh Conference
 <8> Global Miscellany Conference

Conference Menu

<A> Adjust Pointers
 <C> Change Conference
 <G> Global Read All New Msgs
 <L> List All Available Boards
 <O> Off the System
 <Q> Quit to Main Menu

<R> Read All New Msgs
 <W> ... Welcome Bulletin
 <X> Xfer All New Msgs
 <Z> Zelect Boards of Interest

Interest

Bulletin Board Menu

<A> Alter/Edit an Existing Message
 Blind Reply to a Msg by Number
 <C> Change Boards
 <D> Delete Msg From or To You
 <E> Enter a Message
 <F> Find Message by Keyword
 <L> Library for this Board
 <O> Off - Quit the System
 <Q> Quit to Main Menu
 <R> Read a Msg or Msgs
 <S> Scan Message Headers
 <T> Title Scan Msg Headers
 <W> ... Welcome Bulletin for Board
 <X> Xfer (Download) a Msg or Msgs

Editor Menu

<A> Add to File
 <C> Clear File in Memory
 <D> Delete a line from File (#)
 <E> Edit a Line (#)
 <F> Find a String
 <G> Global Search & Replace
 <I> Insert Lines into File (#)
 <L> List the File (#)
 <M> Toggle Reply Mode
 <N> Line Numbering Mode On/Off
 <P> Purge Temporary File
 <Q> Quit - Clear File & Exit
 <R> Read back from Temporary File

<S> Save File and Exit Editor
 <T> Write File to Temporary File
 <U> Upload Mode Toggle (No Reply Mode)
 <V> View Temporary File
 <X> Exchange a String within line (#)
 <“> Modify Reply Mode Characters

File Transfer Menu

<A> Adjust Pointers
 <G> Global Read New Descs
 <L> List All Available Areas
 <N> New File Descriptions
 <O> Off the System
 <Q> Quit to Main Menu
 <R> Read All New Descs
 <Z> Zelect File Areas.

File Area Menu

<A> Alphabetical List
 Batch Functions
 <C> Change File Area
 <D> Download a File
 <F> Find File Descriptions
 <H> Help With File Transfer
 <I> Info on File Contents
 <L> List All Files
 <M> Mark Files for Downloading
 <O> Off the System
 <Q> Quit to Main Menu
 <R> Read File Descriptions
 <T> TitleScan Descriptions
 <U> Upload a File or Files
 <W> ... Welcome Bulletin

User Preferences

<A> Alter Password
 <E> Emulation Mode
 <F> File Transfer Protocol
 <P> Prompt Character
 <Q> Quit to Main Menu
 <R> Reply Mode Prefix
 <V> Video Length
 <X> Expert/Novice Prompts
 <Y> Your Current Status



Beginner's Corner: Polishing Green Apples

by Steve Weyhrich

cost to outfit a II Plus, IIe, or IIgs with a similar-sized drive.

Hooked on Storage, Part II

Prelude

Last time I laid the groundwork for an understanding of the function and use of a hard disk, with a brief explanation as to why a hard disk is not necessarily a luxury item, on through to some vocabulary that will be used as we continue to discuss the topic. This month the discussion will turn to what is needed to create a mass storage system for you.

Putting the Pieces Together

Now that you've decided to take the plunge and buy a hard disk, what exactly do you need to make it work with your computer? Your decision depends primarily on which computer you have, how much storage capacity you plan to buy, and how much speed you want. As usual, some of those decisions will hinge on how much money you can afford to spend on this upgrade. Remember that no matter HOW much storage or speed you have today, you'll want more within a year. It is probably best to buy as large and as fast a drive as you can afford right now, because on the used market you can be sure that you will never get back what you paid for it. (The depreciation of computer equipment is pretty steep.)

Apple IIC

For IIC owners, the choices are few. Originally a "sealed" computer

that the user would simply plug in and start using, the Apple IIC was not designed with expandability in mind. In fact, the original IIC was conceived to use one and ONLY one external 5.25 drive; it was not until user demand prompted them to upgrade the hardware and firmware to handle the larger capacity 800K UniDisk 3.5 drive that it became possible for a greater variety of disk devices to be used on the IIC. This modified disk port, which is nearly identical in function to the one later used on the Apple IIgs, utilizes a firmware protocol that Apple named the "Smartport" protocol. It includes the necessary commands to allow the ProDOS operating system to communicate with different types of disk devices.

After the Smartport protocol was created, however, a protocol that was more flexible and more widely accepted across the computer industry came into use. The Small Computer Systems Interface (SCSI; pronounced "scuzzy") protocol used commands similar to those used on the Smartport, but not similar enough to be directly compatible. Although Macintosh computers beginning with the Macintosh Plus came with a SCSI port built in, the IIC never was upgraded with that ability. Companies that wanted to build hard drives that would work on the Apple IIC had to jump through some hoops to make it work at all. Consequently, you will definitely pay more for a hard drive on the IIC than it would

Sequential Systems

For brand new hard drives, there is only one choice available: Sequential Systems sells a SCSI drive, originally designed by Chinook, which uses a built-in adapter to enable it to work with the Smartport on the IIC. That adapter translates Smartport commands into proper SCSI commands. After Chinook sold their hardware operations to Sequential Systems, the IIC hard drive was not discontinued, as it fills a niche that is available nearly nowhere else.

As of this writing, Sequential still sells the CT-40c (\$399) and CT-100c (\$549), 40- and 100-meg hard drives respectively. They are selling the 40-meg version "while supplies last", as it is getting more difficult to obtain new hard drives at a size less than 100 megs. These drives use SCSI mechanisms made by Quantum, a respected name among disk drive manufacturers. With the drive comes a utility program that will allow you to repartition the drive if you wish, but it does come already formatted and partitioned. (Recall that partitions are necessary since ProDOS can handle disk volumes only up to 32 meg in size.) The CT-40c is divided into two 20 meg partitions, and the CT-100c into multiple 32 meg partitions.

(Note: These drives will work only on versions of the Apple IIC that can accept a UniDisk 3.5. To see which version of the IIC YOU have, get into Applesoft BASIC, and type "PRINT PEEK(64447)". If it responds with "255", you need an upgrade — which Apple is still supposed to do for free; ask for authorization number "ODL660" at your dealer. If you see a 0, 3, or 4, you can use this hard drive. The Apple IIC Plus will respond with a 5, and will be compatible with the Sequential drives.)



Alltech Electronics / ProApp

Alltech Electronics still sells some older hard drives for the Apple IIc that carry the ProApp name. These are 40 meg drives, and require UniDisk 3.5-capable Apple IIcs. However, they use a protocol called "RLL", which is different from the more common IDE and SCSI types of hard drives. As with the Sequential drives, the ProApp drives come with partitioning software, and are divided into two 20-meg partitions.

Quark

One other hard drive for the Apple IIc may be found on the used market: the Quark QC-10. This is a 10-meg hard drive that was released soon after the IIc came on the market in 1984, and was unique in that it managed to function on the ORIGINAL Apple IIc disk port (recall that this was designed to work ONLY with a single external 5.25 drives). Because of that design, a QC-10 possibly may NOT work with a IIc that has been upgraded to use the UniDisk 3.5 or memory expansion; however, if the drive itself is still functioning, it may be possible for an enterprising hacker to make the modifications to allow it to work. (I do not have specifications about what type of hard drive this was, nor how they made it work on the old IIc disk port, and cannot be certain about whether it can be used "as is", or would require modifications.)

Hardening An Apple IIC

A couple other considerations about the use of hard drives on the IIc must be made here. Versions of ProDOS up through v1.9 would allow no more than four disk devices to be attached to a disk device on slot 5 (which is where the IIc and IIgs Smartport appears in the classic Apple II slot scheme). On other slots no more than two disk devices could appear. Because of this, a hard disk that was partitioned into more than four volumes would not be fully

available for use on the IIc. For example, if you purchased a CT-100c and wanted five 20 meg volumes, only the first four would show up in a disk list. (ProDOS must remap those other drives to make it appear that they are attached to another slot and drive. The first volume attached to the Smartport can be accessed at Slot 5/Drive 1, the second at slot 5/Drive 2, the third at Slot 2/Drive 1, and the fourth at Slot 2/Drive 2.)

Beginning with v2.0.1 of ProDOS, up to fourteen disk devices could be attached to a single slot. If you are running that version or any later one on your IIc, you could theoretically divide that 100 meg hard drive into as many as twelve smaller-sized volumes. (To go beyond twelve would possibly interfere with access to the internal 5.25 drive, and to the 64K RAMDisk in Slot 3/Drive 2.) My personal recommendation would be to aim for 20 meg partitions on the IIc; if you use ProSel as a program selector — highly recommended, by the way — some of its hard disk management utilities cannot handle volumes greater than 20 megs unless you are running on a IIgs.

One other little problem with the use of a hard drive on a IIc: The IIc will start at slot 7 and scan down to slot 1 until it finds a disk device with a valid disk that can be booted. The internal 5.25 drive is at Slot 6/Drive 1, and a hard disk attached to the Smartport will appear at Slot 5/Drive 1. It is preferable to boot from a hard disk, for the sake of convenience. On a IIe, you would just put the hard disk card into slot 7; on the IIgs, you would change the control panel setting to make it boot from the right slot. How to do this on a IIc, where such changes cannot be made?

When I used a IIc and a Chinook CT-20c hard drive, my solution was to write a short utility that I called "SmartBoot". It is still available in the A2 Library:

```
13641 SMARTBOOT.BXY V2.1 X
```

S.WEYHRICH 901002 32760 328
40

Desc: Improved Hard Disk Booting

This program, which is also useful on the IIgs and IIe, lets you use a disk device that IS available immediately (such as the internal 5.25 drive on the IIc) to look at another slot and drive, and continue checking that location until a valid disk is available. That means that you can also turn on both the computer AND the hard disk simultaneously, and SmartBoot will wait until the hard disk has come up to speed before it tries to boot it. In the above example, SmartBoot is stored on a disk in the internal 5.25 drive, and is configured to check Slot 5/Drive 1, which is where the hard disk's first partition is found. (SmartBoot has other features, but I won't go into them here.)

Resources

Here's where to get in touch with the companies mentioned in this article:

Alltech Electronics Co.

602 Garrison Street
Oceanside CA 92054
800-995-7773
800-759-4549

Sequential Systems

1200 Diamond Circle
Lafayette CO 80026
619-721-7733
619-721-2823 (fax)

(c) Copyright 1993 T/TalkNET Online Publishing and GENie. To join GENie, set your modem to 2400 baud (or less) and half duplex (local echo). Have the modem dial 1-800-638-8369. When you get a CONNECT message, type HHH. At the U#= prompt, type: XTX99014,DIGIPUB and hit the [return] key. The system will then ask you for your information.

Call (voice) 1-800-638-9636 for a free brochure about the GENie information service. ■



Golden Oldie Review: Bard's Tale

by Darrel Raines

THIS MONTH I intend to pull another "Golden Oldie" from the shelf and review a software package that you will be most likely to find in the "used software" areas — "Bard's Tale". This program was originally written for and distributed by Electronic Arts. The game was produced for many different computer systems, including the Apple II, IIGs, IBM clone, Atari and Amiga platforms. The game was successful enough to justify two follow-up games and, for some platforms, a construction set that allowed you to create your own scenarios. I will be reviewing the Apple IIGs version of this game.

Bard's Tale is an adventure game in the mold of the Wizardry scenarios: You are called upon by the people of Scara Brae to rid them of an evil wizard who has closed down the city gates and controls most of what goes on within the city walls. Outlaws, demons, and monsters of all description have taken over the city. You are responsible for gathering a band of merry men to release Scara Brae from the clutches of this deadly maniac. Fortunately, there is a good deal of monster-thumping to be done along the way. We should be in for some fun!

The first thing that struck me when I loaded this game was the graphics. "Out of This World" has some of the best animation that I have ever seen on an Apple IIGs, but Bard's Tale gets my vote as one of the best still-graphics games. It is true

that the graphics in this game have some limited animation, but this is only a crude frame swapping that doesn't really qualify as animation in my book. The graphics are realistic and lead the player to believe that he/she is actually viewing the scenes depicted on his/her computer screen.

The screen is laid out with three main areas. The bottom half of the screen is reserved for a view of the party roster and the current statistics of each character. You may point with the mouse to get more information about a character. This action will also bring up a menu that allows the character to perform many different activities, such as trading supplies and casting spells. The roster also indicates in what order the band travels, which is important for battles since the first three characters are the ones who do most of the hand-to-hand combat. The back three characters are only able to join in the fray via the magic system. Current statistics are always shown in this area including the all-important health indicator (hit points) for each character.

The top left corner of the screen is dedicated to showing a view of the outside world. If the team is engaged in combat mode, the view screen is reserved for a picture of the nasty that you are currently facing. The limited animation comes into play here, but does not really add much to the overall effect of the game. When not engaged in battle, the port is used to show the streets, houses, and

insides of homes that are apparent in your field of view.

The final display area is the top right hand corner. This area is used to tell the player what is going on in the world around him. It is also used in combat mode to select which option each character will take during battle. Any information displayed in this area will scroll at a rate selectable by the player. Therefore, you must pay attention to this part of the screen, or you may miss something important.

The play of Bard's Tale should be familiar to all adventure-game players. You go through a short character-building sequence and then are thrust into the adventurer's guild where you can build a team of characters. Some of the character classes are geared toward fighting, while others are geared toward magic. The Rogue is a thief. Finally, there is a unique class called the Bard. The Bard can fight and can wield weak magic with his songs.

The composition of a party is pretty much standard. You need two fighters, a Bard, a Rogue, and two magic users. You may chose to differ from this standard, but the results may not be what you want. Even though this game has an objective (getting rid of the evil wizard), the main task is to build your characters in experience. Once you have some powerful characters, you can go whip the big boy.

When it comes to character development, this game has a number of good features. However, one of the worst features is the one that hits new players right off the bat. It is extremely difficult to get characters past the first and second levels of the game. Your characters will soon be dropping like flies.. The only way to bring them back to life is with the help of some expensive monks — the cost of healing and bringing back to life a party of six characters required me to create and steal the money from more than fifty throw-away



characters. Life is tough, and then you die... and then you pay exorbitant fees to come back to life!

Once you get a few levels under your belt, the fun begins. Exploration commences in a large city that has a number of hidden dungeons. You soon find that life will go well for you if you can develop a couple of powerful magic users. There are four types of magic users. However, once you learn the spells of any one branch of magic, you can start over (retaining the memories of the learned spells) and learn a new branch of magic. Therefore, it is possible to develop a magic user that will know all the spells for each of the four magic disciplines. This type of character will be known as an Arch-Mage. The greatest part of your time will be spent in trying to develop one or more of these characters.

As you explore the city and dungeons, mapping is an important concept. There are a few riddles and hidden items that must be found for you to be able to find the ultimate bad guy. You must therefore delve into each and every corner of the dungeons to assure success in the final battle.

The quality of graphics in the dungeons and the wide variety of monsters that you encounter make this game a joy to play. The interface is smooth and allows both mouse and keyboard entry of commands.

Bard's Tale uses the sound support of the IIs to good advantage. The number of instruments used in the music is limited, but the quality of the songs is better than usual. One of the unique features of this adventure game is the special nature of the Bard character. As you would expect, there are certain advantages to be gained for this character. The Bard can weave certain long-term magic by playing tunes on his musical instrument. There are many different instruments available. Some of them

have special attributes that are useful in battle as well. Of course, only the Bard can use these instruments. When these weapons are used you will hear appropriate sounds from your speakers.

There are a few weaknesses in this game. The chief fault is that you must return to the adventurer's guild before you can save a game. This can be most annoying if you happen to lose your way in a maze. More than once, I had to turn off the monitor and hope that we did not have a power failure before my next session. As mentioned earlier, it is difficult to get past the first two levels.

In general, Bard's Tale is an extremely enjoyable game and deserves a look. The play is smooth and absorbing; the graphics are fun to look at and add to the realism of the game; the user interface is comfortable. My recommendation would be to find a copy of this game and play it!

Overall rating: A fine specimen of an adventure game. It has a fine future ahead of it as an aging classic.

[Darrel Raines likes to play games on his computer. He has been known to write reviews about these games from time to time. He also sometimes works for NASA as a subcontractor on the International Space Station.]

(c) Copyright 1993 T/TalkNET Online Publishing and GENie. To join GENie, set your modem to 2400 baud (or less) and half duplex (local echo). Have the modem dial 1-800-638-8369. When you get a CONNECT message, type HHH. At the U#= prompt, type: XTX99014,DIGIPUB and hit the [return] key. The system will then ask you for your information.

Call (voice) 1-800-638-9636 for a free brochure about the GENie information service. ■



On the Trail of the Apple ///

by David Ottalini
Apple /// SIG Co-Chairman

///ers From The Past

THE ONE interesting thing about being online on CompuServe and on the Internet these days is that we are hearing from more and more folks with ///s—or who were once active in the /// community and who, while perhaps still owning a ///—have moved on to other things (and yes, I pitch WAP every chance I can!)

One of those individuals is David Thomas Craig, who has contributed a number of excellent PD disks to our library (see disks 3PCL-13,14 and 15). He now lives in New Mexico, and contacted me on CompuServe. Among a number of SARA-related items David has are source code listings for things like the Apple // Emulation mode and many more. But his answer to a question I had about Apple's archives of /// material surprised me: I doubt if Apple has much /// source code in its archives. I talked with one Apple employee (he was around before Apple became a company). He said Apple's software archive really began with the Macintosh in 1984 and as such contains very little pre-1984 software. I also recall hearing that Sun Remarketing was looking for the SOS source around the 1988-1990 period and could not find a copy at Apple (I don't know if this true).

And why wouldn't Apple have kept such an archive? If true, it would be a real tragedy for the entire Apple//and///family. David answered this way:

It has been my experience that companies are not good archivists of software sources since once a piece of

software has no operating value to the company, the sources for that software just take up space.

We hope to work with Dave to develop a complete set of source listings for the Apple /// that can be held as an archive at WAP. He also has a large set of LISA documentation, which we may also be able to get copies of. Stay tuned!

Detroit Doings

We missed Paul (and Anieta and family) at the last /// SIG Meeting. But we are always happy to see his postings on the /// SIG Board on the TCS. As usual, there's a great story to tell about our SARA besting Messy-DOS:

Well it's been an interesting week with almost no time for computing. My third IBM has decided to not fail so I hooked it up to my /// so they can share files. It's funny, after playing around with the direct connection for the first weeks, the IBM now sits idle most of the time (as usual). I don't have the patience to work in slow motion, while SARA rips through the same workload without asking any questions.

I was also frustrated by WordPerfect to the point of just transferring the file to the Apple as soon as possible. I had worked through my entire lunch hour writing a three page letter, brought it home and jumped into WordPerfect. WP 5.1 would not load the file. Matter of fact, it would not let me print or even look at the file, and I had to have it ready for the next morning! It was a minor oversight on my part. WP 6.0 at work,

and WP 5.1 at home. I had to drive thirty miles (back to work to change the format). When I got home I just had DOS output the file to the Communications Manager so I could grab it in /// EZ Pieces. That's where I should have done it in the first place! By the way, WP 6.0 is unusable in the graphics mode unless you have a good 486 or better. I gave up on the spell checker after waiting 10 minutes for the checking of the first *paragraph*. I assumed that a 20 Mhz 386 could do better than that, but I guess not...

Paul II: More Irony

They have the best computers in the entire corporation, plus an IBM 9000 mainframe, file servers and super servers, LANs, WANs, and standalone applications. "They" are the administrators and database programmers for the Detroit Medical Center. They are working on a new database and discussing database report output. They hold in their hands the standard, the goal of their output, the example of how they felt it should be done. They hold in their hands a final report that was being examined because it looked much better than their own. They hold in their hands the creation of an Apple ///.

PD Library on the Move

I've been working the past few months on a project to reorganize our PD library (that scream you just heard in the background was our own John Ruffatto, who has to do the actual, physical reorganization. But its not too bad—just 250 disks!).

My main goal here was to turn it into something that was easier for you to use and find disks you're interested in. Better organization also makes it easier as we develop new disks, since we have more categories that better describe what we have to offer. Please see our separate article about these changes and when they may take effect.



Word Juggler Pathname Problems

A new Apple /// SIG Member, Gracie Clifford, has been using her faithful SARA for a very long time with basically one program—Word Juggler. But recently a new copy I gave her had a problem—it had a default pathname of /Profile.2 which her system couldn't recognize because there was no Profile to begin with. What to do if you are only using a floppy-based system?

I am *not* a Word Juggler user. But, after rooting around in an old manual, I discovered how to change the default pathname and decided you might like to know too (if you are a Word Juggler user).

When you boot into Word Juggler, you are taken to the Edit Configuration Menu. One of the choices tells you the default pathname and asks if you'd like another. If you change it, though, that new pathname does *not* become permanent, but rather is good only so long as WJ is an active program.

The only way to change the default pathname (for some unknown reason) is to use a program on the WJ boot disk called "Make.Params." It is a Basic program! To use it, you will have to boot Business Basic and at the ")" prompt, type in "Run .D1/Make.Params" and hit RETURN. The program will load and in a few seconds you'll see:

"Word Juggler Parameter File Editor"

Now remove the disk and insert your WJ Boot/Program Disk. Note that the Editor program gives you 3 choices. Choose #3 "Set Default Pathname" and press "RETURN." The disk will whirl a tad and about 2/3rds down you should see:

"Current Default Setting is "/Profile.2."

At the bottom, you'll see the question: "New Default Prefix?" Type in either ".D1" (for the WJ boot disk) or (say) ".D2" if you want WJ to look

there for your WJ files. Press the "RETURN" key. Your WJ Disk will whirl a tad and the screen will note (at the bottom) "System Busy" and then stop.

Whew! You're done. You can now either press "0" to end completely or simply press the CONTROL and RESET keys at the same time to boot into Word Juggler. It will now look to .D1 or .D2 as your default and you won't have to go to the setup menu to change the pathname.

BOS3 Problems Take Two

Our Canadian ///er Martin Davidson noted with interest Paul Cambell's suggestions for making BOS work better with his system. Martin had these additional comments:

I think Paul has correctly identified the sources of my memory problems (see below the readout I get from BOS utilities when I check memory allocation):

Bank \$06	Reserved for The Desktop Manager
Bank \$05	Reserved for the BOS Program Switcher
Bank \$04	28K for drivers 1K for cache 3K free
Bank \$03	32K free
Bank \$02	32K free
Bank \$01	32K free
Bank \$00	32K free

The big memory consumers are of course DTM and BOS themselves, and the drivers. These last could indeed be controlled if I deactivate a few until I needed them, but I'm too idle to go back in to reactivate them at need, and that seems an inelegant response in any case. BOS shares with Selector a regrettable inability to load drivers dynamically like Catalyst, as well as requiring more memory for itself than Catalyst does.

In its favor, BOS does NOT obstruct the operation of DTM macros. Any DTM macros I try to use

to pass through the Catalyst menu fail completely to load and move on to the next interpreter, and I cannot use any DTM applications AT the Catalyst menu itself. BOS lets me cut something from one application and paste it in another all using the one macro, as well as invoke DTM at the BOS main menu.

I compromise by booting BOS from one side of my boot disk and Catalyst from the other. Most applications can operate reasonably within 4 banks; even many Pascal ones, if I stick to RTPascal. It's just that with Catalyst I have only two programs I can't run for lack of memory (Lazarus /// and Keystroke DB), while with BOS there are a good many more. But 3EZP, AWR and Advanced Visicalc, my most commonly used software, give no trouble. If I had 512K (which I otherwise don't need) this discussion wouldn't even be occurring.

Stemspeller and BOS

/// SIGer Steve Truax has been having some problems with BOS and the old Australian program called Stemspeller of late:

Now that I've taken BOS home and installed it, I have a problem. It has worked well with every program except Stemspeller. When I load Stemspeller, it seems to work fine. But it won't read any files from my old Corvus drive, where all my files that need checking live. I get a message that says "error reading file" or something (sorry, I didn't write the message down) and then it looks like it's proceeding anyway but terminates. The system doesn't hang or crash, but it refuses to read my files and Stemspeller can't seem to recover from the error. It all works fine under Selector ///. Any suggestions? Should I call Stemsoft's technical support number? (A little orphan humor there). I haven't had time to explore this, so I can't tell you any more right now. I hope one of you



might have an insight into this. I do have a 256K machine with a very large driver file—could I be running out of memory?

I put the question to ///SIGer Bob Consorti, who wrote BOS3 and here's his reply:

I'm not sure about the StemSpeller problem. I just tried it out on my system and it worked fine. I would suggest reinstalling StemSpeller and the associated files and run a DDF3 check on the hard disk. If that doesn't fix it, try running StemSpeller from bank 0 (put a "0" before the program name). If it works from there the Apple /// has a memory problem that wasn't showing up because the program was in a different bank of memory under Selector. I would also try changing the order of the Corvus driver to see if it would work better there. I have a feeling it's a data corruption problem on the hard disk or a memory failure.

A Few Tidbits from Bob Consorti

■ As designed, the Apple /// can handle up to 4MB of memory on board. (but building a new RAM card to handle 4 MBs is not feasible financially and even if it were, programs would have to be rewritten to handle the extra memory).

■ Our Sara works with the new Seagate 1.2 GIGABYTE hard disk! Bob says if anyone wants one, he would need to write a partition management utility since the drive would have to be split up into 66 16 megabyte partitions!

Apple /// Resources/Repairs

Bob Consorti
179-B Kent St.
Brookline, MA. 02148
1-617-731-0662

On Three c/o Joe Consorti

1174 Hickory Ave.
Tehachapi, CA. 93561
1-805-822-8580

Sun Remarketing
PO Box 4059
Logan, Utah 84321
1-800-821-3221

W.M.Enterprises
1932-D Lincoln Dr.
Annapolis, MD. 21403
(301)-268-4242

The Lisa Shop
PO Box 969
Woodland, Ca. 95695
916-668-5637

Tom Linders
12604 Wardell Ct.
Saratoga, CA. 95070
1-408-741-1001

Apple Catalog
800-795-1000

Apple User Group Connection
800-538-9696 ext. 500

Apple User Assistance
800-767-2775 ■

Please write

The Journal seeks articles from our members. They may be submitted either via the TCS—the journal board—or on disk to the Pi office. Preferred format includes providing the article in a word processing format, with screenshots in a separate file. If you have preferred positions for screenshot placement, please let us know. (Include your name, phone number and a proposed title too.)

There are many different computer-related areas which are potential topics for review. These include not only hardware and software reviews, but also reviews of specific projects — how the hardware/software was or was not able to perform. Such a write-up would also be an appropriate addition to the Journal.

Think about getting involved and contributing to the Journal. Your perspective can help others in similar situations. Consider writing.

We look forward to hearing from you.

—K.A.M.
Managing Editor



What My Apple /// Needed Was a Good Boot!

by Martin Davidson

WHERE IS IT written that you have to boot up an Apple /// from the inboard drive?

A few years ago when booting up a non-Apple personal computer of a widely-used make at work, it suddenly occurred to me that there was no disk in the inboard drive, and yet all was going perfectly well. All the code required by the machine was either built into its hardware or resident on the hard disk. I reflected on my Apple /// at home, which demanded that Boot Code, SOS.KERNEL, SOS.INTERP and SOS.DRIVER files all be on the slowly chugging .D1 drive if anything was to happen at all, and I began to wonder why. (When I say "wonder why", I am referring to a series of frustrated speculations rather than to an incisive and informed analysis; my grasp of what is going on when my Apple boots up was nebulous at best, and has not improved much since). Given the faster disk reading speeds obtainable from a hard disk, it seemed obvious that a shorter boot time would result if some or all of the SOS files could be loaded from there and not from the inboard floppy.

At that time, the most progress I could make was to realize that the device containing the boot code must be determined by some code in the ROM. Since that is inaccessible to all but the most adventurous, and perhaps not even to them, I was stuck. The boot code itself, and the SOS files, could in theory be modified once

understood, but of understanding I had none.

Some time later I discovered Ed Gooding's treasure trove of /// software on his ///s Company BBS (now under the wing of WAP's Apple /// SIG), and found that not only had somebody succeeded in disassembling the Block 0 Boot Code, but that modifications of it existed which went looking for SOS.KERNEL (the first SOS file loaded) not on the inboard drive but on a Corvus hard disk - which by a happy coincidence is the kind I have. For the curious, source code for these files is found in the "Programming - 6502 Disassemblies" section of the BBS, to which they were contributed by Mr Scott Stinson, their creator.

So far so good. After some weeks of confusion caused by my inability to realize that the code was written assuming a different slot assignment than mine for the hard disk control card, I finally got to the point where I could move SOS.KERNEL from .D1 to .C1 (the root device for the Corvus drive, as will be familiar to other Corvus owners out there), and have it load from there during the boot process. SOS.KERNEL, however, still refused to look anywhere but .D1 for SOS.INTERP and SOS.DRIVER; so although there was some sense of progress, and a modest reduction in bootup time, the arrangement remained esthetically lacking. I think, but can't prove, that SOS.KERNEL is steered in this

direction by clues planted by the bootup ROM, and that the modified boot code I was using did not override these.

At about this time I had the good fortune to contact Mr Stinson directly. It was some years since he had last paid attention to novel boot codes, but he was good enough to hear me out and make some very helpful suggestions and contributions. In particular, he devised a second variation on the Block 0 boot code, and some modifications to the early part of SOS.KERNEL—parts of which he had once disassembled - which together achieved the purpose I have described. An examination of the text file for the boot code suggests that modifying the environment register to disable ROM is indeed one of the important things it does. I have the modified SOS.KERNEL only in assembled form, and am quite incapable of identifying the significant changes there, although some code found in the normal Block 0 Boot Code does seem to have found its way in.

Whatever the internal mysteries of the arrangement, when I put a floppy containing the modified Block 0 Boot Code (and nothing else) in the inboard drive, and the SOS.INTERP, SOS.DRIVER and modified SOS.KERNEL files on the Corvus .C1 drive my whole system boots up with no complaint, and much more quickly than in normal mode. As a bonus, a small modification to the boot code ensures that the computer will wait until the hard disk comes up to speed, rather than hang when it fails to find the disk ready.

The above system works with Catalyst as the SOS.INTERP, and with SOS.DRIVER files containing PowerKeys; I do not know whether it works with BOS or Selector. Unfortunately, I do know that it does not work with Desktop Manager. DTM itself requires a modified boot code (to reserve memory for itself

during bootup), and I have not been able to reconcile this with the other modifications. As a result, when I try to work with DTM, everything hangs in mid-boot. Work continues on this, and all suggestions will be treated very politely.

Although I have made this work only with a Corvus Hard Drive, I am not convinced that it matters what make of HD is used. The boot code thinks in terms of slots, and once past the slot—as I understand it—the directory and file structure it needs to find and load SOS.KERNEL (from which all else flows) is not device-specific. Perhaps it would work equally well on a Profile or a Sider. For anybody who would like to tinker further (on a non-commercial basis), I have sent to the WAP /// SIG a copy of the (assembled) modified SOS.KERNEL and the (unassembled) text for the boot code with which it works. The other Corvus boot code, which works with the normal SOS.KERNEL but which as a result requires the SOS.DRIVER and SOS.INTERP to stay on .D1, can be picked up from the ///s Company BBS.

The careful reader will have realized that it will do little good to ask me deeply technical questions about this small miracle. I am here more a publizer of other people's achievements than a great original mind. However, if anybody wants to follow up I will be glad to provide any information I can. I can be reached on ///s Company (301-593-0024). ■

March Apple // Meeting

by The Jernigans

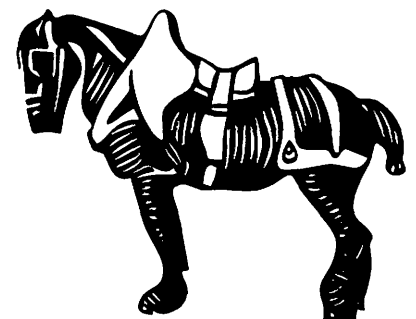
THE MARCH MEETING of the Apple// group was held at the WAP office. Because the General Meeting was at Burning Tree School, some of our members were late getting to the Apple // portion of the "Progressive meeting." Once we got started, we had a great presentation by Ron West, a social studies teacher on Virginia's Eastern Shore. He has created 3-D models of historical buildings using PaintWorks Gold. The Office GS didn't have PaintWorks and my Paintworks program disk was bad, so Ron used Platinum Paint to show how he creates components (walls, doors, roofs, etc.) of each building and then prints them in color, cuts them out, glues them to a stiff backing (used file folders), and then assembles them. We saw Mount Vernon, Monticello, and Jamestown.

Ron went on to tell us how his students have created their own models, using his method of: research the background, visit the site, photograph the building, and then use the paint program, rulers, and other graphics tools to prepare the templates. Ron showed us photographs of his students at work. His is a very impressive undertaking. Thank you, Ron, for sharing with us. Ron also showed us his digital camera and we have digital proof that Dave Jernigan, John Ruffato, and Dale Smith are real people and the TCS does exist and has resident penguins. We may see these in the magazine or stop by the office.

The April meeting will again be at Burning Tree (General) and WAP

office (Apple //). Bill Geiger will be sharing his GS sound system. If you have anything to share, please feel free to bring it. (By the time you read this in the magazine, the meeting will already have been but the invitation is still open). There is nothing scheduled for the May meeting. We can use that time to plan activities for the coming year. June is the Garage Sale and August is the Games Sig. Anything that you would like to share will be greatly appreciated by us. We need to know what software and hardware you want to see.

From "Sunny" California where the Oregon Mist has followed us. ■





Musicshop v1.0 by Opcode Systems

by Hal Feldman

ABOUT SIX WEEKS ago I dove into music and MIDI head first. Armed with a new keyboard and a Mac, I was determined to erase my traumatic memories of childhood piano lessons. Back then, my fingers failed me, as did my patience, and I quit piano because the frustration level was too high. But now I wanted to try again...with a new high-tech approach. Enter MIDI, a musical language that allows electronic instruments to talk to each other. With MIDI every aspect and nuance of a performance is captured as digital information. This information can then be stored or sent to other instruments, allowing musicians to play many instruments at once. Couple this powerful language with a computer and some sequencing software that allows you to alter that musical data, and MIDI gains the ability to correct the mistakes made during a performance. This is what I needed...a way to "play" what my ear heard without my fingers getting in the way.

Now enter Musicshop by Opcode Systems, Inc. Out of the box this sequencer product was very friendly. The installation/tutorial manual explained in detail how to set everything up and supplied plenty of helpful diagrams. The tutorial wasted no time in letting me enter data and hear just what Musicshop was capable of. It even supplied a simple tutorial song if I didn't want to try entering notes from my keyboard right off the bat. Everything flowed

in a very organized and educational manner. Within 30 minutes I had a smile plastered on my face, music playing from my keyboard, and had a good overview of what wonderful things MIDI could do for me.

Once I put down the "get-up-and-running-but-don't-learn-too-much-too-fast" tutorial manual, the reference manual was next. This manual outlined all of Musicshop's editing features in detail. Although organized and well laid-out, it was not nearly as well written as the tutorial manual. Several features of the program were explained in a confusing manner and in one case, a very important detail was missing. In particular, in order to record which voice (instrument sound) you wish the sequencer to playback your song in, you must place a program change at the beginning of your sequence file. This was completely omitted from the manual. Thus, every time I tried to load and playback my first recorded song, the wrong instruments would play on the keyboard. In addition, their explanation of how to personalize the program and note names to a specific keyboard was lacking not only clarity, but also neglected to point out a *reason* to personalize note names. These, and other minor flaws in the manual, made further learning and experimentation somewhat frustrating. A musical novice needs far more detail and hand-holding than this manual provides. However, I must admit that I was not left without

product support. Where the manual failed, the phone support succeeded. When I called the 6-day-a-week customer support line, they were very pleasant and immediately cleared up the questions that I had. Too bad the reference manual wasn't written by the tech support staff! An interesting fact about the missing "setting up a voice change" documentation that I explained above is that the instructions are *included* in the manual of Opcode's more expensive Vision sequencing software. Not only that, but in that manual it is separated from the rest of the text by a bold "Important" headline and italicized lettering. I don't think Opcode intentionally left it out of the Musicshop manuals, but maybe they should consider rewriting the manuals for this otherwise excellent product.

Once past the manuals, Musicshop does nothing but shine. Its on-screen appearance is top notch, packing hoards of tools and indicators into a small, organized interface. Every icon and picture is designed well, adding to the product's intuitive feel. One particularly nice feature is an icon they added to the main editing window. It reveals a pull-down menu that allows quick access to the mixer, track setup, and arrangement windows. All of Musicshop's tools follow the Macintosh GUI (graphical user interface), accomplishing the difficult tasks of making an incredibly powerful piece of software both non-threatening and easy to use.

Musicshop is also more than "just a sequencer." It also allows you to directly enter musical notes in both standard staff view or in the sequencer's timeline view. In addition, Musicshop automatically interprets sequences and assigns standard notation to "live" performances, making it a pseudo-notation program as well. While it accomplishes notation, the ability to edit the notation is scarce, so don't



expect it to replace a music notation program. It is, however, good enough for educational purposes and gives you a general sense of what your printed music would look like.

Overall, Musicshop is a well-rounded sequencer program that will make any beginner or intermediate user very happy. Its editing capabilities are not ultra-extensive, but supply more than enough ability to all but the professional musician (which is where Opcode's Vision and StudioVision software are positioned.) Musicshop is easy to run and is quite nimble, even with large and complex sequence files. The only drawback is the sketchy reference manual which should have more details. Musicshop's notation feature makes it an excellent teaching aid and allows users to enter sheet music as well (a feature lacking from other sequencers.) I highly recommend this program to anyone looking for their first sequencing software package. With its myriad of features, it may well be the last one you'll ever need. ■

If you enjoyed this article, please drop a note to:

*Hal Feldman
10 West 66th Street, Apt. 9J
New York, NY 10023*

or message him at the following electronic mailboxes: Prodigy: MDCS79A AOL: HalF Internet: half@aol.com OneNet at node Hal Feldman, NYMUG



Give in to the Dark Side A Review of ZOA

by Michael Volchok

WHEN I FIRST played ZOA, I could have sworn that I heard Ben Kenobi. As I watched the new star fighter simulation, I heard "Trust your feelings, Luke." I turned off my range finder, called on the force, and promptly slammed into the side of a slow moving space station. It seems that despite having seen Star Wars too many times, it was no preparation for the real thing (real simulation that is).

ZOA (Zone Of Avoidance) a new game from Cassidy & Greene is a terrific star fighter simulation. When flying in the three dimensions of space you have to deal with your horizontal velocity, your vertical velocity, your thrust and your roll. You also must control your velocity which can easily get out of control in the zero-G environment of space. It is easy to spot the first-time player of ZOA, he's the one spinning out of control until he hits the nearest large object. It is very difficult and challenging to master all three axes of motion as well as your roll.

You are a lone star fighter defending your space station from various and sundry attackers. On the first four levels (basic training more or less) you are confronted with a storm of asteroids hurtling toward your space station. After shooting all the asteroids you then have to maneuver your spaceship into the hanger of the space station. Docking may seem like an impossible task, the space station is rolling one way, your rolling another, coming in at an angle,

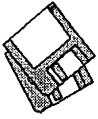
too fast...but you can get the hang of it after about twenty crashes. Besides, it's easy compared with engaging enemy fighters.

ZOA has color three dimensional objects including your space station, asteroids, enemy fighters, marauders and the planet around which your space station orbits. When I first saw this game demonstrated on a Quadra 800 I thought, great, another game for "the rest of us" who own one of the top of the line machines. I was pleasantly surprised however, when I loaded the game on my PowerBook 160 with its (comparatively) sluggish 25MHz 68030 and its small 512 x 480 resolution screen. It plays just as quickly and enjoyably as it was on the Quadra 800 (without color of course).

ZOA is such an accurate simulation that it suffers from the constrains of reality in some ways. Although there are good fight sequences, most of your time is spent maneuvering and journeying to your next encounter.

ZOA is not non-stop action, but it is an entertaining and challenging simulation which will keep you entertained for hours. ■





Macintosh Disketeria

by Dave Weikert

New Disks

There are fourteen new disks this month; two Anti-virus utilities series, eleven are in the Graphics series and one Apple System Software. Descriptions of the files on the new and revised disks are included below.

Anti-Virus Utilities

We updated our Anti-Virus Utility series due to the discovery of the new variant of the INIT 29 virus and a new INIT 9403 virus. The INIT 29 B variant was detected in March of 1994. The virus infects data, applications and system files and spreads under both System 6 and 7. The virus does not contain any intentionally destructive code but can cause crashes and other problems. The INIT 9403—sometimes called the SysX virus—was discovered in Italy in March of 1994. Unlike most other Mac viruses, this virus will erase disks connected to the system including the boot volume.

Mac Disk #1.02L is a self starting (boot) disk for earlier Macs. This boot disk will not self start with the newest Macs that use System 7.1 and System Enablers (LC III, Centris, Performa 450, Quadra, PowerBook 145 and later and all Duos). Mac Disk #1.03L contains Disinfectant and a number of other anti-virus utilities and is more useful for later Macs that will not boot from Mac Disk #1.02L.

Revised Graphics Series

Graphics! Along with desktop publishing, the graphics capability

provided by the Mac was the primary reason for the initial success of our beloved computers in the business place. Graphics and color first appeared in our Mac Disketeria in the Mac II series of disks. The Mac II was the first machine capable of performing color graphics, other color functions such as games and monochrome and color plotting routines that required more powerful CPUs. (It seems odd referring to a Mac II 68020 CPU as a powerful CPU after looking over the most recent crop of 68040 and Power Macintosh models.) As time has passed, color and more capable CPU have been added to a variety of Macintosh models other than the II series and the Mac II disk series was revised last year to become this graphics series.

After a complete revision this month, the Graphics Disk series 8.XX now extends through Mac Disk #8.11A. The first three disks—#8.01A through #8.03A—include fractal applications. These display Mandelbrot sets with fantastic swirls of color for you with color Macs. Mac Disks #8.04A and #8.05A include applications and DAs for viewing and modifying graphic files in GIF, PICT and JPEG formats. The next four disks—#8.06A through #8.09A—include drawing and painting programs and general purpose graphic utility programs. Disks #8.10A and #8.11A are dedicated to the NIH Image—an image processing and analysis program that can acquire, display, edit, enhance, analyze, print and animate images. Descriptions of the new files

are included below.

The disks in the Graphics series are primarily applications and DAs that generate, modify or view graphics files in a variety of formats. Although the category of Graphics is a holdover from the Mac II series, the majority of the files are new or significant revisions to ones previously issued. We think that you will be interested in at least some of the files on these disks. Look them over and let us know what you think.

All of the files in the Graphics series are compressed with Stuffit so you receive more value per disk. Members may purchase disks individually for the normal Disketeria price of \$4.00 per disk or \$3.50 each for five or more. You may also purchase the entire collection for \$33.

Apple System Software

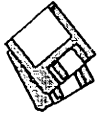
There is one disk this month which updates Apple System Software. The **Network Software Installer** fixes bugs and improves performance of networked Macs, especially on Ethernets. Apple must have decided to make this disk their version of the disk of the month since this is the third time in the past four or five months that it has been revised.

About Shareware Requests

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

Disk #1.02L — AV 2 ANTI-VIRUS UTILITIES

This disk is self starting and includes the System Folder files. Its is designed for users who want a "canned solution" for their Anti-Virus start-up disk. It should be locked when you receive it; keep it



locked to prevent the spread of a virus to this disk. Use Disinfectant as the primary means of detection and removal.

Disinfectant 3.5: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 17, INIT 29, INIT 1984, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace), MBDF (A & B), CODE 1, CODE 252, T4, T4-C and Frankie. Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

system 6.0.5 f: Includes Apple System Software version 6.0.5 with System and Finder with Control Panel and SCSIProbe to provide a self starting disk. The System file has been stripped of all possible fonts and DAs to permit using this as your primary virus detection, eradication and prevention disk. We could not install System Software 6.0.7 because there was not enough disk space to install Disinfectant even after 6.0.7 was stripped of all possible fonts and DAs.

**DISK #1.03L — AV 3
ANTI-VIRUS UTILITIES**

This disk contains the most popular and effective Anti-Virus applications but does not include a System Folder. Its is designed for users who want to "roll their own" Anti-Virus start-up disks. Two files on this disk are CompactPro self extracting archives to save space (the file name suffix is .sea). Place each file on a separate disk and double click to expand them.

Disinfectant 3.5.sea: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT M, INIT 17, INIT 29 (A & B), INIT 1984, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace), MBDF (A & B), CODE 1, CODE 252, T4, T4-C and Frankie. Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out

the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

Eradicat'Em 1.2 f: By Dave Platt. The sole purpose of this INIT program is to monitor and remove the WDEF virus; it does this quite effectively. It scans all inserted disks for WDEF in the invisible Desktop file after it is installed in the System folder and your Mac is rebooted. **Eradicat'Em 1.2 release notes** are in TeachText format. Requires Mac 512KE or later.

GateKeeper 1.3 Dist f.sea: By Chris Johnson. These INITs and associated Control Panel Device (cdev) are placed in your system folder (Systems earlier than 7.0) and are then accessible via the Control Panel after booting. For System 7.0 and later installation, see the documentation. GateKeeper monitors the types of action that viruses take and limits the system response to prevent infection. GateKeeper creates a log file for later analysis and diagnosis of virus attacks. GateKeeperAid looks for certain viruses and their variants and eradicates them. **GateKeeper Introduction** and **GateKeeper Aid Introduction**, in MacWrite format, describe the use of the programs. For Mac 512KE and System 4.1 or later. **Send a postcard.**

HyperVirus 1.3 f.sea: By Joe and Hubert Savelberg. Searches HyperTalk scripts for the HyperVirus (Musidenn) virus. Also includes the ability to enter any search string to find any future HyperTalk script virus.

PostScript Vaccine 1.0.3: By Jon D. Clauson. Modifies the Apple Laser Prep file to install a vaccine against PostScript Trojan horses that modify the printer's server password. For Systems 6.0 and later and LaserWriter drivers 5.2, 6.0 and 6.0.1. **Shareware - donation to American Cancer Society.**

Virus Reference 2.1.2 f.sit: By Kevin Harris. A HyperCard stack that provides information about Mac viruses.

VirusDetective 5.0.6.sea: By Jeffrey S. Shulman. This Desk Accessory scans a disk, folder or file to detect a virus. Viruses detected include Scores, nVIR (A & B), INIT 29, INIT 1984, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace),

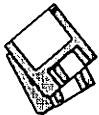
MBDF, CODE 252, T4 and Frankie. Virus Detective can search for operator entered strings and can write a log file to disk. This version has extended capabilities and permits you to easily check out an entire floppy disk library. The DA is installed in the System file and is available under the menu; a copy is not included in this folder due to lack of space on the disk. **JSS Virus Article.Bkmm/Helv** is the MacWrite II format documentation on the theory and use of Virus Detective. **SearchString Sets** contains text files with search strings. **Shareware - \$35 for license, \$40 for license and disk with other demo programs.**

**DISK #8.01A — G 1
GRAPHICS-FRACTALS 1**

This disk and the following two contain colorful images called fractals. 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, actually 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.

Ani-Mandel 1.2 f.sit: By Mark Lankton. An application for viewing the Mandelbrot set and its environs. Choose "Mandelbrot" from the File menu for a plot of the Mandelbrot set, an extremely odd-looking entity. When it's done, choose "Animate Colors" from the Twiddle menu and watch the fun. **Ani-Mandel docs.** is in MacWrite format. **Shareware - \$5 for the documentation.**

C.M.S.E. v. 0.90 f.sit: (Color Mandelbrot Set Explorer). Another approach to the Mandelbrot set, hampered a bit by the fact that the short documentation is *en francais*. But you don't need it to open the application and wander around the small color window which zooms in and out of a Mandelbrot Set. Click either end of the color bar to cycle the colors through



the illustration. **C.M.S.E Docs** is in text format. **Shareware** - \$5.

Fractal Artist 1.6.3 f.sit: By Alexei Lebedev. A fractal generator with a nice interface; unfortunately you cannot save the images. **Fractal Artist 1.6.3 Notes** is in text format.

Fractal Contours.sit: By Jim Cathey. Another black and white program which generates a random landscape of mountains, foothills, or foothills and water. (The menu shows a "save as Paint" option, but it's always dimmed.)

Fractal Explorer V1.2.sit: By Marcio Luis Teixeira. Another fractal generator that permits you to explore the Mandelbrot and Julia sets. **Fractal Explorer Documentation** is in text format. **Shareware** - \$10.

Fractal Islands 5.0.sit: By Scott Berfield. Generates a random fractal landscape of islands in a sea. Can use QuickDraw colors when selected, and can be saved in several formats.

Fractal Wizard 1.6.3 f.sit: By Thomas Okken. One of the applications with more extensive feature set for viewing the Mandelbrot set and related complex images in color or gray scale. Includes a number of External Drawing Procedures. **blurb** is in text format.

Fractal! 1.0.1 f.sit: By Ed Rotberg. A landscape generator using fractals; this one has a lot of features but takes a lot of memory. **Fractal! Manual** is in double clickable Postcard format.

Fractal.sit: By Richard Koch. A simple generator of various black and white fractal curves.

DISK #8.02A — G 2 GRAPHICS-FRACTALS 2

MacMandelMovieMaker 1.0.sit: By J. Geagan. Create a sequence of Mandelbrot image PICT files for incorporation into a QuickTime movie.

MacPlasma 1.1 f.sit: By DW Lawson. A fractal generator that gives you a random moving display over the whole screen. **Read Me First** is in text format. Requires Mac with Floating Point Unit (FPU), 32-bit Color QuickDraw and a monitor depth of at least 8 bits.

Mandelbrot Animator.sit: By Harry Guiremand. Allows viewing of files created with *Mandelbrot Microscope*. Note: bombs (error -37) if it is opened within the same folder with *Mandelbrot Microscope*.

Mandelbrot Microscope f.sit: By Martin Sanders and William Hembree. A black and white or color Mandelbrot generator. **Mandelbrot Microscope Info** is in MacWrite format.

Mandella 8.5 f.sit: By Jesse Jones. This color or gray scale generator for the Mandelbrot and Julia sets and other fractals has even more features than *MicroMandella* (by the same author). **Mandella Docs**, in Word format, is required reading if you want to know more about fractals; it is even more comprehensive than the *MicroMandell Docs*. Requires System 6 or later, a Mac with an FPU and 32-bit QuickDraw if used with System 6. **Shareware** - \$40.

DISK #8.03A — G 3 GRAPHICS-FRACTALS 3

mandelbrot (t l f) demo f.sit: By Roger Bauchspies. A very fast Mandelbrot generator and After Dark module (with payment of shareware fee). **Mandelbrot(t l f) Read Me** is in text format. Operates in color or black and white. **Shareware** - \$22.

Mandelscaping Demo 1.2 f.sit: By Stuart Schechter. Create Mandelbrot and Julia sets, zoom in and out and convert between two and three dimensional views of the complex space. **Read Me First!** is in text format. **Shareware** - \$35.

MandelZot 3.0.4.sit: By Dave Platt. Another very capable color, gray scale or monochrome fractal generator for the Mandelbrot set. There are a number of selectable options including drawing mode and calculation mode. You may also save the fractal image in a variety of formats.

MicroMandella 1.0 f.sit: By Jesse Jones. A very comprehensive color, gray scale or monochrome fractal generator for the Mandelbrot and Julia sets. **MicroMandella Docs**, in MacWrite format, is highly recommended for your enlightenment and for references to other fractal articles. Requires System 6 or later, a Mac with an FPU and 32-bit QuickDraw if used with System 6.

MovieMaker 1.3.sit: By Jesse Jones. Converts a series of PICT files to a QuickTime movie. **Shareware** - \$10.

Super MANDELZOOM 1.07 f.sit: By Robert P. Munafro. An easily manipulated monochrome or color Mandelbrot set rendering program that draws very quickly particularly in the

lower resolution views. The **Super MZ doc (Read me first)**, **Super MZ doc part 1** and **...part 2** is in text format. The extensive documentation will probably tell you more about Mandelbrot and Julia sets than most of you will ever want to know.

DISK #8.04A — G 4 GRAPHICS-VIEWERS

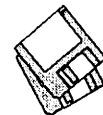
CyberGif 1.3 f.sit: By Roger Allen. A Graphics Interchange Format (or GIF) viewer. This one has dithering that permits operation with black and white Macs, slide shows, resizable windows and a fit to screen feature that preserves image proportions. **CyberGif 1.3 README** is in text format. Requires Color QuickDraw and System 6 and later. **Shareware** - \$15.

GIF Slideshow 1.1 f.sit: By Nick Gammon. Allows you to quickly view folders or disks full of GIF pictures. These may be displayed randomly or in sequence. **Read me!** is in text format; other documentation is as indicated. Requires System 6 or later. **Shareware** - \$20.

GIFConvertor 2.3.7.sit: By Kevin Mitchell. Allows you to view, edit contrast, lightness and gamma and convert between various graphics formats, especially Graphics Interchange Format (GIF for short). You may view graphics images in GIF, RIFF, TIFF, JPG, JPEG (JFIF), MacPaint or PICT format. Save formats include GIF, RLE, scan, startup screen, RIFF TIFF and EPSN format. **GIFConverter 2.3 Notes and about gifconverter 2.3.7** are in text format. Requires Mac Plus or higher, System 6 or later. **Shareware** - \$40.

Giffer 1.12 f.sit: By Steve Blackstock. Permits you to display and modify GIF, PICT, startup screen and Quantized DigiView (QDV) image files. Editing features include contrast and brightness changes, image scaling, and individual scan line shifting. **Giffer 1.12 Doc.msw** is in Word format. **Shareware** - \$20 or a case of beer.

GIF Watcher 2.1.2 f.sit: By Kerry Shetline. A DA for viewing GIF files; it is especially designed for viewing GIF files during download. You may select display alternatives that range from best color for your system or a number of dithered color and black and white selections. **GIFwatcher 2.1.1 doc** is in



MacWrite format and **GIFwatcher 2.1.2 update info** is in text format. *Shareware - \$15.*

PICTshow 2.1 f.sit: By Oliver Dreer. A viewer or player for PICT, GIF and sound files (System 7 format) and QuickTime Movies. For System 7.0 and later and color Macs. **PICTshow Readme** is in text format.

PictureDecomPress 2.0.5 f.sit: By Storm Technology. View JPEG files and decompress JPEG files and save them as PICT files. **PictureDecomPress READ ME** is in Word format.

DISK #8.05A — G 5 **GRAPHICS—VIEWERS**

JPEGView 3.2.1.sea: By Aaron Giles. View JFIF(JPEG File Interchange Format), JPEG (Joint Photographic Experts Group), GIF and PICT format files. Converts between QuickTime JPEG and JFIF formats. Supports 24- and 16-bit JPEG images. Use drag and drop with **JPEGView AutoTyper** to change the file type. **JPEGView 3.2 Blurb** is in TeachText format. Requires System 7 and later and QuickTime. Supports Power Macintosh in native mode. *Postcardware - \$20 for bound, printed documentation.*

Sparkle 1.71 f.sea: By Maynard Handley. Plays MPEGs and converts them to QuickTime movies. It uses the standard QuickTime movie controller as its interface. **README 1st** is in text format. For System 7.0 and later; requires a 68020 CPU and QuickTime 1.6 or later.

DISK #8.06A — G 6 **GRAPHICS—MISC**

3DObjects 1.0 f.sit: By Urban Harrysson. A solid modeler that lets you create and manipulate objects in 3-Dimensions. Includes versions for Floating Point Unit (FPU) and non-FPU equipped Macs. **3D Objects Doc** is in double clickable DOCMaker format. *Shareware - \$25.*

AnimHelp 1.1 f.sit: By Brian Greenstone. A utility designed to help you draw sprite-based animations. *Shareware - \$5.*

Color Convert 1.32 f.sit: By Kendall J. Redburn. Convert from 32- and 8-bit color to 8 color format that may be printed on Apple 8 color printers like the ImageWriter with four color ribbon. **CC Help** is in HyperCard format.

ColorTwirl.sit: Draws colorful, animated

graphics patterns all over your screen.

ColourCheshire 1.0 f.sit: Non only does the Cheshire Cat disappear, but so does the program.

CrediMaker III f.sit: By Erik Walter. Creates a scrolling screen credit that you can add to your QuickTime movie. **Read Me** is in text format.

DesignerDraw 4.4.1 .sit: By Paul Hyman. A drawing program for organization charts, flow charts, dataflow diagrams and other like diagrams. Very good for applications where there is a need for the interconnections between blocks to move as the block is moved. See the examples in **sample diagrams**.

DigiGrafv1.4.3.sit: By W. Simon Tortike. Use a digitizing tablet and this program to digitize graphical information. Easily sets axes and their scaling including non-linear scales. You may also easily select the data format and precision. **DigiGraf docs.macwrite** is as indicated and **DigiGrafrevisions** is in text format.

DISK #8.07A — G 7 **GRAPHICS—MISC**

EPSFilter 2.1a1 f.sit: By Bryce Fowler. Convert HPGL and Plot-1- and simple PostScript files to Adobe Illustrator files that may be edited. **EPSFilter 2.1Docs.wrd** is in Word format. *Shareware - \$25.*

Globe 1.5d1 f.sit: By Paul Mercer. The classic spinning globe demo seen on Sun workstations. It works on all Macintoshes with at least 512K of memory though it looks best on a Mac II with 8 bits/pixel color. **Globe Info** is in text format.

GraphicConverter 1.7.8 (US).sit: By Thorsten Lemke. Converts a wide variety of images between different formats and also contains many useful features for image manipulation. Formats include those for Mac, PC, Atari, Sun and SGI. **Documentation** is in double clickable Postcard format. *Shareware - \$35.*

DISK #8.08A — G 8 **GRAPHICS—MISC**

ImageCatalog 1.5 f.sit: By Tom Bereiter. Create a catalog of dozens of images arranged on the same page much as a photographic contact sheet. ImageCatalog knows MacPaint, PICT, JPEG, JFIF, TIFF and GIF formats.

ImageCatalog doc is in MacWrite format. Requires Color QuickDraw and System 7. QuickTime preferred, but not required.

Imagery 1.8 f.sit: By Jeff Lewis. Converts Macintosh, Apple IIgs, Atari ST, Amiga, IBM PC and UNIX graphics files into Macintosh compatible monochrome or color TIFF, GIF and PICT2 files. The file formats that can be converted are too numerous to mention but seem to include many of the most popular and many obscure formats. You may also import raw image data and try to organize it in a way the Mac can display. **Imagery 1.8 Docs.mw** is in MacWrite format. *Consider a donation to your local Society of Prevention of Cruelty to Animals.*

JPEG Convert 1.0 (PPC) f.sit: By Jim Brunner. Convert images to and from JPEG format using version 4 of the Independent JPEG Group's software. **README** is in TeachText format. Requires Power Macintosh.

JPEG Convert 1.0 f.sit: By Jim Brunner. Convert images to and from JPEG format using version 4 of the Independent JPEG Group's software. Includes Floating Point Unit (FPU) and non-FPU versions. **README** is in TeachText format. Requires System 6 or later.

Kid Pix 1.0.sit: By Craig Hickman. A bit mapped painting program designed especially for younger kids. The rubber stamp feature with a lot of available images will hold their attention.

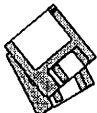
TIFF Show 2.01 f.sit: By Tsutomu Tanno. View up to 8-bit gray scale and 24-bit color TIFF files and touch up the gray scale and color gamma. **About TiffShow™2.01** is in text format.

DISK #8.09A — G 9 **GRAPHICS—MISC**

LightningPaint 1.1 f.sit: By Humayun S. Lari. A very capable bit-mapped painting program with lots of advanced features such as zooms, blends, shadowing, masking, mirroring, etc. **Read Me** is in text format. *Shareware - \$14.*

MattPaint 1.9.3 f.sit: By Matt Battey. A moderately featured color painting program. **Matt Paint README** is in text format. Requires Color QuickDraw. *Shareware - \$20.*

QuickPaint 0.0 f.sit: By Edward Agoff.



A color or black and white painting program that has palettes of black and white and color patterns. **QuickPaint 0.0 Info** is in text format. **Shareware - \$5 for version with fully enabled menus.**

Rainbox 1.0 f.sit: By Alex Rosen. A 'psychedelic' paint program that uses palette animation to make drawings appear as if they are moving. **Readme** is in TeachText format.

ScreenSnap™ 2.2 f.sit: By Michael Hewett & Vaughan Johnson. Take a snapshot of any rectangular portion of the Macintosh screen and save it in a window for later use. The snapshot can be inverted, moved, saved as a PICT file or copied to the Clipboard for pasting into an application document. **ScreenSnap™ 2.2 Fact Sheet** is in text format. **Shareware - \$11.**

StudioCraft 1.3 f.sit: By Seán Bergin. A multi-layer color drawing program. Drawing tools include airbrush and pen and a drop shadow function is built in. **ReadMe-StudioCraft** is in TeachText format. Requires System 6 or later with Color QuickDraw; and Mac II, SE/30 or LC or better with 256 color or gray scale. **Shareware - \$35.**

**DISK #8.10A — G 10
GRAPHICS-NIH IMAGE**

GAUKER f: By Phil Toll. A set of Gaussian convolution kernels useful for MacPaint to gray scale PICT conversions; for use with the Image application. **About Conversion Kernels** is in text format.

NIH Image 1.54 f.sit: By Wayne Rasband. An image processing and analysis program for the Macintosh that can acquire, display, edit, enhance, analyze, print and animate images. It reads and writes TIFF, PICT, PICS and MacPaint

files, providing compatibility with many other applications, including programs for scanning, processing, editing, publishing and analyzing images. It supports many standard image processing functions, including contrast enhancement, density profiling, smoothing, sharpening, edge detection, median filtering, and spatial convolution with user defined kernels. It also incorporates a Pascal-like macro programming language, providing the ability to automate complex, and frequently repetitive, processing tasks. **Change History** is in MS Word format. Requires Mac with 8-bit video in color or gray scale and FPU.

NIH Image V1.54 Docs f.sit: About NIH Image (Word), By Wayne Rasband, is in MS Word format. **Inside NIH Image 1.54** is in Word format and was 'organized' by Mark Vivino.

**DISK #8.11A — G 11
GRAPHICS-NIH IMAGE**

NIH Image 1.54 (Non-FPU) f.sit: By Wayne Rasband. An image processing and analysis program for the Macintosh that can acquire, display, edit, enhance, analyze, print and animate images. It reads and writes TIFF, PICT, PICS and MacPaint files, providing compatibility with many other applications, including programs for scanning, processing, editing, publishing and analyzing images. It supports many standard image processing functions, including contrast enhancement, density profiling, smoothing, sharpening, edge detection, median filtering, and spatial convolution with user defined kernels. It also incorporates a Pascal-like macro programming language, providing the ability to automate complex, and

frequently repetitive, processing tasks. **Change History** is in MS Word format. Requires Mac with 8-bit video in color or gray scale and FPU.

NIH Image V1.54 Docs f.sit: About NIH Image (Word), By Wayne Rasband, is in MS Word format. **Inside NIH Image 1.54** is in Word format and was 'organized' by Mark Vivino.

**DISK #NI.143
NETWORK SOFTWARE INSTALLER
1.4.4**

Fixes bugs and improves performance of networked Macs, especially on Ethernets.

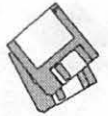
AppleTalk Files: A/Rose, AppleTalk, Archive.as, EtherTalk Phase 2, EtherTalk Prep, Network, Network Resources, Responder, Token Ring, TokenTalk Phase 2 and TokenTalk Prep.

Installer, Network Software Script, TeachText 1.2 and ReadMe.

HyperCard upgrade requires HyperCard proof of purchase; any of original disks, first page of manual, receipt of previous HypCard upgrade disk.

<p><i>Mail this form with your check to:</i> Disk Library, Washington Apple Pi 7910 Woodmont Ave., Suite 910 Bethesda, MD 20814</p>			<p>Are you a member of Washington Apple Pi, Ltd.? Y/N <input type="checkbox"/> 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.</p>		
# of disks	Member Price	Extended	Name _____		
Singles			Box Number, Apt., Suite _____		
___ 4 or less @	\$4.00	_____	Street Address _____		
___ 5 or more @	\$3.50	_____	City _____ State _____ Zip _____		
___ sets (marked above)	\$(above) +postage \$1.00/disk,	_____	Day tele. _____ Evening tele. _____		
maximum \$5.00		_____			
___ Disk catalogs		_____			
+ \$1.50 postage	\$4.50	_____			
TOTAL AMOUNT DUE		\$ _____			

Macintosh Library Order Form



Pi Library

- ___ 0.01 - C 01 Catalog
- ___ 0.02 - C 02 Sampler
- ___ 0.03 - C 03 MemDir

Anti-Virus Utilities

- ___ 1.01G - AV 1
- ___ 1.02L - AV 2
- ___ 1.03L - AV 3

Desk Accessories

- ___ 7 disk set; \$21
- ___ 2.01E - DAs 1
- ___ 2.02E - DAs 2
- ___ 2.03E - DAs 3
- ___ 2.04E - DAs 4
- ___ 2.05E - DAs 5
- ___ 2.06E - DAs 6
- ___ 2.07E - DAs 7

F Keys (Function Keys)

- ___ 4.01A - FKs 1
- ___ 4.02A - FKs 2

ImageWriter Fonts

- ___ 5.01A - IW 1
- ___ 5.02A - IW 2
- ___ 5.03A - IW 3
- ___ 5.04A - IW 4

PostScript Fonts

- ___ 6.01B - PS 1
- ___ 6.02B - PS 2
- ___ 6.03B - PS 3
- ___ 6.04B - PS 4
- ___ 6.05B - PS 5
- ___ 6.06B - PS 6
- ___ 6.07B - PS 7
- ___ 6.08B - PS 8
- ___ 6.09B - PS 9
- ___ 6.10B - PS 10
- ___ 6.11B - PS 11
- ___ 6.12B - PS 12
- ___ 6.13B - PS 13
- ___ 6.14B - PS 14
- ___ 6.15B - PS 15
- ___ 6.16B - PS 16
- ___ 6.17B - PS 17
- ___ 6.18B - PS 18
- ___ 6.19B - PS 19

TrueType Fonts

- ___ 7.01A - TT 1
- ___ 7.02A - TT 2
- ___ 7.03A - TT 3
- ___ 7.04A - TT 4
- ___ 7.05A - TT 5
- ___ 7.06A - TT 6
- ___ 7.07A - TT 7
- ___ 7.08A - TT 8
- ___ 7.09A - TT 9
- ___ 7.10A - TT 10
- ___ 7.11A - TT 11

- ___ 7.12A - TT 12
- ___ 7.13A - TT 13

Graphics

- ___ 11 disk set; \$33
- ___ 8.01A - G 1
- ___ 8.02A - G 2
- ___ 8.03A - G 3
- ___ 8.04A - G 4
- ___ 8.05A - G 5
- ___ 8.06A - G 6
- ___ 8.07A - G 7
- ___ 8.08A - G 8
- ___ 8.09A - G 9
- ___ 8.10A - G 10
- ___ 8.11A - G 11

INITs & cdevs

- ___ 9.01C - I/C 1
- ___ 9.02C - I/C 2
- ___ 9.03C - I/C 3
- ___ 9.04C - I/C 4
- ___ 9.05C - I/C 5
- ___ 9.06C - I/C 6
- ___ 9.07C - I/C 7
- ___ 9.08C - I/C 8
- ___ 9.09C - I/C 9
- ___ 9.10C - I/C 10
- ___ 9.11C - I/C 11
- ___ 9.12C - I/C 12
- ___ 9.13C - I/C 13
- ___ 9.14C - I/C 14
- ___ 9.15C - I/C 15
- ___ 9.16C - I/C 16

Miscellaneous

- ___ 10.01A - M 1
- ___ 10.02A - M 2

Paintings (MacPnt)

- ___ 5 disk set; \$15
- ___ 11.01 - P 1
- ___ 11.02 - P 2
- ___ 11.03 - P 3
- ___ 11.04 - P 4
- ___ 11.05 - P 5

Digitized Sounds

- ___ 9 disk set; \$27
- ___ 12.01B - S 1
- ___ 12.02B - S 2
- ___ 12.03B - S 3
- ___ 12.04B - S 4
- ___ 12.05B - S 5
- ___ 12.06B - S 6
- ___ 12.07B - S 7
- ___ 12.08B - S 8
- ___ 12.09B - S 9

Telecommunications

- ___ 13.01B - T 1
- ___ 13.02B - T 2
- ___ 13.03B - T 3

Programmer/

Hacker

- ___ 14.01A - PH 1
- ___ 14.02A - PH 2

Miscellaneous

Utils

- ___ 15.01C - MU 1
- ___ 15.02C - MU 2
- ___ 15.03C - MU 3
- ___ 15.04C - MU 4
- ___ 15.05C - MU 5
- ___ 15.06C - MU 6
- ___ 15.07C - MU 7
- ___ 15.08C - MU 8
- ___ 15.09C - MU 9
- ___ 15.10C - MU 10
- ___ 15.11C - MU 11
- ___ 15.12C - MU 12
- ___ 15.13C - MU 13
- ___ 15.14C - MU 14
- ___ 15.15C - MU 15

System Utilities

- ___ 16.01E - SU 1
- ___ 16.02E - SU 2
- ___ 16.03E - SU 3
- ___ 16.04E - SU 4
- ___ 16.05E - SU 5
- ___ 16.06E - SU 6
- ___ 16.07E - SU 7
- ___ 16.08E - SU 8
- ___ 16.09E - SU 9
- ___ 16.10E - SU 10
- ___ 16.11E - SU 11
- ___ 16.12E - SU 12
- ___ 16.13E - SU 13
- ___ 16.14E - SU 14
- ___ 16.15E - SU 15

Word Processing

Utils

- ___ 7 disk set; \$21
- ___ 17.01C - WP 1
- ___ 17.02C - WP 2
- ___ 17.03C - WP 3
- ___ 17.04C - WP 4
- ___ 17.05C - WP 5
- ___ 17.06C - WP 6
- ___ 17.07C - WP 7

Adobe Screen

Fonts

- ___ 18.01A - AF 1
- ___ 18.02A - AF 2

Fun & Games

Series

- ___ 22.01 - F/G 1
- ___ 22.02 - F/G 2
- ___ 22.03 - F/G 3
- ___ 22.04 - F/G 4
- ___ 22.05 - F/G 5
- ___ 22.06 - F/G 6
- ___ 22.07 - F/G 7
- ___ 22.08 - F/G 8
- ___ 22.09 - F/G 9
- ___ 22.10 - F/G 10

Online Bible

- ___ 24 disk set; \$50
- ___ Set 1, 6 disks; \$15
- ___ Set 2, 7 disks; \$15
- ___ Set 3, 6 disks; \$15
- ___ Set 4, 5 disks; \$15

Disketeria

ValuPaks (†)

- ___ Best of Pi, 15 disks; \$30
- ___ PS Fonts 1, 14 disks; \$30
- ___ PS Fonts 2, 5 disks; \$10
- ___ TT Fonts 1, 9 disks; \$20
- ___ TT Fonts 2, 4 disks; \$10
- ___ Sys Extensions 1, 6 disks; \$15
- ___ Sys Extensions 2, 10 disks; \$30
- ___ Calc/Clk Utils 1, 5 disks; \$15
- ___ Pers Mgt Utils 2, 5 disks; \$15
- ___ Misc Utils 3, 5 disks; \$15
- ___ Sys Utils 1, 5 disks; \$15
- ___ Sys Utils 2, 5 disks; \$15
- ___ Sys Utils 3, 5 disks; \$15
- ___ Fun/Games 1, 10 disks; \$25
- ___ LW 8.1.1 & PPDs - 4 disks; \$10

Apple System

Software

- ___ 6.0.3 - 4 disks; \$12
- ___ 6.0.5 - 4 disks; \$12
- ___ 6.0.7 - 4 disks; \$12
- ___ 6.0.8 - 4 disks; \$12
- ___ 7.0 - 8 disks; \$20
- ___ 7.0.1 - 6 disks; \$20 (‡)
- ___ 7/7.0.1 Tune-Up \$3
- ___ 7.1 Sys Updater 2.0.1 \$3 (‡)
- ___ Sys Util Update 1.0.1 \$3 (‡)
- ___ QuickTime 1.6.1; \$3
- ___ LaserWrtr 8.1.1

- ___ - \$3 (‡)
- ___ LaserWrtr 8.0; \$6
- ___ Network Installer \$3
- ___ TrueType; \$6
- ___ Basic Con Set 1.1.1; \$3
- ___ Express Modem; \$3 (‡)
- ___ Express Modem Geo; \$3 (‡)
- ___ CD ROM Setup; \$3
- ___ Comm 1 (CTB); \$3
- ___ LW PPDs - 3 disks; \$9
- ___ AShare 4 Tune-Up; \$3
- ___ AtEase Updater 2.01 \$3
- ___ StyleWriter II; \$12
- ___ Iie Installer; \$3
- ___ Mon Energy Star; \$3
- ___ LW Pro Tune-Up; \$3

HyperCard Update

- ___ 1.2.5 - 3 disk set; \$9
- ___ 2.0 - 5 disk set; \$15

- (†) all files compressed (except LW 8.1.1 & PPDs)
- (‡) on 1.44 Meg diskette



Apple Disk Library

by John B. Ruffatto

Welcome to the Apple Disk Library section of the Journal, as you can see there is always room for improvement. In this issue there are now Disk Order Forms for the Apple II, Apple IIGS, and the Apple III. The librarians would like to receive comments pro and con to the new set-up versus the old listing format. Direct your comments to me via the Washington Apple Pi office and I will try to respond them.

I would also desire your comments in regard to Public Domain software you would like to see included in our Disk Libraries. Since we no longer publish the titles of the disks in the library, it is advisable to order the Disk Library Catalog Disks for the machine you are using.

Each month we will endeavor to provide information on new additions to the libraries or feature disks currently in the libraries. Some of the disks in the Apple Disk libraries contain SHAREWARE. If you use any Shareware program, please send the shareware fee to the author. By submitting the fee we encourage the author(s) to develop more software.

Special Note: All Apple II, Apple III, and Apple IIGS Catalog Disks may be exchanged for most current edition of the Disk Catalog series— free of charge - if exchanged at the office. For exchanges by mail, please be certain to include your old disks and \$1.00 per disk to cover shipping and handling.

Thank you.

GSGM-35 A - Games 22

In the /Boggled.GS/ folder:

Boggle word game by Kenrick Mock (the author of Columns GS). Based on the game of lettered dice. Documentation for this game is included within the program. This game is intended for lovers of word games and is based on Boggle (TM Parker Brothers). The object is to find, within 3 minutes, as many words as possible in a 4 by 4 grid of randomly generated letters. Shareware, \$10 fee.

In the /CastleArms2.0/ folder:

Castle Arms by Tom Gooding is a simple two player game for the Apple IIGS. The object is to volley a cannon shot across the terrain and strike the opponent's castle. Two modes of play, plus sound and smooth animation. Shareware, \$5 fee.

GSGM-36 - /BLUE.HELMIT/ - FTA's Blue Helmit

This disk uses its own unique, non-standard disk operating system. This program can't be launched from the Finder or any other program launcher. To run the

Blue Helmit game you will have to boot the Blue Helmit game disk. The Blue Helmit game is "Freeware".

Another posthumous FTA prerelease. Blue Helmit is the prototype of a game from the FTA which never got finished. Use a joystick to navigate your race car over hills and around sharp curves and obstacles. Please understand that it is NOT a completed game; it will allow you to race for 10 minutes, and then the game is over. Like Bouncin' Ferno, this demo never got several key features completed such as scoring and fiery crashes. Lots of stuff is provided on disk for you 65816 assembly language programmers and hackers.

GSGM-37 A - Games 23

In the /Ant.Wars/ folder:

Instructions to Ant Wars v1.0 by Karl Bunker are available under its Apple menu. In ant Wars you maneuver your red ants (the good guys) around a grid, attempting to surround and kill the computer controlled black ants (the bad guys). Both quick reflexes and thoughtful, creative strategies are required to chalk

up high scores. This game rewards experience, and you'll find your scores growing rapidly as you play. There are four levels. When you kill all of the black ants in one level, you will progress to the next level. This is the same as the previous version- except it is now freeware.

In the /ArkIIXmasLevels/ folder:

Arkanoid II Christmas levels by Grover Thomas. Here are some Christmas-theme levels to play on Arkanoid II. Instructions are included. Requires Arkanoid II to play. Freeware.

In the /Battle.Zone/ folder:

This is a fun, fast-action game not unlike Moon Patrol. On the planet Bannore war is raging and you are the only one who can stop the evil invaders from destroying the peaceful people. Just one man pitted against the entire squadron! Good Luck! The built-in instructions will tell you everything you need to know in order to play the game. Please read them before playing the game. The joystick or keyboard may be used, depending upon which you have selected from the menu. Shareware, \$5 or \$10 fee. Written in both BASIC and assembly and very fast.

In the /Robots.v2.4/ folder:

This is version 2.4 of the robots game that seems to come with every Unix. I took the best features out of the 2 or 3 versions I have played, but this is *not* a port. It was written completely from scratch in HyperC (it is very simple to port *that* to Unix). The archive includes hyperc source, hyperc executable, docs, and a prodos SYS file version (created using Gary Desrochers and Andy Werner's 'makesys' programs). Should run on all apple //s. It is a simple game, no graphics or anything, but quite addicting. This version handles scores up to 3 or 4 billion.

In the /Solarian.v1.01/ folder:

Solarian GS v1.0.1 arcade shoot-em-up. Solarian is a fast-action arcade game not unlike Galaxian but with a number of tricks and traps that give it a unique and interesting character of its own. It started life as the first commercial-quality color Mac arcade shoot-em-up, written by Jonah Stich and controversially released as ShareWare. See the read.me file for details.

GSGM-38 - Viad Disk 1



GSGM-39 - Viad Disk 2

Sound Barrier Systems Proudly Presents VIAD (Vocabulary In Any Direction) by Kenrick Mock. Vocabulary In Any Direction is similar to Columns, but the falling blocks are letters which you must use to construct words. Documentation for this game is included within the program. This game is shareware, \$10 fee.

GSGM-40 - LetterSlide

Sound Barrier Systems Proudly Presents LetterSlide, a Companion Piece to Boggled GS. By Kenrick Mock. Push letters so they form words so you can collect jewels. Comes with a level editor so you can make your own levels. Somewhat similar to Sokoban, but with letters! This game is shareware, \$10 fee. Documentation for this game is included within the program.

GSGM-41 - Games 24

In the /Brick.Out/ folder:

You will find two versions of the "Brick Out" game by Jim Mensch in this folder. Brick Out is an adaptation of the classic Atari game.

In the /Concentrate/ folder:

Concentration Version 2.1 is an Apple IIGS specific game, which should be launched from the finder or a similar program launcher. For the best appearance, the font Shaston.16 should be in the fonts folder on your boot disk. Concentration is a classic memory game. After you launch the game, select "Help..." from the "Game" menu for instructions. Since the computer is capable of perfect recall, it can be a formidable foe; in fact, at the higher levels, it's hard to believe that he isn't cheating. You can adjust the computer's ability to remember to a level that makes it a fair contest.

In the /DuelTris/ folder:

DuelTris v1.0s by DreamWorld is a two player head-to-head tetris-like game, which features incredible graphics and sound. It is not DuoTris, which was part of the GS<>IRC demo. DuelTris features 2 player simultaneous play, the DuellINK (tm), and six different special pieces. When DuellINK is turned on, whenever one player makes 2-4 lines, they are automatically passed to the other player, and vice versa. The six special pieces have a variety of functions, gun, fill gun, bomb, anvil, inverse other person's controls, etc.

DuelTris has some of the best 16 and 256 color art I've seen, drawn by David Seah and has great music composed by James Brookes. DuelTris is shareware, \$15/\$20 fee. This version of DuelTris is fully functional, except you cannot save preferences or high scores. The registered version will allow you to save both. DuelTris requires an Apple IIGS w/ 1 meg of ram, System 5.04 or above, and 1 3.5" disk drive. Speakers and a stereo card are optional, but a nice addition.

In the /DW.GS.CharEdit/ folder:

DragonWars GS CharEdit is is an editor for saved games in DragonWars GS. The thing seems bug free to me, and is pretty nifty. It starts up with a cool title screen and proceeds.

DragonWars GS CharEdit EXE:

For ORCA/Shell,GNO, etc users, ALL the files in this archive should be kept in the same directory its being run from. (PREFIX to that directory before running it). For Prosel-16, copy 'See' to /yourharddrive/prosel.16/commands subdirectory. The others stay in the same directory just as in ORCA/GNO/Etc.

DragonWars GS CharEdit s16:

Again, this is a character editor for DragonWars GS, only in S16 form so those shell-haters can run it from the Finder or whatever (sorry, this is not a desktop application.)

In the /Out.World.Hints/ folder:

This folder contains two ASCII text files. These files contains hints for the game "Out of this world". The first file is just the codes for each level of "Out of This World". The second file is a complete Walk-Thru for this game.

GSGM-41 - Games 24

In the /Brick.Out/ folder:

You will find two versions of the "Brick Out" game by Jim Mensch in this folder. Brick Out is an adaptation of the classic Atari game.

In the /Concentrate/ folder:

Concentration Version 2.1 is an Apple IIGS specific game, which should be launched from the finder or a similar program launcher. For the best appearance, the font Shaston.16 should be in the fonts folder on your boot disk.

Concentration is a classic memory game. After you launch the game, select "Help..." from the "Game" menu for instructions. Since the computer is capable of perfect recall, it can be a formidable foe; in fact, at the higher levels, it's hard to believe that he isn't cheating. You can adjust the computer's ability to remember to a level that makes it a fair contest.

In the /DuelTris/ folder:

DuelTris v1.0s by DreamWorld is a two player head-to-head tetris-like game, which features incredible graphics and sound. It is not DuoTris, which was part of the GS<>IRC demo. DuelTris features 2 player simultaneous play, the DuellINK (tm), and six different special pieces. When DuellINK is turned on, whenever one player makes 2-4 lines, they are automatically passed to the other player, and vice versa. The six special pieces have a variety of functions, gun, fill gun, bomb, anvil, inverse other person's controls, etc.

DuelTris has some of the best 16 and 256 color art I've seen, drawn by David Seah and has great music composed by James Brookes. DuelTris is shareware, \$15/\$20 fee. This version of DuelTris is fully functional, except you cannot save preferences or high scores. The registered version will allow you to save both. DuelTris requires an Apple IIGS w/ 1 meg of ram, System 5.04 or above, and 1 3.5" disk drive. Speakers and a stereo card are optional, but a nice addition.

In the /DW.GS.CharEdit/ folder:

DragonWars GS CharEdit is is an editor for saved games in DragonWars GS. The thing seems bug free to me, and is pretty nifty. It starts up with a cool title screen and proceeds.

DragonWars GS CharEdit EXE:

For ORCA/Shell,GNO, etc users, ALL the files in this archive should be kept in the same directory its being run from. (PREFIX to that directory before running it). For Prosel-16, copy 'See' to /yourharddrive/prosel.16/commands subdirectory. The others stay in the same directory just as in ORCA/GNO/Etc.

DragonWars GS CharEdit s16:

Again, this is a character editor for DragonWars GS, only in S16 form so those shell-haters can run it from the Finder or



whatever (sorry, this is not a desktop application.)

In the /Out.World.Hints/ folder:

This folder contains two ASCII text files. These files contain hints for the game "Out of this world". The first file is just the codes for each level of "Out of This World". The second file is a complete Walk-Thru for this game.

GSGM-42 A - Games 25

In the /DngMaster.Cheat/ folder:

This is a cheat for the game Dungeon Master GS, but it requires a lot of work on your part. This cheat is a CDA that allows you to edit character stats and levels from within the game at any time. The game doesn't update characters right away. You have to click on the character icons before the stats become apparent. You can edit character levels as well as stat levels. The source code is included along with the author's information.

In the /GamesNDAs.v1.2/ folder:

3 NDA games by Nathan Mates. Includes 3 NDA games, documentation, and an Icon file. These NDAs have been upgraded. New features include a better GUI & a piece editor for MultiTris. Mine Hunt requires you to move through a minefield and the only help you have is a barely functional mine detector. MultiTris is similar to Tetris. Power Grid - You're in charge of connecting the power plants to the towns by your local power board.

In the /Shifty/ folder:

Shifty is a puzzle based on polyhedra which can be played at different levels of difficulty. The goal is to transform an initial colored pattern into a target pattern by pressing keys. Each key shifts the colors in the diagram in a certain way. The solver must discover, by trial and error, how each key does this. Each colored diagram is a distorted projection of a polyhedron, one face of which is hidden; the others are displayed in different colors. Shifty by Richard FitzHugh is freeware.

In the /SpyHunter.ver2/ folder:

SpyHunter GS version 2 by Shane Richards is a IIGS version of Spy Hunter. The game is fairly straight forward. There are 15 types of enemy car attempting to harm you, few will leave you alone! Each level has a different set of baddies out to

get you. Version 2 includes the song "Peter Gunn" as background music. The new version has a few bug fixes, background sound! and a easter egg (of sorts) - you can, when playing the game, hit ctrl-P for practice mode. When you die in practice mode you will be given a full array of weaponry, plus you won't lose a life. This game is FreeWare.

In the /StarTrekFC2.1/ folder:

"Star Trek: First Contact" v2.1 by Jim Royal is a game simulation based on ST:TOS and ST:TNG. It's written under Zbasic and uses graphics, animation, and sound. Apple IIGS users must set their control panel settings to monochrome, and system speed to normal. Version 2.1 contains a few bug fixes, and a much-requested feature; a Save Game function. Some of the highlights: More complex and detailed; Multiple landing sites on each planet; Much smoother operation, All those repetitious command sequences have been improved; New missions for the alien Intruder; Fully Apple IIGS compatible (no crashes!) Freeware.

In the /Thexder.Cheat/ folder:

Thexder Character Modifier by Daniel Dallaire. This program will modify your robot so as to have unlimited energy. You will be able to survive and see all the levels and different characters.

GSGM-43 - Pente GS

Pente GS by Kenrick Mock is a board game somewhat like GO or Go-Moku. Generally, it's like tic-tac-toe but on a larger scale. Extremely simple to learn, yet difficult to master. Pente GS contains a challenging computer opponent, or you may play in 2-player mode if you wish. Shareware, \$10 fee.

GSGM-44 - Bouncin' Ferno II

Bouncin' Ferno II by Dustin Mitchell is the winner in a contest held by the Shareware Solutions column of inCider/A+. The rules for the programming contest were simple: use the IIGS assembly language source code supplied by the FTA to complete their Bouncin'Ferno game. The criteria for the contests were direct: "Let the FTA guide you in spirit, and make our eyes bug out and make our toes tap". The guidelines suggested that all entries would be judged for artistry, creativity, playability, fun, music, sound

and animation.

The original FTA version of Bouncin' Ferno is a Marble Madness type of game, with stunning animations, incredible graphics, sound effects and music. 3 levels, each containing 25 different rooms, were defined by the FTA. The goals of Bouncin' Ferno are twofold: try to roll over small objects - the more objects rolled over, the higher the score - and try to advance to the next level. Some scoring objects are suspended high above the ground, while others are hidden under 3 dimensional ramps. As originally released, Bouncin' Ferno was a lot of fun, but it wasn't quite complete; it is now!

The game is now completely GS/OS compatible; it's even hard drive installable and if launched from The Finder it returns the player to the Finder upon quitting the game. True to the spirit of the FTA, it does not use the IIGS Toolbox.

As Bouncin' Ferno II begins, a stunning scanned NASA photograph of the earth is displayed, a wonderful sounding song is played, and a multi-colored animated credit screen is shown. Once the game starts, the player has the option to play the FTA's original levels, a new level supplied by Dustin, or any other level located in the Level folder found on disk.

In Bouncin' Ferno II, game play is essentially the same as in the FTA's original version. Enhancements include a superimposed playing field on top of a dazzling fractal graphic, and a musical soundtrack that plays continuous NoiseTracker music in the background. For late night sessions, that music can be turned off. The player's score is displayed on screen at all times, and as energy is gained or lost, the IIGS border changes colors. Each level is now also linked to it's own High Score module.

GSGM-44 - Bouncin' Ferno II

Bouncin' Ferno II by Dustin Mitchell is the winner in a contest held by the Shareware Solutions column of inCider/A+. The rules for the programming contest were simple: use the IIGS assembly language source code supplied by the FTA to complete their Bouncin'Ferno game. The criteria for the contests were direct: "Let the FTA guide you in spirit, and make our eyes bug out and make our toes tap". The guidelines suggested that all entries would be judged for artistry, creativity, playability, fun, music, sound



and animation.

The original FTA version of Bouncin' Ferno is a Marble Madness type of game, with stunning animations, incredible graphics, sound effects and music. 3 levels, each containing 25 different rooms, were defined by the FTA. The goals of Bouncin' Ferno are twofold: try to roll over small objects - the more objects rolled over, the higher the score - and try to advance to the next level. Some scoring objects are suspended high above the ground, while others are hidden under 3 dimensional ramps. As originally released, Bouncin' Ferno was a lot of fun, but it wasn't quite complete; it is now!

The game is now completely GS/OS compatible; it's even hard drive installable and if launched from The Finder it returns the player to the Finder upon quitting the game. True to the spirit of the FTA, it does not use the IIGS Toolbox.

As Bouncin' Ferno II begins, a stunning scanned NASA photograph of the earth is displayed, a wonderful sounding song is played, and a multi-colored animated credit screen is shown. Once the game starts, the player has the option to play the FTA's original levels, a new level supplied by Dustin, or any other level located in the Level folder found on disk.

In Bouncin' Ferno II, game play is essentially the same as in the FTA's original version. Enhancements include a superimposed playing field on top of a dazzling fractal graphic, and a musical soundtrack that plays continuous NoiseTracker music in the background. For late night sessions, that music can be turned off. The player's score is displayed on screen at all times, and as energy is gained or lost, the IIGS border changes colors. Each level is now also linked to it's own High Score module.

GSGM-45 - Oil Landers

FTA's Oil Landers is an unfinished Battle Zone/Stellar 7-type 3D tank game by the FTA. Requires a GS with at least 1.25 megs RAM and a joystick. An RGB Color Monitor and a stereo card are recommended. No instructions are provided.

You use the mouse on the main map to highlight individual blocks. Your tanks face right, the others face left. You can move tanks by selecting the MOVE button and clicking on the tanks that you wish to

move, and you can also attack other tanks by going into action.

Once you choose to fight, you need a joystick. One button fires, one button arms the aiming reticule. When you turn on the aiming ret, your turret becomes detached from the chasis, meaning that you can move in one direction and shoot in another. When you're using the crosshairs, you can use the up and down arrows to zoom your view in and out, and pressing enter, I believe, turns on telemetry data.

GSGM-46 - Bille aRT

This is a self-booting disk. When the "UNABLE TO LOAD PRODOS" message appears, press the Clear key on your numeric keypad to continue loading.

Here's "Bille Art", a sorta-pool game from a new French free-tools group. For the IIGs, works on ROM 01 and 03, and I think it needs a 1.25 megs. Btw, the group's name is "Brutal Deluxe".

The purpose of this game is to hit the pink bumpers with the white ball. But to reach the next level you have to hit all the bumpers with just ONE stroke. When a bumper is hit it turns blue. The time decreases when the ball is moving and the game stops when the time is empty. Each ten levels, you have 9 minutes for the next ten levels. The bumpers' number will increase with the levels.

You aim the ball like with Zany Golf. The distance between the ball and the mouse arrow gives the power of the stroke. When the distance is too high or too small the line will disappear then you couldn't shoot: there is a limit to the power applied. If you click on 'PANIC' or 'OPTIONS' you will loose the level you have reached.

The 'PAUSE' blocks the game until you click the mouse button to continue the game. If you want a music during the game just escape the 'REALISATION' option with the key at the top and the left on the numeric pad (equivalent to Ctrl-X). To stop the music, just escape the 'REALISATION' option with the mouse button.

GSGM-47 - FTA's Mini Prix

This is another game from the FTA. This game is unfinished, so don't expect that all of the features will be available. Use the joystick to maneuver a race car around a race track. Button 1 is the

accelerator and button 2 (I believe) is the brake. Documentation is included on this disk, but it is in French.

GSGM-48 - Games 26

In the /Pix.Mix/ folder:

PixMix by Doug Happel is a jigsaw puzzle game for the Apple IIGs. It can read most kinds of IIGs graphic images (types \$C0 and \$C1) from diskette, fracture them into from 6 to 80 pieces, and let you reassemble them as a pleasurable exercise. PixMix is Freeware.

In the /Platoon/ folder:

Tank Platoon is a strategy game involving combat between small groups of tanks, infantry, personnel carriers, leaders and artillery. It can be played as a two-player game or against the computer. The object is to select an optimum mix of units, located the enemy units, and destroy them. To win, a player must combine the various capabilities of his units, and take chances, but not too many. It can be played at various levels of difficulty, and the computer makes a tough opponent. Freeware.

In the /Shanghai.Tiles/ folder:

This folder contains 6 new tilesets designed to be used with Activision's Shanghai for the IIGs. To use these tilesets you need Activision's GS version of Shanghai. Since it is NEVER a good idea to work on your original disk make a backup copy of Shanghai. In the Systems folder find the file Tileset and rename it to Old.Tileset or some such thing. Copy one of the new tilesets to the Systems folder and rename it Tileset. When you boot Shanghai you should see a new design as the game's tileset.

You will find the following six tilesets in this folder:

- Christmas.Tiles
- EzEyes
- Shakespeare
- Space.Tiles
- USA.Tiles
- Xian.Tiles

In the /Strategy/ folder:

Here's a collection of 11 strategy/simulation games. Included are: a 2-player hi-res air combat game, 3 different implementations of the "Hammurabi"



game, an "Apple Trek" clone, a hi-res lunarlander, a nuclear powerplant game, a hi-res maze, a sea battle game, and a 2-to-4-player interstellar trader game. Also there's a version of "Life" that is as good an implementation as I have seen that isn't buggy-it runs on the lo-res screen and is very easy to use. The nuke powerplant is a challenge to beat and very enjoyable.

GSGM-49 - Games 27

In the /Galactic.Cnqst/ folder:

Galactic Conquest by David Hallwas. You (and up to three more of your closest friends) can compete to become Supreme Emperor of the Galaxy. You each begin on your lowly home planet with 20 cash credits. From here, conquer the galaxy. You must amass a fleet of ships to do your dirty work— trading, fighting, boarding ships, and of course conquering the planets. Fight amongst each other as well as the four computer opponent scout ships from surrounding galaxies. See who can build and maintain the greatest galactic empire. Shareware, \$5.00 fee.

In the /MineField/ folder:

Minefield IIgs by Aaron Taurog is played on a grid. A number of mines are spread randomly throughout the grid. The object of the game is to uncover all the cells NOT containing mines, and to place flags in the cells which do contain mines. Shareware, \$10 fee.

In the /TheDragon/ folder:

The Dragon, a Shanghai clone, by Curt Clifton. The object of this game is to remove all of the matching pairs of tiles from the playing field. Shareware, \$10 fee.

In the /Wiz5.Levels/ folder:

IIgs super hires maps of levels 4-6 of Wizardry V, "The Heart of the Maelstrom". Done with Platinum Paint. The game runs on any Apple II, but these maps are IIgs only. Completeness and accuracy not guaranteed.

GSGM-50 - Mean 18 Golf Courses 4

This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with your game for using extra course disks. An ASCII text file named Mean.18.Info is included. This file provides further

information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.10.SEA" contains the following Mean 18 golf courses:

- ISLANDS.M18 A lot of water and par 5's - challenge
- KAPALUA.M18 Kapalua Golf Club for Mean 18
- KINGTUTS.M18 Tutankhamen C.C. for Mean 18
- LAJOLLA.M18 La Jolla course for Mean 18
- LAKETOUR.M18 Lake Tour course for Mean 18

The file "Courses.11.SEA" contains the following Mean 18 golf courses:

- LEDARA.M18 A challenging Mean 18 course
- LOCHNESS.M18 Loch Ness Monster course for Mean 18
- LUVCANAL.M18 Love Canal C.C. for Mean 18
- MACLAREN.M18 MacLaren Isles Mean 18 course
- MADHAT.M18 Mad Hatter's course for Mean 18

The file "Courses.12.SEA" contains the following Mean 18 golf courses:

- MAXRAD.M18 Max Rad Dude! course for Mean 18
- MAYCREEK.M18 Mayde Creek C.C. for Mean 18
- MEANGRE.M18 Mean Green Mean 18 - very good
- MEMORDAY.M18 Memorial Day C.C. for Mean 18
- MONSTER.M18 Monster course for Mean 18

GSGM-51 - Mean 18 Golf Courses 5

This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with your game for using extra course disks. An ASCII text file named Mean.18.Info is

included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.13.SEA" contains the following Mean 18 golf courses:

- MUTATION.M18 Mutation Harbor course for Mean 18
- MYSTIC.M18 Mystic Keep C.C for Mean 18
- NIAGARA.M18 Niagara Falls C.C. for Mean 18
- OCEAN.M18 Ocean Hills course for Mean 18
- OLYMPIC.M18 The Olympic Club for Mean 18

The file "Courses.14.SEA" contains the following Mean 18 golf courses:

- PAR5.M18 Par 5 G.C. for Mean 18
- PAWNEE.M18 Pawnee Hills C.C. for Mean 18
- PGCC.M18 P.G.C.C. for Mean 18
- PROGRESS.M18 Progression course for Mean 18
- PUBLINK.M18 Public Links G.C. for Mean 18

The file "Courses.15.SEA" contains the following Mean 18 golf courses:

- RANCHER.M18 Rancher C.C. for Mean 18
- RIVERBND.M18 River Bend C.C. for Mean 18
- ROYDACHS.M18 Royal Dachsy G.C. for Mean 18
- SCROSS.M18 Southern Cross course for Mean 18
- SENTRY.M18 Sentry C.C. for Mean 18

GSGM-52 - Mean 18 Golf Courses 6

This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with your game for using extra course



disks. An ASCII text file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.16.SEA" contains the following Mean 18 golf courses:

SHANGRA.M18	Shangri-La
course for Mean 18	
SHORE.M18	Shore Creek course
for Mean 18	
SISYPHUS.M18	Sisyphus's Stone
course for Mean 18	
SKARABRA.M18	Skara Brae
course for Mean 18	
SMEDLEY1.M18	Smedley Heights
1 course for Mean 18	

The file "Courses.17.SEA" contains the following Mean 18 golf courses:

SPYGLASS.M18	Spyglass Hill
G.C. for Mean 18	
SQUIRES.M18	Squire's Run C.C.
for Mean 18	
STANLEY.M18	Stanley C.C. for
Mean 18	
STERLING.M18	Sterling Shores
course for Mean 18	
STMIKES.M18	St. Michael's Jems
course for Mean 18	

The file "Courses.18.SEA" contains the following Mean 18 golf courses:

TAVERN.M18	Tavern Isles M18
of MacLaren Series	
TEST4GOD.M18	Test of the Gods
course for Mean 18	
TPCSAWGR.M18	TPC Sawgrass
course for Mean 18	
TROPICS.M18	The Tropics course
for Mean 18	
TUFFENUF.M18	Tuffenuff C.C.
for Mean 18	

GSGM-53 - Mean 18 Golf Courses 7

This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with

your game for using extra course disks. An ASCII text file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.19.SEA" contains the following Mean 18 golf courses:

TURNBERRY.M18	Turnberry
course for Mean 18	
USATODAY.M18	USA Today
Hardest course for Mean 18	
UTOPIA.M18	Utter Utopia course
for Mean 18	
VISNQUEST.M18	Vision Quest
course for Mean 18	
WATERVL2.M18	Watervill II
course for Mean 18	

The file "Courses.20.SEA" contains the following Mean 18 golf courses:

AQUALINK.M18	AquaLinks
course for Mean 18	
AUBLAKES.M18	Auburn Lakes
course for Mean 18	
WAYRAD.M18	Way Rad Dude!
course for Mean 18	
WONDRLND.M18	Wonderland
C.C. for Mean 18	
WYNSTONE.M18	Wynstone
course for Mean 18	

The file "Courses.21.SEA" contains the following Mean 18 golf courses:

BALI.M18	Bali Island C.C. for
Mean 18	
BALIH.M18	Bali Highlands
course for Mean 18	
BALIVAL.M18	Lost Valley course
for Mean 18	
BANFF.M18	Banff Springs
course for Mean 18	
BAYTREE.M18	Bay Tree (Gold)
course for Mean 18	

GSGM-54 - Mean 18 Golf Courses 8

This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with

your game for using extra course disks. An ASCII text file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.22.SEA" contains the following Mean 18 golf courses:

BUGABOO.M18	Duffers Bugaboo
course for Mean 18	
BUNGLE.M18	Bayou Bungle
course for Mean 18	
BURRFOOT.M18	Burrfoot C.C.
for Mean 18	
CAROLINA.M18	Carolina Hills
course for Mean 18	
CRASH.M18	Cancel course for
Mean 18	

The file "Courses.23.SEA" contains the following Mean 18 golf courses:

DESERT.M18	Desert Classic
course for Mean 18	
DODADUNE.M18	Do-Da Dunes
course for Mean 18	
DUNNBRAK.M18	Dunn-Brakken
C.C. for Mean 18	
DURBAN.M18	Durban Cnty Club
for Mean 18	
FLORHAM.M18	Florham Park
C.C. for Mean 18	

The file "Courses.24.SEA" contains the following Mean 18 golf courses:

FOREST.M18	The Forest Club
for Mean 18	
GILLIGAN.M18	Gilligan's Isles
course for Mean 18	
HEDGEROW.M18	Hedgerow
Manor course for Mean 18	
HELLSHOL.M18	Hell's Holes
course for Mean 18	
HORROR.M18	Horror C.C. for
Mean 18	

GSGM-55 - Mean 18 Golf Courses 9

This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with



your game for using extra course disks. An ASCII text file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.25.SEA" contains the following Mean 18 golf courses:

JIMCLAY.M18	Jimmy Clay
course for Mean 18	
KAYAK.M18	Kayak Point course
for Mean 18	
KEYWEST.M18	Key West
Gardens course for Mean 18	
KILLER.M18	Killer Eighteen
course for Mean 18	
LAKES.M18	Lakside Links
course for Mean 18	

The file "Courses.26.SEA" contains the following Mean 18 golf courses:

LAKESOTW.M18	Lakes of the
World for Mean 18	
LUNALINK.M18	Lunar Links
C.C. for Mean 18	
MAKAHA.M18	Sheraton Makaha
course for Mean 18	
MARKS.M18	Mark's 18 course
for Mean 18	
MARSH.M18	Marsh Harbour
course for Mean 18	

The file "Courses.27.SEA" contains the following Mean 18 golf courses:

MEDINAH.M18	Medinah course
for Mean 18	
MISSOULA.M18	Missoula Beach
course for Mean 18	
MONARCH.M18	Monarch C.C.
for Mean 18	
MTPLEAS.M18	Mt. Pleasant
course for Mean 18	
MULE.M18	Mule Mountain
course for Mean 18	

GSGM-56 - Mean 18 Golf Courses 10
This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with

your game for using extra course disks. An ASCII text file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.28.SEA" contains the following Mean 18 golf courses:

OAKHOLLO.M18	Oak Hollow
course for Mean 18	
OCEANA.M18	NAS Oceana G.C.
for Mean 18	
OCEANHIL.M18	Ocean Hill
course for Mean 18	
OTTAWA.M18	Ottawa course for
Mean 18	
OYSTERB.M18	Oyster Bay course
for Mean 18	

The file "Courses.29.SEA" contains the following Mean 18 golf courses:

PGA.M18	PGA National course
for Mean 18	
SANDTC.M18	Sand Trap City
course for Mean 18	
SDBEST.M18	San Diego's Best
course for Mean 18	
SMOKY.M18	Smoky Mountain
course for Mean 18	
SMOKYLNK.M18	Smokey Links
course for Mean 18	

The file "Courses.30.SEA" contains the following Mean 18 golf courses:

SNAKE.M18	Snake River course
for Mean 18	
SONOVAB.M18	Sonova Beach
course for Mean 18	
SUMMER.M18	Summerdale
course for Mean 18	
SWATER.M18	Super Water C.C.
for Mean 18	
SWOPE.M18	Swope Memorial
- KC for Mean 18	

GSGM-57 - Mean 18 Golf Courses 11
This disk contains additional Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with

your game for using extra course disks. An ASCII text file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels.

The Mean 18 Golf courses on this disk have been compressed into self-extracting archive files. This allows me to include more Mean 18 Golf courses than I would normally be able to fit onto a single disk.

The file "Courses.31.SEA" contains the following Mean 18 golf courses:

THEFOX.M18	Fox Prairie
course for Mean 18	
THINKING.M18	Thinking Man's
course for Mean 18	
VEGAS.M18	Vegas Valley Par 3
course for Mean 18	
VHILLS.M18	Victory Hills
course for Mean 18	
WALDEN.M18	Walden on Lake
Conroe for Mean 18	

The file "Courses.32.SEA" contains the following Mean 18 golf courses:

WATERY.M18	Watery Grave
course for Mean 18	
WETLANDS.M18	USA Today
Water for Mean 18	
WILD1.M18	Wilderness - 1
course for Mean 18	
YULETIDE.M18	Yuletide C.C.
for Mean 18	
ZIMCO.M18	Zimco
International for Mean 18	

The file "Courses.33.SEA" contains the following Mean 18 golf courses:

AUTUMN.M18	Autumn in
Maine course for Mean 18	
GREEN.M18	Green Island G.C.
for Mean 18	
ISLE.M18	Isle Links course for
Mean 18	
JAX.M18	NAS Jacksonville
course for Mean 18	
ZINK.M18	Think Zink Club
course for Mean 18	

The file "Courses.34.SEA" contains the following Mean 18 golf courses:

BEACH1.M18	Beachhead course
for Mean 18	



BEACH2.M18 Beachhead II
 course for Mean 18
 BEACH3.M18 Beachhead III
 course for Mean 18
 BEACH4.M18 Beachhead IV
 course for Mean 18
 BEACH5.M18 Beachhead 5
 course for Mean 18
 BUSHHILL.M18 Bush Hill C.C.
 for Mean 18

GSGM-58 - Lander Rescue

Lander Rescue by Terry Burdett. Your mission is to land your space craft on the pads which have miners without crashing the rescue vehicle. A minimum of two miners must be recovered before you can move to the next plant. Shareware, \$10 fee.

GSGM-59 A - Games 28

In the /Bowl.GS/ folder:

Bowl GS is a freeware bowling simulation game by Terry Burdett. Use the mouse to control the direction and power of the bowling ball in a manner that is similar to Mean 18. One to three players.

In the /Invaders/ folder:

Invaders From Space by David & April Taylor is based on the Atari game Space Invaders. The aliens have invaded, and it's your job to eliminate them! You control your ship with the mouse, and fire with the mouse button. The concept is simple — you kill or be killed! Shareware, \$5.00 fee.

In the /Keef.Help/ folder:

Hints and maps (Apple Preferred Format pictures) for the IIGS game "Keef the Thief".

In the /PCS.ProDOS/ folder:

Pinball Construction Set by Bill Budge was recently released to the public domain. This folder contains several Pinball Construction Set pinball games that were converted to ProDOS. Launch a pinball game and when finished press control reset - this will return you to your program launcher.

If you have never played a PCS game before, it's rather simple. Just use the space bar to choose the number of players, then hit open-apple to begin. While playing, the joystick (right-left) controls the spring on the plunger, open-apple

launches, and open apple and closed apple (option) control the flippers. Note that on a //gs keyboard the flipper controls are backwards.

In the /RasterBlaster/ folder:

The Lost Classics effort sponsored by the A2 RoundTable on GEnie presents Raster Blaster by Bill Budge. This program was previously available commercially but has not been in distribution for several years. Lost Classics was successful in tracking down the copyright holder, Bill Budge, and he has agreed to release this product to the Public Domain.

"Raster Blaster" is a detailed simulation of pinball, with advanced game features found only in state-of-the-art (1980-81) electro-mechanical pinball machines. The simulation is complemented by full color high resolution graphics, animation and sound effects, completely interleaved in time. The program itself is approximately 22K of machine code and tables, implementing over 50 graphics and sound processes.

The file Raster.Blaster is a BIN (binary) file which is the actual Raster Blaster program converted from the original DOS 3.2 disk to a ProDOS BRUNable file. The file Startup.RB is a short Applesoft program which loads a short screen, explains what it is all about, and then BRUNs the Raster.Blaster file.

In the /RB.Patch/ folder:

Raster Blaster patch version 1.01 by Larry W. Beam. This patch program adds the ProDOS Quit code to the RASTER.BLASTER file, and converts it into ProDOS SYS file. In addition, the patch also allows the flipper controls to be switched, so that the game may be played more easily on an Apple IIc+ or Apple IIGS. This patch program has been released to the public domain.

In the /TaskForceCheats/ folder:

Two cheats for Task Force, one from ECC's Joe Hack which lets you increase your health from 5000 to 8500. The other cheat makes you invulnerable.

GSGM-60 - Games 29

In the /BT2gs.Char.Edit/ folder:

Bard's Tale I and IIGS character editor. It's will let you edit BTII GS characters: gold and experience points, spell and hit

points, etc.

In the /Carte.Primus/ folder:

Carte Primus by David Manthey is a collection of card games. Includes Cribbage, Gin Rummy, Hearts, Pinochle, and Pitch. All of the card games allow you to save the total score. Many of the card games can be played in several different styles. All of the games have learning aids consisting of suggestions on which card to play and viewing your opponent's hand. Shareware, \$15 fee.

In the /CrossPurpose/ folder:

X-Purpose! by Bob Owen is a game of skill and logic. Jump over an adjacent piece onto an empty square and remove the jumped piece. Shareware, \$5.00 fee.

In the /Escape/ folder:

Escape by Russell Nielson is a game where you are in jail and you must escape. You start off in a cell (made up of rooms). You have to find your way out before the guard finds out that you are missing. Then you must negotiate a mind field, pick off nine guards at the tower, gain access to the computer, contact Joe, and then find him down town. The built-in instructions will tell you everything you need to know in order to play the game. Freeware.

In the /Neuromancer/ folder:

This file contains very specific information about how to solve "Neuromancer" by Interplay Productions. It seems to have all the answers, so don't use it unless you are willing to spoil the puzzles for yourself. It is an AWP file.

In the /QBurt/ folder:

Qburt version 1.0 by Roy LeCates is a IIGS version of the arcade hit Q*bert. It was written for use under Apple's GS/OS version 5.0 or later. It was written to bring the arcade fun into the home of IIGS owners. Public domain.

In the /Russ.Prog.A/ folder:

Russell Nielson's programs disk side 1. On this game disk you will find these APPLE II programs:

Maze Craze:

A low-res game where you are challenged to find your way out of many mazes collecting as many points as possible and



before your time limit expires. This game has not been completed.

Wacko Game:

A weird program that has very little meaning and almost no purpose. Run it and if you find a use for it... then let me know. <grin>

Flight II:

Navigate your craft and save the people from the clouds and let them out on the mountain peaks. You must save 10 people while avoiding the deadly laser blasts aimed at your engine.

Phrase Game:

Test your ability to read and remember a phrase and then type it in exactly as it appeared.

Addition Whiz:

A little math fun for youngsters at a fast paced speed.

Imperial Raiders:

Shoot all the oncoming aliens and play all the bonus rounds. If you complete all the stages, you will win.

Jackpot:

Bet your money and stop the numbers making sure they end up in a winning sequence, or you will lose your bet.

Life Saver:

Save the doomed man from the cage and flames burning below by entering the codes that correspond to the colors. There is no real way to win, just keep him alive as long as possible to gain as many points as you can.

In the /Russ.Prog.B/ folder:

Russell Nielson's programs disk side 2. On this game disk you will find these APPLE II programs:

Ice it Over:

This is like Wheel of Fortune in a way. You are given a phrase in the form of dashes. You (and a friend) will compete and the first person who presses the right letters and vowels will solve the puzzle and win the round!

Tank Alliance:

It's one tank against another in this low-res head-to-head battle.

Pick 6:

Let this computer program pick your next Pick 6 numbers for you.

Serpentine:

Guide a snake around the lo-res screen and eat fruits. Be careful not to run into your own tail or a wall, because the game will be over.

Escape:

You must escape from a jail cell and then out of the country to win. This game combines text and lo-res graphics.

Alien Bomber:

Control your bombing machine and destroy the alien invader.

Tank Bomber:

Control you bombing maching and destroy the tank invader.

Robot Run:

Dodge the deadly robots and get to the exit to advance to the next stage. But watch out for the pit. Once you fall into it, you are a goner!

In the /ShadowGateSolve/ folder:

This file contains the entire solution for Shadowgate. It is NOT a help file, it is the step by step solution.

In the /Star.Merchant/ folder:

From Joe Kohn's selections of the "Best of Big Red". STAR.MERCHANT is a text simulation of a galactic trader. You choose what to buy and sell and what planet to travel to next. Not a trivial game! Planets are at different industrial levels and need and make different goods.

In the /Uninvited.Hints/ folder:

This file provides a stet by step solve for the game Uninvited.

GSGM-61 - Star Trek GS floppy disk version

In the /StarTrekGS/ folder: This is the classic Star Trek game, updated for the GS. It is a real time game so turn off all those accelerators. This game requires 1.5 Meg, it will eventually crash if you don't have enough memory. This game needs lots of disk space due to the sound affects that were digitized from various S.T. episodes.

The original version of this game was too large to fit on a floppy disk and required a hard drive. This version is just small enough to fit on an 800k floppy disk.

GSGM-62 - Plotting

Plotting is a fun IIGs game that uses a joystick or mouse. \$25 shareware from a French group. Move your character up and down, shooting blocks away with the block you're holding. One or two players. This is a completed version; a preview version can be found on WAP disk: GSGM-31.

GSGM-63 - Moria GS v 5.3

This disk includes the latest version (v5.3) of the GS port of Moria. It is an extremely addictive text graphic based dungeon exploration game. Originally a UNIX game similar to Rogue, Hack and Nethack. Moria allows you to create characters and send them into a 50 level dungeon, fight all kinds of nasties, use spells, weapons, armor, etc. to your advantage and find many amusing ways to die. This game is challenging and addicting, and has excellent replay value. This version adds all sorts of new goodies.

The game of Moria is a single player dungeon simulation. A player may choose from a number of races and classes when creating their character, and then 'run' that character over a period of days, weeks, even months; attempting to win the game by defeating the Balrog which lurks in the deeper levels.

The player will begin his adventure on the town level where he may acquire supplies, weapons, armor, and magical devices by bartering with various shop owners. After preparing for his adventure, the player can descend into the dungeons of Moria where fantastic adventures await his coming!

This disk also includes the Moria Adventurer's Guild, Version 1.1. MAG has been designed to work with Moria. While Moria is an excellent game, you can only have one character and there is no support for creating and playing multiple characters. And when you die, you're dead! There's no starting over at the last saved position. MAG addresses these shortcomings. MAG is freeware. Copyright 1990, Zak Enterprises. All Rights Reserved. By Bryan Pietrzak. WAP has not tested Moria Adventurer's Guild with Moria v5.3 - you are on your own. ■

end of games

Apple II Disk Library Order Form



5-1/4" DISKS:

System Software

- ___ APSD-01 #1
- ___ APSD-02 #2

Apple Disk Catalog (DOS 3.3)

- ___ 3 disk set #3

Apple Disk Catalog (PRODOS)

- ___ 4 disk set #4

Appleworks

- ___ APWK-01
- ___ APWK-02

Communications

- ___ 10 disk set =\$15.00
- ___ COMM-01
- ___ COMM-02
- ___ COMM-03
- ___ COMM-04
- ___ COMM-05
- ___ COMM-06
- ___ COMM-07A
- ___ COMM-08
- ___ COMM-09
- ___ COMM-10A

CP/M

- ___ 11 disk set =\$16.50
- ___ CP/M-01
- ___ CP/M-02
- ___ CP/M-03
- ___ CP/M-04
- ___ CP/M-05
- ___ CP/M-06
- ___ CP/M-07
- ___ CP/M-08
- ___ CP/M-09
- ___ CP/M-10
- ___ CP/M-11

Eamon Adventures

- ___ 24 disk set = \$36.00
- ___ EAMN-01
- ___ EAMN-02 #5
- ___ EAMN-03

Eamon Master

- ___ EAMN-04 #5
- ___ EAMN-05 #5
- ___ EAMN-06 #5
- ___ EAMN-07 #5
- ___ EAMN-08 #5
- ___ EAMN-09 #5
- ___ EAMN-10 #5
- ___ EAMN-11 #5
- ___ EAMN-12 #5
- ___ EAMN-13 #5
- ___ EAMN-14 #5
- ___ EAMN-15 #5
- ___ EAMN-16 #5
- ___ EAMN-17 #5

- ___ EAMN-18 #5
- ___ EAMN-19 #5
- ___ EAMN-20 #5
- ___ EAMN-21 #5
- ___ EAMN-22 #5
- ___ EAMN-23 #5
- ___ EAMN-24 #5

Education

- ___ 20 disk set =\$30.00
- ___ EDUC-01
- ___ EDUC-02
- ___ EDUC-03
- ___ EDUC-04
- ___ EDUC-05
- ___ EDUC-06
- ___ EDUC-07
- ___ EDUC-08
- ___ EDUC-09
- ___ EDUC-10
- ___ EDUC-11
- ___ EDUC-12
- ___ EDUC-13
- ___ EDUC-14
- ___ EDUC-15
- ___ EDUC-16
- ___ EDUC-17
- ___ EDUC-18
- ___ EDUC-19
- ___ EDUC-20

Forth

- ___ FRTH-01
- ___ FRTH-02
- ___ FRTH-03

Games

- ___ 13 disk set = \$19.50
- ___ GAME-01
- ___ GAME-02
- ___ GAME-03
- ___ GAME-04
- ___ GAME-05
- ___ GAME-06
- ___ GAME-07
- ___ GAME-08
- ___ GAME-09
- ___ GAME-10
- ___ GAME-11
- ___ GAME-12
- ___ GAME-13

Logo

- ___ LOGO-01
- ___ LOGO-02

Membership Directory

- ___ MEMD-01

Miscellaneous

- ___ 25 disk set = \$37.50
- ___ MISC-01
- ___ MISC-02
- ___ MISC-03

- ___ MISC-04
- ___ MISC-05
- ___ MISC-06
- ___ MISC-07
- ___ MISC-08
- ___ MISC-09
- ___ MISC-10
- ___ MISC-11
- ___ MISC-12
- ___ MISC-13
- ___ MISC-14
- ___ MISC-15
- ___ MISC-16
- ___ MISC-17
- ___ MISC-18
- ___ MISC-19
- ___ MISC-20
- ___ MISC-21
- ___ MISC-22
- ___ MISC-23
- ___ MISC-24
- ___ MISC-25

New Print Shop

- ___ 31 disk set = \$46.50
- ___ NWPS-01
- Graphics
- ___ NWPS-02
- Graphics
- ___ NWPS-03
- Graphics
- ___ NWPS-04
- Graphics
- ___ NWPS-05
- Graphics
- ___ NWPS-06
- Graphics
- ___ NWPS-07
- Graphics
- ___ NWPS-08
- Graphics
- ___ NWPS-09
- Graphics
- ___ NWPS-10
- Graphics
- ___ NWPS-11
- Graphics
- ___ NWPS-12
- Graphics
- ___ NWPS-13
- Graphics
- ___ NWPS-14
- Graphics
- ___ NWPS-15
- Graphics
- ___ NWPS-16
- Graphics
- ___ NWPS-17
- Graphics
- ___ NWPS-18
- Graphics
- ___ NWPS-19
- Graphics
- ___ NWPS-20
- Graphics
- ___ NWPS-21

Graphics

- ___ NWPS-22
- Graphics
- ___ NWPS-23
- Graphics
- ___ NWPS-24
- Graphics
- ___ NWPS-25
- Graphics
- ___ NWPS-26
- Graphics
- ___ NWPS-27
- Graphics
- ___ NWPS-28
- Graphics
- ___ NWPS-29
- Borders
- ___ NWPS-30
- Borders
- ___ NWPS-31
- Fonts

Pascal

- ___ 8 disk set \$12.00
- ___ PASC-01
- ___ PASC-02
- ___ PASC-03
- ___ PASC-04
- ___ PASC-05
- ___ PASC-06
- ___ PASC-07
- ___ PASC-08

Pilot

- ___ PILT-01

Utilities

- ___ 24 disk set = \$36.00
- ___ UTIL-01
- ___ UTIL-02
- ___ UTIL-03
- ___ UTIL-04
- ___ UTIL-05
- ___ UTIL-06
- ___ UTIL-07
- ___ UTIL-08
- ___ UTIL-09
- ___ UTIL-10
- ___ UTIL-11
- ___ UTIL-12
- ___ UTIL-13
- ___ UTIL-14
- ___ UTIL-15
- ___ UTIL-16
- ___ UTIL-17
- ___ UTIL-18
- ___ UTIL-19
- ___ UTIL-20
- ___ UTIL-21
- ___ UTIL-22
- ___ UTIL-23
- ___ UTIL-24

- (#1) System Disk V. 4.0.2 - \$1.50
- (#2) DOS 3.3 System Master - \$1.50

- (#3) Apple Disk Catalog (A) (DOS 3.3) - 3 disk set - \$3.00
- (#4) Apple Disk Catalog (A) (ProDos) - 4 disk set - \$4.00
- (#5) Requires EAMN-03

3-1/2" DISKS:

System Disk

- ___ 2APS-01 #6

Apple Disk Catalog

- ___ 2ADC-01A #7
- ___ 2ADC-02A #7

Appleworks

- ___ 2AWK-01

Communications

- ___ 2COM-01
- ___ 2COM-02
- ___ 2COM-03

Education

- ___ 2EDU-01

Membership Directory

- ___ 2MRD-01

Utilities

- ___ 2UTL-01
- ___ 2UTL-02A

- (#6) - System Disk - V. 4.0.2 - \$3.00
- (#7) - Apple Disk Catalog - 2 Disk set - \$4.00

Note: Some disks may contain Shareware. Please send a remittance to the author of the program if you use it.



Apple IIGS Disk Library Order Form

3-1/2 DISKS:

System Software

- ___ GSAS-01 (*1)
- ___ GSAS-02 (*2)
- ___ GSAS-03 (*3)
- ___ GSAS-04 (*4)
- ___ GSAS-05 (*5)

Communications

- ___ 7 disk set = \$21
- ___ GSCM-01E
- ___ GSCM-02C
- ___ GSCM-03B
- ___ GSCM-04C
- ___ GSCM-05B
- ___ GSCM-06
- ___ GSCM-07

DAs, CDevs, FExts, Dvrs, and Inits

- ___ 16 disk set = \$48
- ___ GSDA-01C
- ___ GSDA-02D
- ___ GSDA-03E
- ___ GSDA-04C
- ___ GSDA-05C
- ___ GSDA-06B
- ___ GSDA-07C
- ___ GSDA-08B
- ___ GSDA-09A
- ___ GSDA-10A
- ___ GSDA-11A
- ___ GSDA-12A
- ___ GSDA-13A
- ___ GSDA-14A
- ___ GSDA-15B
- ___ GSDA-16B

Demos

- ___ 35 disk set = \$35
- or \$1 per disk
- ___ GSDM-01
- ___ GSDM-02
- ___ GSDM-03
- ___ GSDM-04
- ___ GSDM-05
- ___ GSDM-06
- ___ GSDM-07
- ___ GSDM-08
- ___ GSDM-09
- ___ GSDM-10
- ___ GSDM-11
- ___ GSDM-12
- ___ GSDM-13A
- ___ GSDM-14
- ___ GSDM-15
- ___ GSDM-16
- ___ GSDM-17A
- ___ GSDM-18
- ___ GSDM-19
- ___ GSDM-20A
- ___ GSDM-21A
- ___ GSDM-22
- ___ GSDM-23
- ___ GSDM-24
- ___ GSDM-25

- ___ GSDM-26
- ___ GSDM-27
- ___ GSDM-28
- ___ GSDM-29
- ___ GSDM-30
- ___ GSDM-31
- ___ GSDM-32
- ___ GSDM-33
- ___ GSDM-34
- ___ GSDM-35

Developer

- ___ 20 disk set = \$60
- ___ GSDV-01
- ___ GSDV-02
- ___ GSDV-03
- ___ GSDV-04
- ___ GSDV-05A
- ___ GSDV-06A
- ___ GSDV-07
- ___ GSDV-08A
- ___ GSDV-09
- ___ GSDV-10A
- ___ GSDV-11A
- ___ GSDV-12A
- ___ GSDV-13
- ___ GSDV-14A
- ___ GSDV-15A
- ___ GSDV-16
- ___ GSDV-17A
- ___ GSDV-18
- ___ GSDV-19
- ___ GSDV-20

Disk Catalog

- ___ 3 disk set = \$6
- ___ GSDC-01J
- ___ GSDC-02J
- ___ GSDC-03J

Education

- ___ 10 disk set = \$30
- ___ 7 disk set = \$21
- (*6)
- ___ GSED-01A (*6)
- ___ GSED-02A (*6)
- ___ GSED-03A (*6)
- ___ GSED-04A (*6)
- ___ GSED-05A (*6)
- ___ GSED-06A (*6)
- ___ GSED-07A (*6)
- ___ GSED-08A
- ___ GSED-09
- ___ GSED-10

Fonts - BitMapped

- ___ 27 disk set = \$81
- ___ GSFT-01
- ___ GSFT-02
- ___ GSFT-03
- ___ GSFT-04
- ___ GSFT-05
- ___ GSFT-06
- ___ GSFT-07
- ___ GSFT-08
- ___ GSFT-09
- ___ GSFT-10

- ___ GSFT-11
- ___ GSFT-12
- ___ GSFT-13
- ___ GSFT-14
- ___ GSFT-15
- ___ GSFT-16
- ___ GSFT-17
- ___ GSFT-18
- ___ GSFT-19
- ___ GSFT-20
- ___ GSFT-21
- ___ GSFT-22
- ___ GSFT-23
- ___ GSFT-24
- ___ GSFT-25
- ___ GSFT-26
- ___ GSFT-27

Fonts - TrueType

- ___ 30 disk set = \$90
- ___ GSTT-01
- ___ GSTT-02
- ___ GSTT-03
- ___ GSTT-04
- ___ GSTT-05
- ___ GSTT-06
- ___ GSTT-07
- ___ GSTT-08
- ___ GSTT-09
- ___ GSTT-10
- ___ GSTT-11
- ___ GSTT-12
- ___ GSTT-13
- ___ GSTT-14
- ___ GSTT-15
- ___ GSTT-16
- ___ GSTT-17
- ___ GSTT-18
- ___ GSTT-19
- ___ GSTT-20
- ___ GSTT-21
- ___ GSTT-22
- ___ GSTT-23
- ___ GSTT-24
- ___ GSTT-25
- ___ GSTT-26
- ___ GSTT-27
- ___ GSTT-28
- ___ GSTT-29
- ___ GSTT-30

Games

- ___ 64 disk set = \$192
- ___ GSGM-01B
- ___ GSGM-02B
- ___ GSGM-03
- ___ GSGM-04
- ___ GSGM-05
- ___ GSGM-06A
- ___ GSGM-07A
- ___ GSGM-08
- ___ GSGM-09A
- ___ GSGM-10
- ___ GSGM-11
- ___ GSGM-12A
- ___ GSGM-13
- ___ GSGM-14

- ___ GSGM-15
- ___ GSGM-16
- ___ GSGM-17A
- ___ GSGM-18A
- ___ GSGM-19A
- ___ GSGM-20
- ___ GSGM-21
- ___ GSGM-22
- ___ GSGM-23A
- ___ GSGM-24B
- ___ GSGM-25B
- ___ GSGM-26A
- ___ GSGM-27
- ___ GSGM-28
- ___ GSGM-29
- ___ GSGM-30
- ___ GSGM-31
- ___ GSGM-32
- ___ GSGM-33
- ___ GSGM-34
- ___ GSGM-35A
- ___ GSGM-36
- ___ GSGM-37A
- ___ GSGM-38
- ___ GSGM-39
- ___ GSGM-40
- ___ GSGM-41
- ___ GSGM-42A
- ___ GSGM-43
- ___ GSGM-44
- ___ GSGM-45
- ___ GSGM-46
- ___ GSGM-47
- ___ GSGM-48
- ___ GSGM-49
- ___ GSGM-50
- ___ GSGM-51
- ___ GSGM-52
- ___ GSGM-53
- ___ GSGM-54
- ___ GSGM-55
- ___ GSGM-56
- ___ GSGM-57
- ___ GSGM-58
- ___ GSGM-59A
- ___ GSGM-60
- ___ GSGM-61
- ___ GSGM-62
- ___ GSGM-63
- ___ GSGM-64

Graphics

- ___ 68 disk set = \$204
- ___ GSGX-01
- ___ GSGX-02
- ___ GSGX-03
- ___ GSGX-04
- ___ GSGX-05
- ___ GSGX-06
- ___ GSGX-07A
- ___ GSGX-08A
- ___ GSGX-09B
- ___ GSGX-10A
- ___ GSGX-11
- ___ GSGX-12
- ___ GSGX-13A
- ___ GSGX-14

- ___ GSGX-15
- ___ GSGX-16
- ___ GSGX-17
- ___ GSGX-18
- ___ GSGX-19
- ___ GSGX-20
- ___ GSGX-21C
- ___ GSGX-22B
- ___ GSGX-23
- ___ GSGX-24
- ___ GSGX-25
- ___ GSGX-26
- ___ GSGX-27
- ___ GSGX-28A
- ___ GSGX-29
- ___ GSGX-30
- ___ GSGX-31A
- ___ GSGX-32A
- ___ GSGX-33
- ___ GSGX-34
- ___ GSGX-35
- ___ GSGX-36
- ___ GSGX-37
- ___ GSGX-38
- ___ GSGX-39
- ___ GSGX-40
- ___ GSGX-41
- ___ GSGX-42
- ___ GSGX-43
- ___ GSGX-44
- ___ GSGX-45
- ___ GSGX-46
- ___ GSGX-47
- ___ GSGX-48
- ___ GSGX-49
- ___ GSGX-50
- ___ GSGX-51
- ___ GSGX-52
- ___ GSGX-53
- ___ GSGX-54
- ___ GSGX-55
- ___ GSGX-56
- ___ GSGX-57
- ___ GSGX-58
- ___ GSGX-59
- ___ GSGX-60
- ___ GSGX-61
- ___ GSGX-62
- ___ GSGX-63
- ___ GSGX-64
- ___ GSGX-65
- ___ GSGX-66
- ___ GSGX-67
- ___ GSGX-68

HyperCard

- ___ 6 disk set = \$18
- ___ GSHC-01
- ___ GSHC-02
- ___ GSHC-03
- ___ GSHC-04
- ___ GSHC-05
- ___ GSHC-06

HyperStudio

- ___ Demo Ver. (1-10)
- = \$10

Apple IIGS Disk Library Order Form



- ___ GSHS-01
- ___ GSHS-02
- ___ GSHS-03
- ___ GSHS-04
- ___ GSHS-05
- ___ GSHS-06
- ___ GSHS-07
- ___ GSHS-08
- ___ GSHS-09
- ___ GSHS-10

___ 66 disk set (11-76)
= \$198

- ___ GSHS-11
- ___ GSHS-12
- ___ GSHS-13
- ___ GSHS-14
- ___ GSHS-15
- ___ GSHS-16
- ___ GSHS-17
- ___ GSHS-18
- ___ GSHS-19
- ___ GSHS-20
- ___ GSHS-21A
- ___ GSHS-22
- ___ GSHS-23
- ___ GSHS-24
- ___ GSHS-25
- ___ GSHS-26
- ___ GSHS-27
- ___ GSHS-28
- ___ GSHS-29
- ___ GSHS-30
- ___ GSHS-31
- ___ GSHS-32
- ___ GSHS-33
- ___ GSHS-34
- ___ GSHS-35
- ___ GSHS-36
- ___ GSHS-37
- ___ GSHS-38
- ___ GSHS-39
- ___ GSHS-40
- ___ GSHS-41
- ___ GSHS-42
- ___ GSHS-43
- ___ GSHS-44
- ___ GSHS-45
- ___ GSHS-46
- ___ GSHS-47
- ___ GSHS-48
- ___ GSHS-49
- ___ GSHS-50
- ___ GSHS-51
- ___ GSHS-52
- ___ GSHS-53
- ___ GSHS-54
- ___ GSHS-55
- ___ GSHS-56
- ___ GSHS-57
- ___ GSHS-58
- ___ GSHS-59
- ___ GSHS-60
- ___ GSHS-61
- ___ GSHS-62
- ___ GSHS-63
- ___ GSHS-64

- ___ GSHS-65
- ___ GSHS-66
- ___ GSHS-67
- ___ GSHS-68
- ___ GSHS-69
- ___ GSHS-70
- ___ GSHS-71
- ___ GSHS-72
- ___ GSHS-73
- ___ GSHS-74
- ___ GSHS-75
- ___ GSHS-76

Icons

- ___ 12 disk set = \$36
- ___ GSIC-01B
- ___ GSIC-02B
- ___ GSIC-03B
- ___ GSIC-04B
- ___ GSIC-05B
- ___ GSIC-06B
- ___ GSIC-07B
- ___ GSIC-08A
- ___ GSIC-09A
- ___ GSIC-10A
- ___ GSIC-11A
- ___ GSIC-12A

Membership Directory

- ___ GSMD-01

Miscellaneous

- ___ GSMS-01A

Music

- ___ 83 disk set = \$249
- ___ GSMU-01C
- ___ GSMU-02
- ___ GSMU-03
- ___ GSMU-04
- ___ GSMU-05
- ___ GSMU-06
- ___ GSMU-07
- ___ GSMU-08
- ___ GSMU-09
- ___ GSMU-10
- ___ GSMU-11
- ___ GSMU-12
- ___ GSMU-13C
- ___ GSMU-14
- ___ GSMU-15
- ___ GSMU-16A
- ___ GSMU-17
- ___ GSMU-18A
- ___ GSMU-19A
- ___ GSMU-20A
- ___ GSMU-21A
- ___ GSMU-22
- ___ GSMU-23A
- ___ GSMU-24A
- ___ GSMU-25A
- ___ GSMU-26A
- ___ GSMU-27A
- ___ GSMU-28A
- ___ GSMU-29A
- ___ GSMU-30A

- ___ GSMU-31A
- ___ GSMU-32A
- ___ GSMU-33A
- ___ GSMU-34A
- ___ GSMU-35A
- ___ GSMU-36A
- ___ GSMU-37A
- ___ GSMU-38A
- ___ GSMU-39A
- ___ GSMU-40A
- ___ GSMU-41A
- ___ GSMU-42
- ___ GSMU-43A
- ___ GSMU-44A
- ___ GSMU-45
- ___ GSMU-46
- ___ GSMU-47
- ___ GSMU-48
- ___ GSMU-49
- ___ GSMU-50
- ___ GSMU-51
- ___ GSMU-52A
- ___ GSMU-53A
- ___ GSMU-54A
- ___ GSMU-55A
- ___ GSMU-56A
- ___ GSMU-57A
- ___ GSMU-58A
- ___ GSMU-59
- ___ GSMU-60
- ___ GSMU-61
- ___ GSMU-62
- ___ GSMU-63A
- ___ GSMU-64
- ___ GSMU-65
- ___ GSMU-66
- ___ GSMU-67
- ___ GSMU-68
- ___ GSMU-69
- ___ GSMU-70
- ___ GSMU-71
- ___ GSMU-72
- ___ GSMU-73
- ___ GSMU-74
- ___ GSMU-75A
- ___ GSMU-76
- ___ GSMU-77
- ___ GSMU-78
- ___ GSMU-79
- ___ GSMU-80
- ___ GSMU-81
- ___ GSMU-82
- ___ GSMU-83

Sounds

- ___ 20 disk set = \$60
- ___ GSSN-01A
- ___ GSSN-02A
- ___ GSSN-03
- ___ GSSN-04
- ___ GSSN-05
- ___ GSSN-06
- ___ GSSN-07
- ___ GSSN-08
- ___ GSSN-09
- ___ GSSN-10
- ___ GSSN-11

- ___ GSSN-12
- ___ GSSN-13
- ___ GSSN-14
- ___ GSSN-15
- ___ GSSN-16
- ___ GSSN-36
- ___ GSSN-37
- ___ GSSN-38
- ___ GSSN-39

Sounds - CDev rSounds

- ___ 20 Disk Set = \$60
- ___ GSSN-17A
- ___ GSSN-18
- ___ GSSN-19
- ___ GSSN-20
- ___ GSSN-21
- ___ GSSN-22
- ___ GSSN-23
- ___ GSSN-24
- ___ GSSN-25
- ___ GSSN-26
- ___ GSSN-27
- ___ GSSN-28
- ___ GSSN-29
- ___ GSSN-30
- ___ GSSN-31
- ___ GSSN-32
- ___ GSSN-33
- ___ GSSN-34
- ___ GSSN-35
- ___ GSSN-40

Utilities

- ___ 18 disk set = \$54
- ___ GSUT-01C
- ___ GSUT-02
- ___ GSUT-03C
- ___ GSUT-04B
- ___ GSUT-05C
- ___ GSUT-06A
- ___ GSUT-07B
- ___ GSUT-08D
- ___ GSUT-09B
- ___ GSUT-10B
- ___ GSUT-11B
- ___ GSUT-12
- ___ GSUT-13B
- ___ GSUT-14
- ___ GSUT-15B
- ___ GSUT-16
- ___ GSUT-17
- ___ GSUT-18

Best of The Apple IIGS

- ___ 25 disk set = \$56.25 (save \$6.25 - normally \$62.50)

Best of The Apple IIGS Disk Catalog

- ___ 1 disk set = \$2.00 (free w/Purchase of 25 Disk Set)

Best of Communications

- ___ 1 disk set = \$2.50

Best of DA's, CDevs, FExts, Dvrs, & Inits

- ___ 1 disk set = \$2.50

Best of Bit-Mapped Fonts

- ___ 2 disk set = \$5.00

Best of Games

- ___ 5 disk set = \$12.50

Best of Graphics

- ___ 2 disk set = \$5.00

Best of Icons

- ___ (Finder) 1 disk set = 2.50

Best of Music

- ___ 4 disk set = \$10.00

Best of Sounds

- ___ 2 disk set = \$5.00

Best of True Type Fonts

- ___ 5 disk set = \$12.50

Best of Utilities

- ___ 2 disk set = \$5.00

The Best of the Apple IIGs may be purchased as a 25 disk set or as individual sets as listed above.

- (*1) System 5.0.4 - 2 Disk Set = \$6.00
- (*2) Hyper Mover v1.1 -(Macintosh & IIGS) 2 Disk Set = \$6.00
- (*3) GS Bug & Debug Tools v1.6 = \$3.00
- (*4) System 6.0.1 - 6 Disk Set = \$18.00
- (*5) HyperCard IIGS - 6 Disk Set = \$18.00
- (*6) Astronomer - 7 disk set (GSED-01 to GSED-07) \$21.00

Note: Some disks may contain Shareware. Please send the requested remittance to the author if you use the program. Most of the programs on these library disks may require a IIGS with a minimum of 1.25 megs of memory.



Apple III Disk Library Order Form

5-1/4" DISKS:

Accounting

- ___ 3 disk set = \$4.50
- ___ 3ACT-01B
- ___ 3ACT-02B
- ___ 3ACT-03B

3 Easy Pieces

Templates

- ___ 15 disk set = \$22.50
- ___ 3AWZ-01
- ___ 3AWZ-02
- ___ 3AWZ-03
- ___ 3AWZ-04
- ___ 3AWZ-05
- ___ 3AWZ-06
- ___ 3AWZ-07
- ___ 3AWZ-08
- ___ 3AWZ-09
- ___ 3AWZ-10
- ___ 3AWZ-11
- ___ 3AWZ-12A
- ___ 3AWZ-13
- ___ 3AWZ-14
- ___ 3AWZ-15

Business Basic

- ___ 9 disk set = \$13.50
- ___ 3BSB-01
- ___ 3BSB-02
- ___ 3BSB-03
- ___ 3BSB-04
- ___ 3BSB-05
- ___ 3BSB-06
- ___ 3BSB-07
- ___ 3BSB-08
- ___ 3BSB-09A

Disk Catalog (ASCII TEXT)

- ___ 3 disk set = \$3 or \$1 per disk
- ___ 3CAT-01B - Disk 1
- ___ 3CAT-02B - Disk 2
- ___ 3CAT-03B - Disk 3

Disk Catalog (3 EZPC's)

- ___ 2 disk set = \$2 or \$1 per disk
- ___ 3CAT-04B - Disk 1
- ___ 3CAT-05B - Disk 2

Games

- ___ 5 disk set = \$7.50
- ___ 3GAM-01
- ___ 3GAM-02
- ___ 3GAM-03A
- ___ 3GAM-04

Graphics

- ___ 43 disk set = \$64.50
- ___ 3GRX-01
- ___ 3GRX-02
- ___ 3GRX-03
- ___ 3GRX-04
- ___ 3GRX-05
- ___ 3GRX-06
- ___ 3GRX-07
- ___ 3GRX-08
- ___ 3GRX-09
- ___ 3GRX-10
- ___ 3GRX-11
- ___ 3GRX-12
- ___ 3GRX-13
- ___ 3GRX-14
- ___ 3GRX-15
- ___ 3GRX-16
- ___ 3GRX-17
- ___ 3GRX-18
- ___ 3GRX-19
- ___ 3GRX-20
- ___ 3GRX-21
- ___ 3GRX-22
- ___ 3GRX-23
- ___ 3GRX-24
- ___ 3GRX-25
- ___ 3GRX-26
- ___ 3GRX-27
- ___ 3GRX-28
- ___ 3GRX-29A
- ___ 3GRX-30
- ___ 3GRX-31
- ___ 3GRX-32
- ___ 3GRX-33
- ___ 3GRX-34
- ___ 3GRX-35
- ___ 3GRX-36
- ___ 3GRX-37
- ___ 3GRX-38
- ___ 3GRX-39
- ___ 3GRX-40
- ___ 3GRX-41
- ___ 3GRX-42
- ___ 3GRX-43

Information

- ___ 37 disk set = \$55.50
- ___ 3INF-02E
- ___ 3INF-03
- ___ 3INF-04
- ___ 3INF-05
- ___ 3INF-06
- ___ 3INF-07
- ___ 3INF-08
- ___ 3INF-09
- ___ 3INF-10
- ___ 3INF-11
- ___ 3INF-12

- ___ 3INF-13
- ___ 3INF-14
- ___ 3INF-15
- ___ 3INF-16
- ___ 3INF-17
- ___ 3INF-18
- ___ 3INF-19
- ___ 3INF-20
- ___ 3INF-21
- ___ 3INF-22
- ___ 3INF-24
- ___ 3INF-25
- ___ 3INF-26
- ___ 3INF-27
- ___ 3INF-28
- ___ 3INF-29
- ___ 3INF-30
- ___ 3INF-31
- ___ 3INF-32
- ___ 3INF-33
- ___ 3INF-34
- ___ 3INF-35
- ___ 3INF-36
- ___ 3INF-37
- ___ 3INF-38
- ___ 3INF-39

Membership Directory

- ___ 3MRD-01
- ___ 3MRD-02

Miscellaneous

- ___ 21 disk set = \$31.50
- ___ 3MSC-01
- ___ 3MSC-02
- ___ 3MSC-03
- ___ 3MSC-04
- ___ 3MSC-05
- ___ 3MSC-06
- ___ 3MSC-07
- ___ 3MSC-08
- ___ 3MSC-09
- ___ 3MSC-10
- ___ 3MSC-11
- ___ 3MSC-12
- ___ 3MSC-13
- ___ 3MSC-14
- ___ 3MSC-15
- ___ 3MSC-16
- ___ 3MSC-17
- ___ 3MSC-18
- ___ 3MSC-19A
- ___ 3MSC-20
- ___ 3MSC-21

Pascal

- ___ 20 disk set = \$30
- ___ 3PCL-01
- ___ 3PCL-02
- ___ 3PCL-03
- ___ 3PCL-04

- ___ 3PCL-05
- ___ 3PCL-06
- ___ 3PCL-07
- ___ 3PCL-08A
- ___ 3PCL-09
- ___ 3PCL-10
- ___ 3PCL-11
- ___ 3PCL-12
- ___ 3PCL-13
- ___ 3PCL-14
- ___ 3PCL-15
- ___ 3PCL-16
- ___ 3PCL-17
- ___ 3PCL-18
- ___ 3PCL-19
- ___ 3PCL-20

Repairs

- ___ 11 disk set = \$16.50
- ___ 3REP-01
- ___ 3REP-02
- ___ 3REP-03
- ___ 3REP-04
- ___ 3REP-05
- ___ 3REP-06
- ___ 3REP-07
- ___ 3REP-08
- ___ 3REP-09
- ___ 3REP-10
- ___ 3REP-11

TeleCommunications

- ___ 13 disk set = \$19.50
- ___ 3TEL-01
- ___ 3TEL-02
- ___ 3TEL-03
- ___ 3TEL-04
- ___ 3TEL-05
- ___ 3TEL-06
- ___ 3TEL-07
- ___ 3TEL-08
- ___ 3TEL-09
- ___ 3TEL-10
- ___ 3TEL-11
- ___ 3TEL-12
- ___ 3TEL-13

Utilities

- ___ 56 disk set = \$84
- ___ 3UTL-01A
- ___ 3UTL-02
- ___ 3UTL-03
- ___ 3UTL-04B
- ___ 3UTL-05A
- ___ 3UTL-06
- ___ 3UTL-07
- ___ 3UTL-08
- ___ 3UTL-09
- ___ 3UTL-10
- ___ 3UTL-11
- ___ 3UTL-12

- ___ 3UTL-13
- ___ 3UTL-14
- ___ 3UTL-15
- ___ 3UTL-16
- ___ 3UTL-17
- ___ 3UTL-18
- ___ 3UTL-19
- ___ 3UTL-20
- ___ 3UTL-21
- ___ 3UTL-22
- ___ 3UTL-23
- ___ 3UTL-24
- ___ 3UTL-25A
- ___ 3UTL-26
- ___ 3UTL-27
- ___ 3UTL-28
- ___ 3UTL-29
- ___ 3UTL-30
- ___ 3UTL-31
- ___ 3UTL-32
- ___ 3UTL-33
- ___ 3UTL-34
- ___ 3UTL-35
- ___ 3UTL-36
- ___ 3UTL-37
- ___ 3UTL-38
- ___ 3UTL-39
- ___ 3UTL-40
- ___ 3UTL-41
- ___ 3UTL-42
- ___ 3UTL-43
- ___ 3UTL-44A
- ___ 3UTL-45
- ___ 3UTL-46
- ___ 3UTL-47
- ___ 3UTL-48
- ___ 3UTL-49
- ___ 3UTL-50
- ___ 3UTL-51
- ___ 3UTL-52A
- ___ 3UTL-53
- ___ 3UTL-54
- ___ 3UTL-55
- ___ 3UTL-56

Word Processing

- ___ 7 disk set = \$10.50
- ___ 3WDP-01B
- ___ 3WDP-02
- ___ 3WDP-03
- ___ 3WDP-04
- ___ 3WDP-05
- ___ 3WDP-06
- ___ 3WDP-07

Note: Some disks may contain Shareware. Please remit to the author of the program the requested amount if you use that program.

Please write disk numbers on a separate sheet of paper and include them with your order.

Mail this form with your check to: Disk Library, Washington Apple Pi 7910 Woodmont Ave., Suite 910 Bethesda, MD 20814			Are you a member of Washington Apple Pi, Ltd.? Y/N ___ 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.		
# of disks	Member Price	Extended	Name _____		
3.5" Singles			Box Number, Apt., Suite _____		
___ 4 or less @	\$4.00	_____	Street Address _____		
___ 5 or more @	\$3.50	_____	City _____		
___ sets (as marked)	\$(above)	_____	State _____		
5.25" Singles			Zip _____		
___ 4 or less @	\$2.00	_____	Day tele. _____		
___ 5 or more @	\$1.75	_____	Evening tele. _____		
___ sets (as marked)	\$(above)	_____			
+ postage \$1.00/disk					
maximum \$5.00					
TOTAL AMOUNT DUE		\$ _____			

Classified Advertisements

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

Macintosh Software for Sale

—**HyperCard FRT Shopping Stack** which compares air & grnd FRT pkg costs. It will provide fast, accurate, and easy bottom line FRT costs, with discounts and other calculations for many carriers. Fly it for less! Save big bucks!!! For more info and demo, please leave your name and phone number on my answering mach. Call "Ed" 410-437-0609 or 410-332-4540 ext 280.

Services

—**JEWISH SINGLES COMPUTER SERVICE** United Synagogue Seaboard Region. Non-Profit Service New in the Wash-Blt to Metro Area. Off to a Great Start with 650 Applicants & 2 Matches since December. For information/application call (301) 230-0801 or (301) 816-2931 FAX, E-Mail Address : 71263.234@CompuServ.Com

—**Macintosh trainer/consultant** available for hire. I currently subcontract to many local Mac schools. Hire me directly and save. I teach: Excel, Word, Quark, PageMaker, Illustrator, MSProject, and more. References available. Alan Stillman, (703) 548-8794.

—**File exchange service offered.** Apple II to Mac or IBM.

Can handle AppleWorks, Bank Street Writer, MultiScribe, WordPerfect IIe. \$15/hour. Phil Shapiro, (202) 686-5465.

For Sale

—**Mac Classic** 2MB RAM, 40MB drive. Comes with ImageWriter II printer and an additional Hebrew system and software (like Clarisworks, MacWrite II, and more), keyboard, and mouse. Asking \$500, or best offer. Ruth Shiloh, (301) 718-0997.

—**Mac SE**, 1/20 w/KB & mouse, \$300. Mac Plus, complete with w/HD, KB & mouse, \$225. ImageWriter II, \$150. Memory upgrades available. Ph. (813) 935-

3614, (813) 935-4048 Fx. . Tampa, FL. WAP member David Weiss. (Call collect.)

—**StyleWriter I** with cable. Excellent condition. \$100 firm. Please call Abel. (410) 269-0040, evenings (Annapolis).

—**External 2400 baud Zoom modem** (v42.bis). Comes with modem cable for Mac, Apple IIs, or Apple IIc+. Phil (202) 686-5465.

—**Radius Rocket 040 Accelerator**, new, \$500. RasterOps 24 Bit Color Board, \$200. (703) 978-0031.

—**HP LaserJet Printer Postscript Cartridge** along w/ doc. and TurboNet cabling for hook-up to Mac. \$99. Call HR (301) 670-0884 (Gaithersburg).

Info Request

—**Is anyone using Lonworks Networking Technology** by Echelon? Please reply to Al Carlton, 6102 Winsome Lane, #7, Houston, TX 77057. (Or CompuServe 74650,1006) or on TCS.

ALLNET SERVICE CENTER

Apple and Macintosh Specialists

Mac Plus/512 Power Supply \$95
One MB Memory Upgrade Installed \$48
Upgrade Mac 512 KE to Mac Plus w/ 1 MB RAM \$335
Laser Printer, Hard Drive, Floppy Drive Repair
Call for our low rates • Pickup/Delivery
On-site/Walk-in • Service Agreements

3020 Wilson Blvd., Arlington, VA, Tel: 703-527-4300

Membership Application

Please print or type:

Name _____ Phone # (H) _____ Phone # (W) _____
 Company _____ Address _____
 Occupation _____ Sponsor's Name _____

Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> Apple II | <input type="checkbox"/> LISA | <input type="checkbox"/> Performa 600 | <input type="checkbox"/> Mac II Other |
| <input type="checkbox"/> Apple II+ | <input type="checkbox"/> Mac II | <input type="checkbox"/> Centris 610 | <input type="checkbox"/> IBM or Compatible |
| <input type="checkbox"/> Apple IIe | <input type="checkbox"/> Mac IIx | <input type="checkbox"/> Centris 650 | <input type="checkbox"/> Non-Apple Laptop |
| <input type="checkbox"/> Apple IIc | <input type="checkbox"/> Mac II cx | WAP has many Special Interest Groups (SIGs) and Activities. Fill in letter next to area of interest. J= Join Group, V= Volunteer | |
| <input type="checkbox"/> Apple IIc+ | <input type="checkbox"/> Mac IIc+ | AppleWorks SIG _____ | HOTLINE _____ |
| <input type="checkbox"/> Apple II GS | <input type="checkbox"/> Mac IIci | Apple II GS SIG _____ | HyperTalk SIG _____ |
| <input type="checkbox"/> Laser 128 | <input type="checkbox"/> Mac IIsi | Apple III SIG _____ | Mac Programmers SIG _____ |
| <input type="checkbox"/> Franklin | <input type="checkbox"/> Mac IIfx | Art SIG _____ | Music SIG _____ |
| <input type="checkbox"/> Apple III (SARA) | <input type="checkbox"/> Mac VX | CAD SIG _____ | NOVA Educators |
| <input type="checkbox"/> Mac 128 | <input type="checkbox"/> Mac PowerBook | Database SIG _____ | Mac/Apple Users SIG _____ |
| <input type="checkbox"/> Mac 512/512e | <input type="checkbox"/> Mac Duo | Disabled SIG _____ | QuickTime SIG _____ |
| <input type="checkbox"/> Mac Plus | <input type="checkbox"/> Quadra 700 | Desktop Publishing SIG _____ | Stock SIG _____ |
| <input type="checkbox"/> Mac SE | <input type="checkbox"/> Quadra 900 | Disk Library _____ | Telecommunications SIG (TCS) |
| <input type="checkbox"/> Mac SE30 | <input type="checkbox"/> Quadra 950 | EdSIG (Education) _____ | Women's SIG _____ |
| <input type="checkbox"/> Mac Portable | <input type="checkbox"/> Newton | Excel SIG _____ | |
| <input type="checkbox"/> Mac LC I, II, or III | <input type="checkbox"/> Performa 200 | Federal SIG _____ | |
| <input type="checkbox"/> Mac Classic I, II, or C | <input type="checkbox"/> Performa 400 | Game SIG _____ | |

Enclose check or money order payable to **Washington Apple Pi, Ltd.**

**** Access to the TCS is contingent on WAP having a current home telephone number for the member.**

- | | |
|----------------------------|------|
| Basic Membership—1 year | \$39 |
| 2 years | \$67 |
| 3 years | \$92 |
| Student rate* (for 1 year) | \$32 |

* Please enclose photocopy of current student ID

For other options please add correct amounts

- WAP Bulletin Board System (TCS)** \$15
- 1st class mail (U.S.) \$17
- Airmail to Canada, Mexico, West Indies or Central America \$20
- Airmail to Europe & South America \$38
- Airmail to Asia & elsewhere \$48
- Surfact to Europe, Asia & Elsewhere \$18

Total Enclosed \$ _____

Indicate desired New Member kit (1 only)

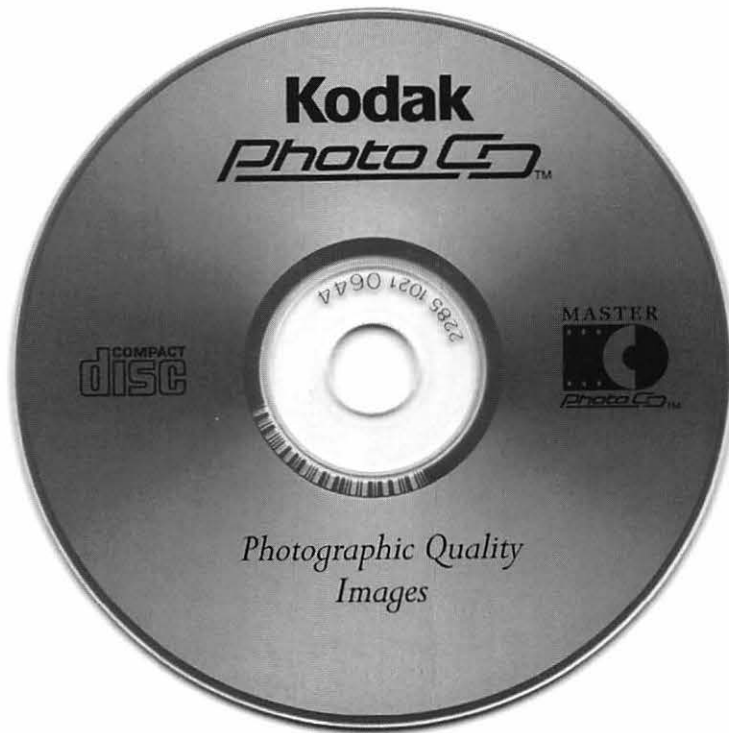
- Apple II
- Apple II GS
- Apple III
- Mac 400k
- Mac 800 k

Please circle Yes or No for the 2 items listed below.

1. My name, address & phone number may be published in the membership directory Yes No
2. 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

Applicant signature and date

Photo CD will change the way you capture and store color images.



Forever.

Good

Our Kodak Photo CD scanner can scan about 100 images from 35mm slides or negatives onto a single Photo CD. Each image is stored at five resolutions. The highest resolution can produce a 7" x 10" color separation on a PostScript® imagesetter at 150 lpi. The cost per image is about \$1.75 plus the price of the disc (under \$10).

Better

Our Kodak Pro Photo CD scanner can scan about 25 images from 35mm slides or negatives or 2" x 2" and 4" x 5" transparencies onto a single Pro Photo CD. The highest resolution can produce a 14" x 20" color separation on a PostScript® imagesetter at 150 lpi. The cost per image is less than \$15 plus the price of the disc (under \$10).



The Publishers Service Bureau
4300 King Street, Alexandria, Virginia * 703 824-8022



Washington Apple Pi, Ltd.
 7910 Woodmont Ave., Suite 910
 Bethesda, MD 20814
 June 1994

Second Class
 postage rates
 paid
 at Bethesda, MD

macUpgrades

301-907-0300



Authorized
 Value Added Reseller

Macintosh service. Our place or yours?

In the unlikely event your Apple® Macintosh® computer or peripheral needs service, you have more choices today than ever before.



If you'd like us to come to you, our goal is to respond to your request within eight hours. And if you choose to bring your Macintosh in, you can expect to be up and running within two business days.

Since we are an Apple Authorized Service Provider, we can offer in-warranty and out of warranty repairs. We can also offer our customers on-site and carry-in service options for select Apple products.

These extended service programs are designed to provide you with maximum in Macintosh service. So stop by or call today. And learn the specifics about full service for your Macintosh.



Call us today for details on carry-in and on-site service.

All AV Models Available



40mhz Ultra-High Speed 68040 Processor
 AT&T Digital Signal Processor
 Full Screen Video (NTSC) In/Out
 16-Bit Stereo Sound In/Out

Ethernet & Appletalk Networking
 DMA SCSI-II Disk Interface
 Optional Apple CD-ROM
 230/500/1000 MB Hard Drives

High-Speed Hard Drives

Fixed Storage

Quantum 105 Meg	\$319
Toshiba 213 (Powerbook)	\$599
Quantum 240 Meg	\$349
Quantum 425 Meg	\$499
Fujitsu 520 Meg	\$799
Fujitsu 1.2 Gig	\$1,099
DEC 1.2 Gig	\$1,099
Quantum 1.8 Gig	\$1,599

** Add \$100 for External Drives

Removable Storage

Apple PowerCD	\$539
PLI Syquest 44 (refurb)	\$299
PLI Syquest 44 (new)	\$369
PLI Syquest 88 (refurb)	\$499
PLI Syquest 88 RW 44	\$649
PLI 105mb Syquest	\$659
PLI CD Multi-Session Int	\$499
PLI 128 Meg Optical	\$999
PLI 1Gig Optical	\$1,999

© 1993 Apple Computer, Inc. & MacUpgrades, Inc. Apple, the Apple logo and Macintosh are registered trademarks of Apple Computer, Inc. Other trademarks property of their respective owners. Prices subject to change without notice.

Complete turn-key system solutions available for DTP/Prepress, Medical Office Billing, Imaging/Document Management, Multimedia, and Point of Sale/Inventory Management.

Fax Quotation Requests to:
 301-907-9335

Low Cost Next Day
 Delivery by UPS

MasterCard, Visa, Discover
 & American Express Accepted

Weekdays: 10-6
 Saturdays: 11-4

6931-A Arlington Road
 Bethesda, Maryland 20814