Mini'app'les Newsletter

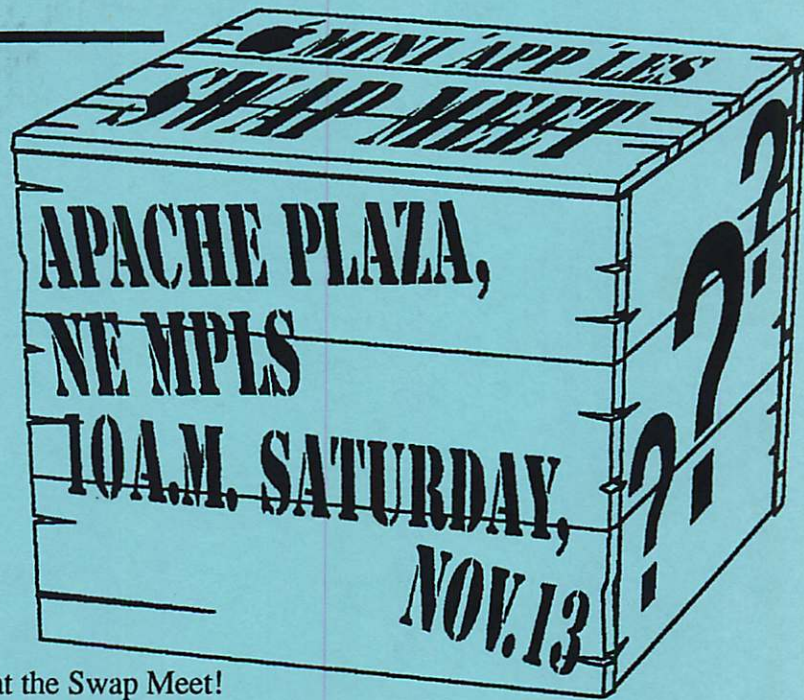**Minnesota Apple Computer Users' Group, Inc.** $2.00

In this Issue:

- **More Good Deals**
- **Apple's Strategy for the Future**
- **PowerPC**
- **Tips from Claris**
- **The History of the Apple II – part 7**

MINI'APP'LES SWAP MEET

APACHE PLAZA, NE MPLS 10 A.M. SATURDAY, NOV. 13

Sign up NOW for a table at the Swap Meet!
Call our Voice Mail at 229-6952.

November Events

Sun	Mon	Tue	Wed	Thr	Fri	Sat
	1	2	3	4 — MINI'APP'LES 7pm	5	6
7	8 — 7pm	9 — 6:30	10	11 — 7pm	12	13 — 10am Swap Meet
14	15 — 7pm	16 — II 7pm	17	18 — W 7pm / 7pm	19	20
21 — 7pm / ? 7pm	22	23 — 7pm	24	25	26	27 — 1pm
28	29	30		N/A		

Board of Directors – *Mini'app'les Members Welcome* – Penn Lake Lib., 8800 Penn Ave. S, Blmngtn – Greg Carlson, 544-8252

Apple II/GS Main – *Typeset* – Lexington Lib., University & Lexington, St. Paul – Tom Ostertag, 488-9979

ClarisWorks SIG – *Open discussion* – Norwest Bank, 5320 Lyndale Ave. S., Mpls – Denis Diekhoff, 920-2437

Macintosh Main – *New products* – Mirror Technologies, 305 2nd St. NW, New Brighton – Mike Carlson, 377-6553

Swap Meet – *call voice mail for table requests* – Apache Plaze, 3800 Silver Lake Rd, N.E. Mples – call voice mail, 229-6952

Fourth Dimension SIG – Metro II, 1300 Mendota Heights Rd, Mendota Heights – Ian Abel, 920-5520

Apple II Novice SIG – Murray Jr. High, 2200 Buford, St. Paul – Tom Gates, 789-1713

Appleworks SIG – *Christmas/Holiday letters* – Murray Jr. High, 2200 Buford, St. Paul – Les Anderson, 735-3953

FileMaker Pro SIG – *Open Discussion* – Highland Park Lib., 1974 Ford Pkwy., St. Paul – Steve Wilmes, 458-1513

HyperCard SIG – *Scripting Q&A* – E. Lake Lib., 2727 East Lake St., Mpls – Peter Fleck, 370-0017

Macintosh Novice SIG – *Open forum* – Highland Park Lib., 1974 Ford Pkwy., St. Paul – Tom Lufkin, 698-6523

Mac Programmers SIG – Murray Jr. High, 2200 Buford, St. Paul – Gervaise Kimm, 379-1836

Programmer's Workshop – *THINK C Program Coding* – Brookdale-Henn Lib., 6125 Shingle Creek Pkwy, Brooklyn Ctr. – Keven Kassulker, 535-2968

Macintosh DTP SIG – Call for info – Bob Grant, 827-6294

Board of Directors

|		
President	Gregory L. Carlson 8216 32nd Ave. N. Crystal, MN 55427	544-8252
Vice-President	**Tom Gates** 3425 Wilshire Place Minneapolis, MN 55418	789-1713
Secretary	**Leroy Sorenson** 308 W. 22nd St., apt.101 Minneapolis, MN 55404	870-7366
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Membership Director	**Bob Demeules**	559-1124
Software Director	**Samuel Goshorn**	827-4948
Publications Director	**Keven Kassulker** 7779 48th Ave. N. New Hope, MN 55428-4515	535-2968
SIG: Apples	**Erik Knopp**	636-3244
Operations & Resources	**Allen Mackler**	424-8889

Introduction

This is the Newsletter of Mini'app'les, the Minnesota Apple Computer Users' Group, Inc., a Minnesota non-profit club. The whole newsletter is copy righted © by Mini'app'les. Articles may be reproduced in other non-profit User Groups' publications except where specifcally copyrighted by the author. (Permission to reproduce these articles must be given by the author.) Please include the source when reprinting.

Dealers

Mini'app'les does not endorse specific dealers. The club promotes distribution of information which may help members identify best buys and service. The club itself does not participate in bulk purchases of media, software, hardware and publications. Members may organize such activities on behalf of other members.

The Fine Print

The Mini'app'les Newsletter is an independent publicaiton not affiliated, sponsored, or sanctioned by Apple Computer, Inc. or any other computer manufacturer. The opinions, statements, positions, and views herein are those of the author(s) or editor and are not intended to represent the opinions, statements, positions, or views of Apple Computer Inc., or any other computer manufacturer. Apple®, the Apple® , Apple IIGS®, AppleTalk®, AppleWorks®, Macintosh®, ImageWriter®, LaserWriter®, are registered trademarks of Apple Computer, Inc. LaserShare™, Finder™, MultiFinder™ and HyperCard™ are trademarks of Apple Computer, Inc. PostScript® is a registered trademark of Adobe Systems, Inc. Times® and Helvetica® are registered trademarks of LinoType Co.

Advertisers & NL contributers:

* See newletter reference section on this page
* Call Publications director listed in the board section when reference section is incomplete

For General information:

* Call Voice Mail system - 229-6952 (Messages aren't checked daily, for faster respondce check with NL or meeting contacts
* Read Newletter
* Attend a meeting (please call calendar contacts before attending)

For detailed Meeting Information:

* See newletter calendar & next mnths events
* Call contacts on NL calendar
* Changes contact NL staff (newletter ref. section)

Bulletin Board System:

* From your computer dial 892-3317, 24 hrs-a-day to interact online. Set your modem software to 8 data, 1 stop, 0 parity

Newletter Reference

Publication Staff:

Calendar Updates	**Erik Knopp**	636-3244
Publisher/Layout Editor	**Hugh Johnson**	780-6053
Publications Director	**Keven Kassulker**	535-2968
Mac Editor	Open position	call
Apple Editor	Open position	Keven
Bulletin Board Editor	Open position	for
Graphics / Photo's	open / new pos	info
Advertising Director	openPos.,tempKeven	535-2968
St. Paul Area Ad Rep.		
DT & S Metro Ad. Rep.		
DT & N Metro Ad. Rep.		
E Mpls Ad Rep.		
W Mpls Ad. Rep		
Greater Mn Ad. Rep.		
Outstate / Nat. Ad. Rep.		

These positions are open. For more information call Keven at 535-2968

Newsletter Contributions – Please send contributions directly to our Post Office, Box 796, Hopkins, MN 55343 or upload them to our BBS at 892-3317.

Deadline for material for the next newsletter is the 15th of the month. An article will be printed when space permits and, if in the opinion of the Newsletter Editor or Manager, it constitutes material suitable for publication.

Newsletter Credits:

AppleLink Liaison	Tom Mehle	536-3972
Graphics Contributer	Roy Sorenson	870-7366
Story Contributer	Ken Slingsby	(507) 263-3715
Story Contributer	Peter Fleck	370-0017
Story Contributor	Tom Ostertag	488-9979
Story Contributor	Tom Gates	789-1713
Story Contributor	Steve George	935-5775
Story Contributor	Greg Carlson	544-8252

Next Month's Events

Board of Directors	7:00 Thr, Dec. 2	–location pending–	Greg Carlson, 544-8252
Macintosh Main	7:00 Thr, Dec. 9	–location pending–	Mike Carlson, 377-6553
Programmer's Workshop	1:00 Sat, Dec. 11	Brookdale-Henn Lib., Brkln Ctr.	Keven Kassulker, 535-2968
Apple II/GS Main	7:00 Mon, Dec. 13	Lexington Lib., St. Paul	Tom Ostertag, 488-9979
Apple II Novice SIG	7:00 Tue, Dec. 14	Murray Jr. High, St.Paul	Tom Gates, 789-1713
ClarisWorks SIG	6:30 Tue, Dec. 14	Norwest Bank Lyndale S., Mpls	Denis Diekhoff, 920-2437
AppleWorks SIG	7:00 Thr, Dec. 16	Murray Jr. High, St. Paul	Les Anderson, 735-3953
FileMaker Pro SIG	7:00 Thr, Dec. 16	Highland Park Lib., St. Paul	Steve Wilmes, 458-1513
Fourth Dimension SIG	7:00 Mon, Dec. 20	Metro II, Mendota Hts	Ian Abel, 920-5520
Macintosh Novice SIG	7:00 Mon, Dec. 27	Highland Park Lib., St. Paul	Tom Lufkin, 698-6523
HyperCard SIG	–Suspended–	–Resumes in January–	Peter Fleck, 370-0017
Mac Programmers' SIG	–date pending–	–location pending–	Gervaise Kimm, 379-1836
Mac DTP SIG	–date pending–	–location pending–	Bob Grant, 827-6294

Coordinators – Please contact Erik Knopp (on our BBS or at 636-3244) by the 1st of the month to have your meeting listed correctly.

Members Helping Members

Need Help? Have a question the manual doesn't answer? Members Helping Members is a group of volunteers who have generously agreed to help. They are just a phone call away. Please call only during appropriate times, if you are a Member, and own the software in question.

ROY SORENSON

Macintosh	Key	Apple II	Key	Apple IIGS	Key
Adobe Illustrator	21	AppleWriter	2	AppleWorksGS	15
Beginners	13, 14, 18, 24	AppleWorks	2, 23	APW	20, 23
Canvas	5	Ascii Express	3	Complete Pascal	10
FileMaker II, Pro	1, 17	BASIC	5	Delux Paint II	23
Freehand	22	Dazzle Draw	23	General Information	3, 10
General	14, 17, 18, 24	DB Master	7	Graphic Writer II/III	15
Helix	16	Educational Software	23	GS/OS	3, 10
HyperCard	6, 9	General Information	23	HyperStudio GS	3
MacDraft	5	Home Acc'n't	20	Merlin 16+	15
MacDraw	5	PublishIt!	23	Mousetalk	15
MacPaint	5	ProTERM	23	PaintWorks Plus/Gold	15, 23
Mac OS	4, 18, 24	Quicken	23	Prosel	2
Microsoft Excel	5, 6, 17	Talk Is Cheap	3	TML Basic	3, 10
Microsoft Word	4, 5, 6, 14, 17	TimeOut	2	TML Pascal	3, 10
Microsoft Works	11, 17	TO Graph	2	Writer's Choice	15
Networking	5, 6, 13				
PageMaker	4, 6, 17	Apple ///	Key		
PostScript	8	General	12		
Power Point	5				
QuickBasic	5, 6				
XPress	21				

If you would like to be a "Members Helping Members" volunteer, please leave your name & phone number on our BBS or leave a voice-mail message at 229-6952.

1.	Steve Wilmes	458-1513	E	9.	Peter Fleck	370-0017	DEW	16. Arnie Kroll 433-3517 E
2.	Tom Ostertag	488-9979	E	10.	Randy Dop	452-0425	EW	17. Michael Foote 507-645-6710 DEW
3.	Tom Gates	789-1713	EW	11.	Ed Spitler	432-0103	D	18. Richard Becker 870-0659 EW
4.	Tom Edwards	927-6790	E	12.	Bob Rosenberg	377-4300	EW	20. Steve Peterson 922-9219 EW
5.	Earl Benser	884-2148	EW			340-0234	D	21. Jodi Roste 933-1698 EW
6.	Dan Buchler	435-3075	E	13.	John Hackbarth	715-246-6561	D	22. Nancy McClure 227-9348 DEW
7.	Ann Bell	422-1115	E	14.	Jim Horswill	379-7624	DEW	23. Rand Sibet 566-8571 EW
8.	Fritz Lott	377-3032	E	15.	Tom Michals	452-5667	DEW	24. Hugh Johnson 780-6053 DEW

D-days (generally 9 a.m. to 5 p.m.), E-evenings (generally 5 p.m. to 9 p.m.), W-weekends (generally 1 p.m. to 9 p.m.).
In any case, call at reasonable hours and ask if this is a convenient time for them. We appreciate your cooperation.

Contents:

Meeting News

Apple II Main Meeting

by Tom Ostertag

The October meeting was at the Lexington Branch Library in St. Paul. Most people had gathered by 6:45 an stood in the lobby blocking traffic waiting for another group to leave. Erik had the computer and the accessory equipment and Owen Aaland had the software... so we were in business.

Announcements were made for the Swap Meet in November and the Hamfest Swap meet the end of October. The AppleWorks meeting will include demonstrations of your favorite AppleWorks Templates.

Randy Peterson had a number of questions about hard drive interface cards and there were a couple of questions about Apple News.

Erik did an ad hoc presentation of Typeset and passed out literature and order information. Then yours truly did a demonstration/discussion of Publish It! and desktop publishing. This generated a lively discussion of what other ways there were on an Apple //e to generate this type of output.

Unfortunately, the discussion was interrupted by the Librarian kicking us out.

Pie SIG was at the Perkins in Midway Center where there was a lively discussion of computer history, Newtons, Apple Management (or lack thereof...) and the local downloads available.

November's meeting is also at the Lexington Library and hopefully will be on games (If I can find someone to do a game demo...) See you there.

All for now...   *Tom*

Mac HyperCard SIG Report

by Peter Fleck

Attendance was up at the September SIG meeting — 15 HyperTalkers present. We talked about basic scripting and a bit about using QuickTime in stacks.

Beginning in November, I will try to provide some shareware stacks at each meeting. Instead of copying your own, please bring an unformatted (meaning new) 1.4mb (high density) floppy and you can trade it in for a disk of stacks. The stacks will be stuffed so you need to have some sort of unstuffing tool to get at them. StuffIt Expander is one of the best and I'll have that on the first disk distributed. It is a free program.

That's all for this month... Pete

Next Meeting: Monday, November 22 at the East Lake Library in Minneapolis, 2727 E. Lake Street, near Minnehaha Mall, Target, Rainbow, and Podany's.

Times: 7:00 – 8:45

Directions: From I-94, take the 25th Ave/Riverside exit and go south on 25th (becomes 26th) to Lake Street, then left 1 block. There is a parking lot behind the library, on-street parking (you don't have to plug the meters after 6 p.m.), and a church lot just east (don't use the church lot if it looks like something is going on at the church, please).

Topic: General discussion of scripting. Maybe a quick look at an AppleScript if I have time to prepare.

Upcoming Meetings: No Meeting in December! Watch the December newsletter for the January meeting date.

Notes and Announcements:

Fall Swap Meet
Saturday, November 13, 10 am-2 pm
Apache Plaza Shopping Center,
3800 Silver Lake Road, N.E. Mpls

Table info:
Members: 1/2 Table: Free
Whole Table: $10.00
Vendors/Non-Members:
1/2 Table: $15.00
Whole Table: $25.00
Leave message at: 229-6952
(Mini´app´les Information line), with Name, Phone #, Table Requirements and Membership # (if applicable).

Attention Apple II Owners!
New at the November 13th Swap Meet:
The Apple II Test Bench Area
Questions on Software? – We'll have a //e, / /c and GS available to look at your questions.
Possible Hardware Problems? – Also available will be an assortment of diagnostic software to check your equipment if you'd like to bring it in.
To get more information, call the Mini´app´les Information line, (612) 229-6952, a 24-hour service, and leave a message – we'll contact you and answer any questions.

Attention all Members:
If you do not wish to have your name, ZIP, and phone number to be listed in the soon-to-be-released membership roster eDOM, please send a note to the Membership Director at PO Box 796, Hopkins, MN 55343

RE: the new ClarisWorks SIG
Remember to enter the bank by the rear entrance. Do not park in the liquor-store parking lot. For further details, call Denis Diekhoff, 920-2437.

Mini'app'les Board of Directors Meeting Minutes

September 2, 1993

Norwest Bank, Minneapolis
Presiding Officer: Greg Carlson, President

Preliminary

Attendance

Members: Greg Carlson, Jacque Gay, David Laden, Erik L. Knopp, Al Mackler, Sam Goshorn, Roy Sorenson, Bob Demeules, Keven Kassulker.

Absent: Tom Gates, Wade Brezina

Guests: Lance Weber, Sue Goshorn, Hugh Johnson.

Meeting called to order by President Greg Carlson at 7:12.

Adoption of Agenda: with addition of trial eDOMs, agenda passed.

Aug. 5 meeting minutes approved with minor corrections.

Treasurer's Report — Jacque Gay

see Treasurer's Report.

President's Report — Greg Carlson

Mail box: Rand Sibet has resigned mail pickup duties. Wayne Couillard has agreed to take on mail pick up and distribution, as he lives within blocks of the Hopkins P.O. box. David explained the club's address relates to its origin in Hopkins.

Exchange Newsletters: Greg distributed exchange newsletters we get from other user groups. Discussion of how they should be routed, and how many we are sending out in exchange — see new business section for further discussion.

Hamfest will be Oct. 30, and Greg asked that a notice appear in newsletter.

Membership Director's Report — Bob Demeules

see Membership Report. Discussion on why we don't have more renewals: someone suggested it was "sticker shock" of members at the $25 rate. Keven also reported continued problems (and frustration) with meetings not being held where and when expected.

Software Director's Report — Sam Goshorn

3 new eDOM disks are coming. Also announced that 3 Mac eDOMs, (#859,861, and 862) have been discovered to have the WDEF virus (which does not affect System 7 desktops). Sam will put notices on the BBS and to the newsletter, and offer exchange for clean disks. Sales: $19 mail order, $10 Mac eDOMs for $29 total eDOM income.

Apple II SIG Director's Report — Erik Knopp

Sites and dates are scheduled through December for the main Apple II meeting and

possibly for the other Apple SIGs.

Publication Director — Keven Kassulker

Keven is working with others on a flyer for ad sizes and rates. There was discussion on what our current ad rates are: David gave some reasons and history for the ad rates. Keven and Hugh will review and clarify them and report back to board. Lance announced that he will be unable to be ad coordinator. This is a very important position for the club, and members who can help should call Keven.

Operations and Resource Director — Al Mackler

No report.

Old Business

Membership List:

The notice has appeared once in the newsletter. It was suggested the next notice mention the list would appear on eDOM.

Fall Swap Meet:

Set for Saturday, Nov. 13 from 10 – 2 pm at Apache Plaza. Greg will ask Tom to contact TC/PC if they would like to attend, and to prepare ad copy for the newsletter.

Anoka Apple Club was not meeting over the summer, so coordination discussion was deferred.

Newsletter Donation:

Greg will arrange for Sue to get a selection of newsletters to submit to the State Historical Society.

Grants:

Sue gave a long report on the grant proposal process. Discussion: we have resources to draw on, including our mission statement, the bylaws, the survey results, and the results of the general business meeting brainstorm sessions. Consensus was that preparing a grant proposal would be a major undertaking, and we lack a clear vision of the process. Sue was asked to distill the process, and include a decision time line to help us see the whole system.

Name Change:

Discussion followed a recommendation from the executive committee that the proposal for a change of name for the user group be dropped, in view of more pressing concerns and a lack of unanimity for an alternative name. Motion to drop the name change from active consideration was made and seconded: Keven voted no, the rest of the board present voted yes, passing the motion.

New Business

Discussion on the number of complementary and exchange newsletters, the routing of them within the group, and if the benefit outweighs the cost. We pay to send out over 70 such newsletters each month. Are any of them superfluous? Many members were surprised to see the number of exchange newsletters, which haven't been widely distributed or routed. Dave pointed out that some "complementary" newsletters are to members or advertisers. The economics of printing extra newsletters has changed with recent changes in production that were a response to decreased membership (the per-issue cost has increased). Decision: Greg will tell the mail pickup person to keep track of the newsletters we get over the next 2 months, so the board can evaluate the exchanges. Routing of exchange newsletters will be changed to first Bob (Memberships, keeper of the mailing list) and Keven (Publications), then the board and out to SIGs.

Audit of Books:

Jacque reported she delegated the task of leading an audit committee to Dick Peterson.

Trial EDOMs:

Discussion of trial proposal to issue 100 free eDOMs as club promotion, targeted for (dealers to give to) computer buyers and for people taking computer classes. Each disk might include the club eDOM catalog, a membership form, and Disinfectant. Jacque said the file size and speed variables would prohibit including the club promotional stack she wrote. Club cost would be 100 (800 k) disks for about $65 (plus minimal cost of printing disk labels). How many memberships would we get from 100 disks? How many would we need to recoup promotional costs and member benefits? Motion for the executive committee to report a specific recommendation on this matter for board consideration seconded and passed.

Adjournment moved, seconded and approved.

Next board meeting:

Thursday, October 7 at Washburn Library, Mpls.

Next Executive Committee meeting Sept. 16 at Jacque's

prepared and submitted
by Roy Sorenson, Secretary ⌘

GOOD DEALS

by Ken Slingsby

This is part of the series of articles which list good deals and press releases that have been brought to our attention via a news source established by Apple Computer Co, AppleLink. Due to the constraints of space in our newsletter and time available, the articles have been greatly condensed. All were posted in their entirety on the Club's BBS. To read the full articles, plead or beg a friend who has access to the BBS to copy it for you.

As an aid in your review of the articles, I have divided them somewhat arbitrarily into DEALS and Press Releases. The DEALS include price, dates available, and the address of the publisher or author. Most of the DEALS are special limited time offers of a significant price reduction. They are presented here as a service of Mini'app'les. The PRESS RELEASES are to make you aware of the new products. You may have to hunt to find a dealer to find the product.

Mini'app'les makes no claim as to the usefulness or quality of the products offered herein. The User Group does not endorse the products and is not supporting the products. The following is not paid advertisement. There may be other products mentioned on AppleLink not appearing here. If so, that is an omission, not a refusal of the product. As in all purchases, buyer beware!

In order to qualify for some of the items presented here, you MUST be a member of an Apple User Group. Be prepared to give your member number, and tell them that Mini'app'les sent you!

DEALS

3-D Tutor

We are shipping a new product which might be of interest to you and your group. 3-D Tutor, is a visually exciting CD-ROM that supplies the tools, techniques and technology to allow users to become 3-dimensionally literate. The first multimedia resource of its kind, 3-D Tutor is for anyone interested in learning the basics of 3-D modeling and animation.

3-D Tutor requires a Macintosh with an available 5mb of RAM to run the products, 8mb of RAM to run the test drive module, System 7.0 or greater and a CD-ROM drive.

The Suggested Retail Price of 3-D Tutor is $119.95, but we are offering it to user group members for $60 through December 25,

1993. Members just need to ask for the user group discount and name their user group when ordering. – *Scott Mize*

Zelos!
110 Pacific Avenue, # 219
San Francisco, CA 94111
415-788-0566 (voice)
415-788-0562 (fax)

2WAY TALKER

The full-duplex, real-time voice communication software for Macintosh computers. 2 Way Computing, Inc. has a new program for Macintosh users that enables two-way voice communication over a network such as Ethertalk or Localtalk. 2Way Talker 2.0.1 is a program that allows two users to talk to each other using the built-in microphone and speakers of Macintosh computers.

Introductory price is $49.95 per copy. Bulk pricing and educational discount are available. Upgrades from previous versions are free.

2 Way Computing, Inc
4370 La Jolla Village Drive, Suite 400
San Diego, Calif. 92122.
Voice (619) 452-3888
Fax (619) 452-3077

ReadySetGrow!

Carries parents from pre-conception to Kindergarten and is very fun and easy to use. Click on different objects in the Nursery scene to access all eight parts of the program. Some of the features include:

- The pregnancy section illustrates what your baby looks like throughout your pregnancy, and fully details a multitude of mother's and father's concerns.
- The "Biological Clock" gives you a running countdown til your due date...to the minute, just for fun!
- Calendar program will not only help you schedule your busy day, it will allow you to record your children's precious milestones, journal the events ... in a diary section.
- Address book section stores and maintains vital information on all the important people in you kid's life.
- The Childhood section is extensive, giving information on health care provider visits, and various topics like feeding, burping, how to handle whining, thumb-sucking,

you name it!
- The Medical Records section allows you to store, maintain and print medical files on all family members. In short, there is no other software that does so much for so little that you can enjoy for many years. BUY READYSETGROW! BEFORE 12/31/93 AND YOU GET IT FOR LESS THAN HALF PRICE! SUGGESTED RETAIL PRICE IS $69.95, BUT THIS OFFER LETS YOU BUY IT FOR $29.95!

Fax your order to 713-973-2440, or call 800-777-BABY. – *(Elisa Medhus, M.D., Atlantis Software Link ASC)*

Prolog

Celebrating the 7th anniversary of the introduction of AAIS Prolog on the Macintosh, Advanced A. I. Systems, Inc. is proud to announce that from September 1, 1993 to December 31, 1993, we are offering our latest complete object-oriented version of our popular AAIS Full Control Prolog for the Macintosh at an amazing low price. Thus creating a special opportunity for anyone to now afford joining the thousands of users of our professional Prolog. AAIS Full Control Prolog is an object-oriented Macintosh development system of the popular Prolog programming language. Prolog is a symbolic, rule language.

The product includes approx. 680 pages of documentation, and almost 15,000 lines of Prolog code.

Suggested Retail Price: US$495
Special Discount Price: US$199

Advanced A. I. Systems, Inc.
P.O. Box 39-0360
Mountain View, CA 94039-0360
Voice: (415)-948-8658
Fax: (415)-948-2486

Defying Gravity

"Defying Gravity: The Making of Newton" (Beyond Words Publishing, Portland) is off the press and available to Mac and Newton User Group members You pay only $19.95 to receive this unprecedented, inside look at Apple Computer during the development of Newton, with over 130 black-and-white documentary photos, 30,000 words of text by Newsweek correspondent Markos Kounalakis, and an introduction by industry analyst Paul Saffo. This first-edition, jacketed collector's item is bound in a 192

page hard-cover volume.

For a limited time, order direct from the publisher via AppleLink at BEYONDWORDS and the publisher will also pay the postage and handling, an additional savings of $5.95 (in the US and Canada).

PRESS RELEASES

BIT JUGGLERS SHIPS UNDERWARE@

The fun of a screen saver while you work. Mountain View, California, September 17, 1993-Bit Jugglers, Inc. today announced the first shipments of UnderWare, a new Macintosh software product that combines traditional screen-saving capabilities with desktop animation and desktop pattern customization.

UnderWare provides three modes:
1) Dynamic Desktop. This mode runs UnderWare's animated modules and After Dark modules on the Macintosh desktop. The difference between UnderWare's Dynamic Desktop and traditional screen savers is that UnderWare runs while the computer is being used-under your windows and icons-while products like After Dark only run when a computer is

asleep.
2) Screen Saver. This mode runs UnderWare and After Dark modules as conventional screen savers. Screen saver modules run on top of the screen, blanking out layers underneath and preventing screen burn in. UnderWare adds more to the conventional screen saver: animation that interacts with your Macintosh environment.
3) Desktop Pattern. Marble, oak paneling, water drops and barn siding are just a few of the custom desktop patterns users can choose from with UnderWare.

The suggested retail price of UnderWare is $59.95.

Bit Jugglers, Inc.
785 Castro Street, Suite C
Mountain View, CA 94041.
The phone 415-968-3908 (voice)
fax 415-968-5358.

CONNECTIX SHIPS ON THE ROAD FOR POWERBOOKS

Printing, faxing and network connections simplified for PowerBook travelers "On The Road enables traveling PowerBook users to prepare documents and faxes just like they do at the office. When they arrive at any familiar facility, On The Road recognizes the

location, automatically prints and faxes, and instantly configures all network services according to the set-up used on their last visit. It's the complete solution for anyone who takes their PowerBook on the road. We are very pleased to add this to our growing line of portable computing products," explained Roy McDonald, President and CEO of Connectix. On The Road is available now worldwide through retail outlets, mail order firms and distributors. Registered users of Connectix PowerBook Utilities and other Connectix products can purchase the product for $29.95 by contacting Connectix at (800) 950-5880.

Fantastic prices on refurbished equipment

From time to time, the Apple User Group Connection offers refurbished equipment for sale at usually 50-60% of new price. For instance, the October offering included a Performa 200 and a StyleWriter I printer, each at the reduced price. Complete details are not included here as the offer is made and expires in October. If this continues, the only alternative I can see is for each of us to purchase a modem and call the Mini'app'les BBS for the latest details.

◀

News from the Software Director

Mini'app'les is now authorized to distribute several new software packages from Apple:

Apple II System 4.0.2
Apple IIGS System 6.0.1
Extensions Manager 2.0.1
Hardware Update 2.0
LaserWriter 8.0
QuickTime Extension 1.6.1
System Enabler Collection 1.0
Threads Manager 1.2

Extensions Manager 2.1 allows you turn "off" or "on" the code that executes at startup in certain "extension documents" such as Control Panels, Chooser devices and INITs (known before as startup documents). It also allows you to choose which ft files should be opened under System 7.1.

Hardware System Update 2.0 offers additional software improvements to meet the ongoing needs of Macintosh users. It also contains software enhancements to address specific problems encountered by some Macintosh computer users. This update

requires Macintosh System Software version 7.1 and is not intended for Macintosh Performa users.

QuickTime 1.6.1 software consists of the QuickTime system software extension, a new version of the Macintosh Scrapbook and a Scrapbook file with a sample movie. The QuickTime system software extension adds capabilities that let your application programs integrate graphics, sound, video, and animation into documents. B providing a standard way for all Macintosh programs to control these multimedia elements, QuickTime makes them easier to use. In the new Scrapbook, you can cut, copy, paste, and play QuickTime movies. Larger images will also shrink to fit so that you can see the entire image in the Scrapbook window. This Scrapbook is otherwise identical to the standard Macintosh Scrapbook.

System Enabler Collection 1.0 is a single floppy disk that contains all of the system enabler files Apple has released since October 1992. This software requires Macintosh

System Software 7.1, and when installed, resides in the computer's stem folder. System enablers are system files that allow System 7.1 to operate on Macintosh computers released since October 1992, including the PowerBook Duo 210 and 230, the PowerBook 160, 180, 165C, the Macintosh IIvx, IIvi, the Color Classic, the Macintosh LC III, Quadra 800, and Centris 610 and 650 Macintosh computers introduced before October 1992 do not need a system enabler to operate with System 7.1.

Threads Manager 1.2 is a System 7 extension which allows applications to make use f both cooperative and preemptive multithreading within an application context o all Macintosh platforms. This release contains Thread Manager 1.2, new header files, and an updated source level debugger along with an updated utilities library.

prepared and submitted by Sam Goshorn, Software Director ◀

Apple's Strategic Directions

This article consists of terse notes, written by an anonymous attendee at a semi-confidential corporate briefing. The information is here presented with very little editing or "prettying-up". Please feel free to read between the lines and make as much sense of it as you like.

Apple's Strategic Directions as of 10/13/93

"The Future Isn't What It Used To Be"

Current technology focus is on computation (database, word processor, spreadsheet) Reshaping this focus by incorporating:
* Human Communications – speech, video.
* Anytime, Anywhere – mobility, moving off the desktop, putting the "personal" back in.
* Changes in functionality, form factor, user interface.

Making Complexity Simple – Human Interface Leadership.
* Speech, handwriting recognition, Intelligent Assistance, Advanced Help, Natural Language.
  The GUI is not the ultimate answer; there are better metaphors! Advances in compute power make new interfaces possible.
* Expect to see Speech Interface on a variety of platforms via the portable software architecture Apple has implemented.
* Handwriting recognition to spread on mobile devices.
* Current GUI is the "manual transmission" – you have to stir the gears, show the computer what you want to do. Intelligent Assistance will supply the "automatic transmission" – to be seen on Newton and Macintosh.
* Advanced help – systems that answer "How do I ...?" questions rather than "What Is This?" questions (balloon help).
* New help system to be out in about 6 months, incorporating sound, video – will have hooks for custom development.
* Natural language – still short on horsepower – time frame is about 2000.
  It is just becoming possible/feasible to release this kind of technological advance in the sub $5000 price range. Expect New OS release in March 1994; enhancements to the current GUI. The next 18 months promise to move us beyond the GUI. Apple is moving towards software – "hardware is a commodity...and the OS may be also" – added-value services and functionality are the focus.

Themes in Human Communication (more than WP/SS/DB).
* Messaging – PowerTalk/AOCE; integrated at the OS level.
* Telephony – fax, answering machine, PBX interface, voicemail.
* Video Conferencing – point-to-point video over LANs.
* Speech – input and output.
* MultiMedia – digital video, stereo sound. The AV machines are not multimedia PCs – they are an implementation of the above technologies as mainstream technologies. These technologies to be available "across the board" over the next 18 months.

Redefining Price / Performance
* PowerPC – workstation performance at personal computer prices.
* 4 to 16 times the performance of a Quadra 800 at the $2000 price point.

Cross Platform Compatibility
Setting and supporting industry standards. Database access (currently DAL for DB2 access). Macintosh as the "Universal Client" – run any Windows or Mac application.
* Run Windows apps at 486 performance levels on the low-end PowerPC.
* As PowerPC evolves, believe it will run Windows faster than native Intel.
* Newton – designed to work cross-platform – this is not a Mac peripheral – there will be strong emphasis on Windows connectivity in the near future.
* Cross Platform "services" Toolboxes for Unix, Open Systems, Windows.
* QuickTime, PowerTalk, Macintosh Services for Open Systems, AppleSearch, OpenDoc document architecture (available next year for Mac, Unix, Windows).
* Taligent – 1995/96.
* Imaging and Peripherals – spring 1994 – image capture devices, printers, monitors targeted directly at the Intel market.

Anytime/Anywhere
* Aiming to "totally dominate" the mobile computing arena.
* Mobile Desktop – PowerBooks.
* Mobile Information Services – Apple OnLine Services, Newton GlobalMail – November announcements.
* Personal Electronics – Newton and more – optimize the solution to the problem.
* Wireless communications.

Apple Product Framework
The goal is to become "hardware and software agnostic" – The value added is in the service.
* Server Services – moving to open, scalable server architecture based on Unix. PowerOpen – IBM's A/IX kernel standard – licensable by others. Apple will not "roll their own" UNIX in the future. Based on PowerPC, consistent and scalable with IBM RS/6000 (Apple on the low-end, IBM on the high-end, sharing a single architecture).
* Advanced Server Services – cross-platform implementations PowerShare collaboration services. Advanced Retrieval and Information filtering (AppleSearch). AppleTalk Remote Access. Targeting Novell environment (NLMs). No reservations about porting to NT if it proves financially feasible.
* Desktop Services – "Middleware" – differentiation via Apple Services. AppleScript, WorldScript, QuickTime, OpenDoc, QuickDraw GC, PowerTalk, Color Imaging. Move from application-centric focus to document focus with "parts editors" – composite document architecture with focused "objects".
* Macintosh Hardware – "Computation plus Communication". 68030->68040->68040+DSP->PowerPC. Pursuing license of Macintosh on PowerPC – Macs from other vendors!
* PowerPC – single chip RS/6000. $1 billion invested to this point. Simultaneously developing 4 chips; all to be released over next 15 months.
* Hardware Reference Platform – IBM & Apple.
  Define minimum core set of functionality common to all machines from either company – standard to be agreed on this year (the first round of PowerPC machines might NOT be compliant). Each company will then be free to enhance or add on to the base. IBM project "SandalFoot" is creating board-level OEM products based on PowerPC – puts IBM back in control of it's hardware platform. "PowerPC will become the dominant RISC architecture in it's first year of release."

PowerPC Transition.
* App compatibility – expect 95% of today's apps will run. Hardware upgrades – logic board swap or PDS card add-in for Q800, 610, 650, Mac IIvx.
  Announcement to be made in November 93 – 3rd parties to provide 68030-platform upgrade path. Ongoing 680x0 operating system support, hardware to be shipping for many years to come (5 year future). Project 1 million PowerPC units sold in 1994 (only 23% of current volume).
  No PowerBook upgrades for current models – there will be future PowerBooks (March 1994) which are 68040 based that can(?) be upgraded to PowerPC 603 chip. Announcements in March 1994 with a high level of availability (machines and upgrades).

"The Past Is Not a Predictor of the Future"

Apple's PowerPC Announced

CUPERTINO, California – October 19, 1993 – In a series of announcements at major industry events this week, Apple Computer, Inc. is demonstrating growing momentum behind and support for the next generation PC platform: Macintosh with PowerPC...

In summary, Apple announced the following:

*   Seven additional software developers have announced plans to develop new "native" versions of applications for the PowerPC (there are 18 total now).
*   Plans to deliver higher clock speeds for RISC-based Macintosh systems.
*   Additional details on its PowerPC upgrade program for current customers.
*   Delivery of first silicon of the PowerPC 603.

This week's progress update coincides with three major conferences where PowerPC will be discussed:

*   The Microprocessor Forum in Burlingame, CA
*   The Seybold Publishing Conference in San Francisco
*   The EDUCOM education conference in

Cincinnati.

Re-affirming that Apple is on schedule for its planned introduction of systems based on new RISC technology during the first six months of 1994, Apple plans to exhibit Macintosh with PowerPC prototype systems and demonstrate a selection of applications that are under development at both Seybold and EDUCOM.

Major Developers Committed to PowerPC

The 7 new developers announcing native applications support for PPC are: Artwork Systems, N.V., Canto Software, Inc., Fractal Design Corporation, Graphisoft, Great Plains Software, ITEDO Software GmbH., and Wolfram Research, Inc.

Developers previously committed to developing native applications include: Adobe Systems Inc., ACIUS Inc., Aldus Corporation, Claris Corporation, Deneba Software, Frame Technology, Insignia Solutions, Microsoft Corp., Quark, Inc., Specular International, and WordPerfect Corporation.

At both the Seybold and the EDUCOM conferences, Apple plans to publicly demon-

strate for the first time a selection of native applications: Aldus FreeHand, Insignia SoftPC, Adobe Photoshop, Fractal Design Painter, Specular Infini-D, Wolfram Mathematica.

Affordable Upgrade Paths

Today, Apple also announced plans to ship upgrade products simultaneous with the initial introduction of Macintosh with PowerPC systems, and added an upgrade path for Apple Workgroup Servers

Increased Microprocessor Performance

In co-operation with IBM and Motorola, Apple announced that the performance of the PowerPC 601 chip has exceeded original goals and plans to ship at higher frequencies (speeds) than earlier announced. The minimum speed of RISC-based Macintosh systems has been increased from 50MHz to 60MHz. Additionally, Apple announced that it also plans to ship 80MHz systems during 1994.

Also this week, Apple with IBM and Motorola announced that the second PowerPC chip, the 603, has reached first silicon.

Apple Unveils Macintosh TV

CUPERTINO, California – Oct. 25, 1993 – Apple Computer Inc. announced today Macintosh TV, a new product that combines an Apple Macintosh personal computer, television and CD-ROM stereo system into one compact, low-priced unit. Designed for users at home and in higher education institutions, the $2,079 system greatly reduces the cost and space requirements currently required to obtain these electronic components separately. This product underscores Apple's business strategy to reach new users in the home and education markets.

Macintosh TV provides the integrated functionality of a powerful personal computer with a cable-ready 14-inch color TV, and double-speed audio CD player for high-quality stereo sound. The system can also be easily connected with a VCR, camcorder, laserdisc player or video game player. In addition, it comes with a sleek infrared remote that controls both television and CD player functions.

"The computer industry and the consumer electronics market are converging, and Apple is at the forefront of this transition," said Brodie Keast, Director of Product Marketing for the Apple Personal Computer Division. "With Macintosh TV, Apple extends its popular all- in- one computer design with new media capabilities that create a whole new category of computing and entertainment devices."

"With this special edition of the Macintosh, Apple hopes to learn more about the needs of this market and to apply that knowledge to future product development," Keast added.

Bundled Software Included

Macintosh TV comes bundled with several popular software programs pre-loaded, including ClarisWorks 2.0 (an integrated program combining a word processor, spreadsheet and database),

American Heritage Dictionary, Mavis Beacon Teaches Typing, HomeWork Templates, and The Performa Click Art Collection. It also includes CD-ROM titles such as Groiler's Multimedia Encyclopedia, World Atlas, Space Shuttle, Wonders of the World (Volume I), Time Almanac 1993, and the Kodak Photo CD Sampler.

Product Details

Macintosh TV combines plug-and-play simplicity with the power of a 32 MHz 68030 microprocessor. It comes standard with 5MB of RAM expandable to 8MB. It has a 160MB hard disk drive and a 1.4MB Apple SuperDrive floppy disk drive and reads MS-DOS disks with Macintosh PC Exchange software.

The television capabilities include a 14-inch Color TV with a cable- ready tuner, a coaxial port to connect an antenna or cable service and a RCA port to connect a VCR, camcorder, laserdisc player, or video game player. The

software support for television features includes frame grabbing, closed captions, channel scanning, and password protection of TV mode.

The AppleCD 300i double-speed CD-ROM drive adds more flexibility to Macintosh TV and provides a richer more exciting computing environment. This built-in CD-ROM plays standard audio CDs, reads data on CD-ROMs and views images on Kodak Photo CDs. The system integrates a high-quality 14" Trinitron color display which provides 640 by 480 pixels, .26mm dot pitch and 8-bit color, displaying 256 colors.

The SCSI port will support up to six SCSI devices, such as hard disks and scanners. There are two serial ports for printers, modems, and AppleTalk networks. There are also two Apple Desktop Bus (ADB) ports for keyboard, mouse, and other input devices. Macintosh TV also has built-in AppleTalk networking and file sharing without a dedicated server.

Pricing and Availability

Macintosh TV is a U.S. only, special edition product and will be available immediately upon introduction at selected consumer retail stores and higher education campuses, and through the Apple Catalog. The consumer stores include Best Buy, Select Video Concepts, Silo YES, and TOPS. The ApplePrice is $2,079.

Tips from the ClarisFax Answerline

Claris has a fax answerline for commonly asked questions and "workarounds" for their programs. The fax answerline is available to anyone with a fax machine, and can assist with various problems that can occur with your Claris programs. Programs included are AppleWorks, AppleWorks GS, ClarisWorks, ClarisCad, FileMaker series, HyperCard and other Claris programs. You can call the Answerline by dialing 800-800-8954 and follow the instructions to get "catalogs" of the documents available.

In the interest of those that do not have the benefit of a fax machine, some of the tips will be presented here:

AppleWorks:

Unable to Insert or Add Records to the Data Base

If any of the following symptoms occur:

1. Cannot insert or add any new records to the Data Base in AppleWorks 1.x – 2.0;
2. An existing record is always displayed after pressing Open Apple-I to insert a new record;
3. The computer freezes when Open Apple-I or Open Apple-Z is entered; try printing the Data Base information to a new ASCII or DIF file. Then, create a NEW Data Base from that ASCII or DIF file.

"Cannot Write to Disk" Message

Problem: Unable to save or print a file to disk on drive X, even through there is plenty of room on the disk.

Explanation and Solution: The problem is more likely to occur when using 3.5-inch disks or hard drives. ProDOS allows only 51 files/directories in the Root directory, no matter how much extra room is available on disk. The solution is to remove some files or subdirectories from the root directory (Put these files in other subdirectories or on separate disks.)

Note: Since AppleWorks always creates a temporary file on disk when saving, the maximum limit of files/directories in the Root directory when using AppleWorks is 50.

Unable to Access Internal Drive of a IIc Plus with AppleWorks 2.0

When using AppleWorks 2.0 and an Apple IIc Plus computer, if the message, "Getting errors trying to read directory at Built-in disk" appears on the screen when trying to retrieve or save files on the built-in 3.5-inch disk drive, try the following:

Set the current disk drive to Disk 3.5 #1. To change the current disk drive, choose Other Activities from the Main Menu, and then choose Select standard location of data disk. A

list of available disk drives will be displayed. Select Disk 3.5 #1 and press Return. The name of the selected disk drive will then appear in the upper left corner of the AppleWorks screen. You can now access the built-in 3.5-inch disk drive.

Since AppleWorks 2.0 was written before the creation of the Apple IIc Plus, it expects to find the built-in 5.25-inch disk drive of the original Apple IIc instead of the built-in 3.5-inch disk drive of the newer Apple IIc Plus. AppleWorks versions 2.1 and later solve this problem; they distinguish between the older IIc and the IIc Plus.

Dollars & Cents Round Incorrectly

Problem: Dollars and cents do not round correctly when multiplying, dividing, adding or subtracting in versions of AppleWorks prior to 3.0.

Solution: Formatting dollar amounts to two decimal places with Open Apple-L will not automatically round calculations to two decimal places. Use the @Round function to ensure proper rounding. Due to the nature of binary arithmetic and SANE, it may be necessary to add a small correction to the calculation before applying the round function. If calculations are not quite rounding correctly, especially those whose last significant digit is a "5" (e.g., 33.345), the following correction should be used to compensate for floating point arithmetic:

@Round(Calculation+.0000001,2).

Erratic Printing; ON

Problem: Erratic printing; margins are not adhered to; columns in the spreadsheet or database are misaligned; digits are dropped from numbers; "ON" is printed at the top of the first page.

Solution: Check the interface card code. AppleWorks defaults to the interface code for the Super Serial card (Control-I 80N). If you are using a different interface card, you must change the interface code. For example, and Epson printer connected to a Grappler Interface card requires an interface code of Control-I 0N. Consult your interface card manual for the correct setting.

AppleWorks GS:

Printing Sideways from the Data Base

You cannot print sideways in the data base. The work around it is to copy field titles into the spreadsheet and then copy all records into the spreadsheet. You can print sideways from the spreadsheet.

RAM Disks: AWGS Size Requirements & Setup

If you have exactly 1.25 Megabytes of RAM and a RAM Disk icon appears on the desktop

upon startup of your computer, you must remove the RAM Disk before running AppleWorks GS. To remove the RAM Disk, follow these steps:

1. Open the Desk Accessories Menu by pressing (Control-Open Apple-Escape)
2. Select the Control Panel option and press Return.
3. Select RAM Disk and press Return.
4. Use the right or left arrow keys to change both the Minimum RAM Disk Size and Maximum RAM Disk Size to zero (check marks should appear to the left of both items).
5. Press Return to save the new settings.
6. Select Quit and press Return to exit the Control Panel Menu.
7. Select Quit and press Return to exit the Desk Accessories Menu.
8. Turn off the Apple IIGS computer with the on/off switch. Wait 10 seconds; then turn on the computer again.
9. The RAM disk icon will no longer appear on the Apple IIGS desktop.

If a user has more then 1.25 Mb of memory and wants to set up a RAM disk for additional speed he or she should keep two things in mind:

1. You must have at least 1.25 Mb free memory in addition to the RAM disk.
2. The RAM disk itself will require considerable overhead. To set up a RAM disk that is equivalent to 1.25 Mb will require adding additional amount of memory to the RAM disk theis overhead. This amount varies. To get a RAM disk functioning as 1.25 Mb will require setting up that RAM disk to be about 1.8 Mb.

Mailing Labels:

Printing to ImageWriter Procedures

The procedure for printing mailing labels from the AppleWorks GS database to the ImageWriter printer is slightly different from that described in Chapter 3 of the Apple-Works GS User's Guide.

1. Select Choose Printer from the File menu.
2. Select IMAGEWRITER.CL from the printer list.
3. If the cable from your printer is connected to the modem port of the Apple IIGS, select MODEM as the printer port. If the cable from your printer is connected to the printer port of the Apple IIGS, select PRINTER as the printer port.
4. Click OK.
5. Select Page Setup from the File menu.
6. Choose US Letter, Condensed, and No Gaps Between Pages.
7. Click OK.

8. Select Show Definition from the Template menu to enter the definition screen.
9. Set the header to 0 inches in length by dragging the header tag, represented by the letter H to the top of the screen.
10. Set the footer to 0 inches in length by dragging the footer tag, represented by the letter F to the bottom of the screen.
11. Arrange the fields in the desired order.
12. Set the body to the length of your mailing label by dragging the body tag, represented by the letter B, to the appropriate ruler setting. For example, if the label is one inch in height, drag the body icon to the one inch mark on the ruler.
13. Go to the Form view by clicking on the Form box at the lower left corner of the screen. Otherwise, you will print the form definition screen and not the labels.
14. Select Display Preferences from the Template menu. Choose Multiple records per form page, and click OK.
15. Choose Print from the File menu.
16. Choose Better Text, one copy, and then click OK.

Terminal Emulation
Q: Does AppleWorks GS Communication module support VT-100 terminal emulation?
A: No. Terminal emulation is not supported.

Cannot Initialize Internal Modems
Q: My Hayes-compatible, 1200-baud, internal modem doesn't seem to work in AppleWorks GS. After I choose Internal 1200 as the modem type and designate the slot the modem is in as "Your Card", the message "Can't Initialize Modem" appears. What is wrong?
A: Try setting the DIP switches or jumper blocks of the modem so that interrupts are enabled. AppleWorks GS does not send interrupts; it depends on the modem to do so. Try the same solution for other brands of internal modems.

ClarisWorks:
AppleWorks to ClarisWorks File Conversion
The following AppleWorks files can be opened from within ClarisWorks:
- AppleWorks 2.0 and later Word Processing, Data Base and Spreadsheet files
- AppleWorks GS Word Processing files

The easiest way to convert AppleWorks files is to use a 3.5-inch floppy disk and Apple File Exchange. Apple File Exchange is a file transfer utility which is included in the Macintosh system software. 3.5-inch floppy disk drives are standard equipment with the Apple IIGS and the IIc+ and are also available for the IIe and IIc from your Apple dealer.
Once your AppleWorks files are saved on an 800K, 3.5-inch disk, any Macintosh with a high density 3.5" drive, also called a SuperDrive or FDHD can transfer them to Macintosh format.
To use Apple File Exchange:
1. On the Macintosh, launch the Apple File Exchange application by double-clicking on

its icon.
2. Insert your AppleWorks data disk in the disk drive.
Directories of the destination disk (left side) and source disk (right side) appear in the Apple File Exchange window.
3. Under the ProDOS to Mac menu at the top of the window choose Default Translation. Make sure that no other items in this window are checked.
4. Select the AppleWorks files to be transferred from their directory.
5. Either choose an existing folder on the destination disk for the files or create a new one by clicking the New Folder button. At the prompt, name the new folder.
6. Click Translate.
The AppleWorks files you selected will be translated to Macintosh files. You may either translate more files, or choose Quit from the File menu. Your disk will be ejected when you quit.
Open the files with ClarisWorks:
When you wish to open your AppleWorks files in ClarisWorks, launch ClarisWorks, choose Open from the File menu, and navigate to the folder which contains your translated files and select it by clicking on its name.
When the Open dialogue box appears, click on the Import Options flag. This will reveal a sub-menu of file types which can be imported by ClarisWorks. When you select the type of document you wish to open, a list of available files of that type will appear.
Choose the desired converted file(s) by clicking on its name and then click the Open button.
When the converted files are saved, they are saved as ClarisWorks files and have a ClarisWorks Icon.
Apple File Exchange can also be used to convert ASCII (text) files in ProDOS format, as well as MS-DOS ASCII (text) files and some MS-DOS word processing files. Once converted, these files can be imported into ClarisWorks.
For more information about Apple File Exchange, consult the reference materials which came with your Macintosh.

Border Doesn't Print
ClarisWorks will not print borders for the top most or left most cells of a Spreadsheet document when both column and row headers are hidden. There are a number of ways to get around this limitation:
1. Put data in the second row or columns only
2. Copy the data from your Spreadsheet document into a Spreadsheet frame.
This problem occurs in all versions.

Can't Get More Than 50 Rows or 10 Columns
When you create a spreadsheet frame in a word processor document, you get 50 rows and 10 columns as a default size. If you try to resize the frame larger than that or if you try to paste more data than that, it will not work.
To enlarge the size of the frame, select the frame and go under the View menu to Open

Frame. Then go under the Format menu to Document and increase the number of rows and columns to fit your needs.
This situation will sometimes occur when trying to resize across a page boundary. The problem is not the boundary; it is the default size of the frame.
There is an alternate method which allows the user to add 5 rows at a time to a spreadsheet frame of a word processing document without opening the frame.
Create the frame and expand it to 50 rows. Go under the Options menu to Frame Links. An arrow will appear at the bottom of the spreadsheet frame. Click the arrow and create a new spreadsheet frame with as many new rows (up to 5 additional) as you want. The first row will be row 51. Now go back and resize the first frame and then you can delete the second frame.

HyperCard:
HyperCard 2.X Installation
The installation instructions on page 16 of the "Getting Started" Manual direct you to use the installer script to install HyperCard. However, for version 2.1 of HyperCard, the installer script was removed, and the change plus a new installation process was documented on page 1.2 of the "New Features Guide". The "HyperCard 2.1x Release Notes" also refers to the new installation procedures. The following steps can be used to install HyperCard version 2.0 or 2.1.
1. Make sure you are running System 6.0.5 or later. HyperCard 2.x will not run on earlier versions of the Apple operating system.
2. Create a folder on your hard disk and name it "HyperCard 2.x".
3. Place the HyperCard Program Disk in the floppy drive. This is the disk labeled IMPORTANT on the top left.
4. Open the disk to view the contents, and drag a copy of HyperCard, Home, and Practice files into the HyperCard 2.x folder you just created. Note: Please note that it is essential that both HyperCard and the Home stack are located in the same folder. After those files are copied:
5. Eject the HyperCard disk and insert the HyperCard stack disk.
6. Open the disk to view its contents, and from the Edit Menu, choose Select All. Notice that all items on the disk are highlighted. Now, click any item and drag it into the HyperCard 2.x folder. Since all items are selected, all files from the HyperCard Stack disk will be copied into the HyperCard 2.x folder. Follow this procedure for the remainder of the disks.
7. Installing HyperCard fonts - System 6.x
Open HyperCard 2.0 folder and double click on the HyperCard fonts icon.
This will activate the Font/DA Mover. If you do not have the Font/DA Mover on your hard disk, you can obtain it from your System Tools disk that came with your computer. If you are

unable to locate your Systems Tools disk, contact your dealer for a replacement, as CLARIS cannot replace this disk. Once the Font/DA Mover is active, a dialog box will appear with a list of all HyperCard fonts on the left, and no fonts on the right.

Note: Font/DA Mover version 3.8 or later is required for the HyperCard 2.x font installation

Click the open button on the right.

Locate your System file and open it. It should be located in your System Folder.

Select all the fonts on the left by dragging down across the list of fonts, and then click Move.

When finished, quit the Font/DA Mover, select Restart from the Special Menu, and you are now ready to use HyperCard 2.x.

System 7

Open the HyperCard 2.0 folder and double click on the HyperCard fonts icon. This will open a window in which you can see all the HyperCard fonts.

Open your system folder, and double click on the file labeled "System". This will open a window showing all your current System fonts. Click in the HyperCard Font window, choose "Select All" from the Edit menu, click on any of the highlighted fonts, hold the mouse button down and drag to the window displaying the System fonts. Release the mouse. The Hyper-Card fonts will be copied into the system file. You can now close all open windows, eject your HyperCard disk, and begin using HyperCard.

Converting Stacks to Version 2.X

The file format for HyperCard 2.x differs from that of earlier versions. Stacks in the old format can be opened read-only by HyperCard 2.x. When such a stack is opened, a standard Macintosh padlock symbol appears in the Menu bar, indicating the stack is read-only, and the Compact Stack item from the File menu becomes Convert Stack... instead.

In order to convert a stack to HyperCard 2.x format, open the stack, choose the Convert Stack... item, and click OK in the confirmation dialog box.

NOTE: Once the stack is converted to HyperCard 2.x format, it can no longer be opened by earlier versions of HyperCard without using third party utilities.

Before converting a stack, keep in mind that you can always save a copy of it by choosing Save A Copy... from the File menu. Because the copy is an exact duplicate of the current stack, you can use Save A Copy... to archive versions of your stacks in the old format or any other.

Most operations on stacks, such as entering text into fields, creating new buttons, or editing graphics, are not allowed until the stack is converted. When you attempt to perform such operations within a stack in the old format, a dialog box appears informing you that you must first convert the stack before performing the operation.

submitted by Gregory L. Carlson 🍎

AppleWorks Hints

Loading A TimeOut Program:

If you want to load a new TimeOut program from a disk, you must hit Ó-ESC and then select the option marked "Utilities." Your computer will remember the original volume used to boot up, so it must stay in your drive till you have selected the option for "Utilities." Then insert the new disk in your drive. If you try to switch too soon, the disk will not be recognized and you will not be able to load the TimeOut program needed.

Tabs and Going Backwards:

In the manual for AppleWorks 3.0, it says that CONTROL-TAB will move the cursor backwards towards the previous tab, but this does not work and appears to be a typo. To go back, use Ó-Left Arrow and it will jump back one word at a time or one Tab space at a time. If the line the cursor is on is free of text, it will return to the left column of that line.

Templates and Protection:

I recently added a template to my growing collection. It would not accept any data. I thought it was an error on my part until I noticed that the protection scheme was on so that no one could alter the template from the author's original setup. Once I cleared the protection, I was able to enter and use the data any way I wanted. Always check a template before using it by hitting Ó-V and selecting Protection (or just the "P") and then de-protect the template.

A Quick Keyboard Trick:

If you need to move the cursor from the middle of one line to another and not upset the format, don't hit the arrow key or space key over and over. Just use Ó-RETURN and the cursor will appear at the beginning of the next line without moving any text. If you need to move several lines down, just repeat the procedure the necessary number of times.

Foreign Dictionaries:

To allow the spelling checker to recognize words with special characters, you must modify your AppleWorks disk. This modification comes from Alan Bird of AppleWorks fame.

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BLOAD SEG.WP,A$300,B$8FCB,L5
POKE 768,64
POKE 772,126
BSAVE SEG.WP,A$300,B$8FCB,L5
```

Using Sideways for Text:

If you want to use TimeOut Sideways for spreadsheets it's a snap. That's what it was designed for, but if you want to do the same with a text page, what do you do? Load a new spreadsheet onto the desktop and widen the main column to fill the entire screen. Then copy your word processor to the clipboard and move it over the new spreadsheet. Print it

using the TO Sidespread module and enjoy the results.

And from The PULP, this review of Outliner for AppleWorks 3.0:

Outliner is a productivity tools that brings outline processing to AppleWorks 3.0. It lets you organize information up to six levels deep. You can use it to create to-do lists and tests, prepare a curriculum, generate lesson plans, organize class or presentation notes, write a term paper, and more. Information that you organize into different topics or levels can be processed with Outliner.

Outliner modifies the AppleWorks word processor, and is always just a keystroke away. When you press Open-Apple +, you are taken from the standard edit mode of the word processor to outline mode. At this point, outline topics can be inserted, edited, moved around, arranged alphabetically, hidden or expanded to reveal subtopics and body text. You can shift a topic up or down levels and the associated subtopics and body text will move along with it. You can choose how many levels deep the outline mode should display, and you can even edit the body text for specific topics while in Outliner.

Outliner requires ProDOS, AppleWorks 3.0, Apple IIe, IIc, IIc+ or IIGS, at least 128K RAM memory (can be expanded to any amount) and one 5.25" or one 3.5" disk drive.

From DELVAC this item:

Got some TimeOut modules loaded and in use? Need to get back to the document on your desk at the exact place you left it? Well, do we have one for you. Most TimeOut modules will return you right back to where you left off with a simple Ó-S. There will be some exceptions to the rule, but most TimeOut programs will work. So far we know it does not work on Graph, FileMaster or Telecomm. Try it on your system and let us know which ones work and which ones don't.

The History of the Apple II
part 7

APPLE II HISTORY
(PART 7 – THE APPLE IIE)
[v1.1 :: 12 Dec 91]

*Compiled and written
by Steven Weyhrich*

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PRELUDE:
THE APPLE III PROJECT

As we continue our travels examining the history of the Apple II, let's fine tune the time-machine card on our souped-up Apple II to concentrate specifically on the next version of the II, the IIe. As before, just accelerate the microprocessor speed to 88 MHz, and watch out for the digital fire-trails! Destination: 1982.

Between the years 1979 and 1983, although no new versions of the Apple II were released, it enjoyed a broad popularity and annually increasing sales. The open architecture of the computer, with its fully described hardware and firmware function via the Reference Manual, made it appealing both to hardware and software hackers. Third-party companies designed cards to plug into the internal slots, and their function varied from making it possible to display and use 80-column text, to clocks and cards allowing the Apple II to control a variety of external devices. During this time there was also an explosion of new software written for this easily expandable machine, from the realm of business (VisiCalc and other spreadsheet clones), to utilities, to games of all types. Each month a host of new products would be available for those who wanted to find more things to do with their computer, and the Apple II was finding a place in the home, the classroom, and the office.

At Apple Computer, Inc., however, the Apple II was not viewed with the same degree of loyalty. By September 1979 the Apple II had continued to be a sales leader. However, few at Apple believed that the II could continue to be a best seller for more than another year or two. Since Apple Computer, Inc. was a business, and not just a vehicle for selling the Apple II computer, they began to enlarge the engineering department to begin designing new products.[1] These new design efforts had begun as far back as late 1978. Their first effort was an enhanced Apple II that used some custom chips, but that project was never finished. They also began work on a different, more powerful computer

that would use several identical microprocessor chips sharing tasks. The main advantage would be speed, and the ability to do high precision calculations. This computer was code-named Lisa, and because it was such a revolutionary type of design, they knew it would take many years to come to actual production. Because of the power it was to have, Apple executives felt that Lisa was the future of the company.[2,14]

Because they knew that the Lisa project would take a long time to complete, and because the Apple II was perceived to have only a short remaining useful life as a product, they began a new computer project called the Apple III. Instead of building upon the Apple II as a basis for this new computer, they decided to start from scratch. Also, although Wozniak made most of the design decisions for the II, a committee at Apple decided what capabilities the Apple III should have. They decided that the Apple III was to be a business machine, and not have the home or arcade-game reputation that the II had. It was to have a full upper/lowercase keyboard and display, 80-column text, and a more comprehensive operating system. They also decided that since it would be a while before many application programs would be available for this new computer, it should be capable of running existing Apple II software. In some ways this handicapped the project, since it was then necessary to use the same microprocessor and disk drive hardware as was used in the Apple II.[3]

Apple executives also decided that with the introduction of the Apple III they wanted a clear separation between it and the Apple II in regards to marketing. They did not want ANY overlap between the two. The III would be an 80-column business machine and was predicted to have ninety percent of the market, while the Apple II would be a 40-column home and school machine and would have ten percent of the market. Apple's executives were confident that after the release of the Apple III, the Apple II would quickly lose its appeal.[4]

Because of their desire for a strong and distinct product separation, the Apple II emulation mode designed into the Apple III was very limited. The engineers actually ADDED hardware chips that prevented access to the III's more advanced features from Apple II emulation mode. Apple II emulation couldn't use 80 columns, and had access to only 48K memory and none of the better graphics modes. As a result, it wouldn't run some of the better Apple II business software, during a time when

there wasn't much NEW business software for the Apple III.

The Apple III engineers were given a one year target date for completion. It was ready for release in the spring of 1980, but there were problems with both design and manufacturing. (It was the first time that Apple as a company tried to come out with a new product; the Apple II had been designed and built by Wozniak when he WAS the engineering department). The first Apple III computers were plagued with nearly 100% defects and had to be recalled for fixes. Although Apple took the unprecedented step of repairing all of the defective computers at no charge, they never recovered the momentum they lost with that first misstep, and the III did not become the success Apple needed it to be.[3]

Although all of the bugs and limitations of the Apple III were eventually overcome, and it became the computer of choice within Apple, it did not capture the market as they had hoped. At that point, they weren't sure exactly what to do with the II. They had purposely ignored and down-played it for the four years since the II Plus was released, although without its continued strong sales they would not have lasted as a company. In a 1985 interview in Byte magazine, Steve Wozniak stated:

"When we came out with the Apple III, the engineering staff canceled every Apple II engineering program that was ongoing, in expectation of the Apple III's success. Every single one was canceled. We really perceived that the Apple II would not last six months. So the company was almost all Apple III people, and we worked for years after that to try and tell the world how good the Apple III was, because we KNEW [how good it was]... If you looked at our advertising and R&D dollars, everything we did here was done first on the III, if it was business related. Then maybe we'd consider doing a sub-version on the II. To make sure there was a good boundary between the two machines, anything done on the II had to be done at a lower level than on the III. Only now are we discovering that good solutions can be implemented on the II... We made sure the Apple II was not allowed to have a hard disk or more than 128K of memory. At a time when outside companies had very usable schemes for adding up to a megabyte of memory, we came out with a method of adding 64K to an Apple IIe, which was more difficult to use and somewhat limited. We refused to acknowledge any of the good 80-column cards that were in

the outside world – only ours, which had a lot of problems."[4]

Wozniak went on in that interview to say that at one time he had written some fast disk routines for the Pascal system on the Apple II, and was criticized by the Apple III engineers. They didn't think that anything on the II should be allowed to run faster than on a III. That was the mindset of the entire company at the time.

Apple has been much maligned for the attention they gave the Apple III project, while suspending all further development on the Apple II. They pegged their chances for the business market in 1980 on the Apple III. Even Steve Wozniak had stated in another interview, "We'd have sold tons of [computers in the business market] if we'd have let the II evolve... to become a business machine called the III instead of developing a separate, incompatible computer. We could have added the accessories to make it do the business functions that the outside world is going to IBM for."[3] Part of the problem was the immaturity of the entire microcomputer industry at the time. There had NEVER been a microcomputer that had sold well for more than a couple of years before it was replaced by a more powerful model, usually from another company. The Altair 8800 and IMSAI had fallen to the more popular and easier to use Apple II and TRS-80 and Commodore PET, as well as other new machines based on the Intel 8080 and 8088 processors. It is entirely understandable that Apple's attitude between 1978 and 1980 would be of panic and fear that they wouldn't get a new computer out in time to keep their market share and survive as a company. However, during the entire time when Apple was working on the III as a computer to carry the company through until Lisa would be ready, and during the entire time that the Apple II was ignored by its own company, it continued to quietly climb in sales. It is a credit to both the ingenuity of Wozniak in his original design, and to the users of the Apple II in THEIR ingenuity at finding new uses for the II, that its value increased and stimulated yet more new sales. The Apple II "beat" the odds of survival that historically were against it.

THE APPLE IIE:
BEGINNINGS

When Apple saw that the sales on the Apple II were NOT going to dwindle away, they finally decided to take another look at it. The first new look at advancing the design of the II was with a project called "Diana" in 1980. Diana was intended primarily to be an Apple II that had fewer internal components, and would be less expensive to build. The project was later known as "LCA", which stood for "Low Cost Apple". Inside Apple this meant a lower cost of manufacturing, but outsiders who got wind of the project thought it meant a $350 Apple II. Because of that misconception, the final code name for the updated Apple II was "Super II",

and lasted until its release.[5]

HARDWARE

Part of the IIe project grew out of the earlier work on custom integrated circuits for the Apple II. When they finally decided to go ahead and improve the design by adding new features, one of the original plans was to give the Apple II an 80-column text display and a full upper/lowercase keyboard. Walt Broedner at Apple did much of the original hardware planning, and was one of those at Apple who pushed for the upgrade in the first place. To help maintain compatibility with older 40-column software (which often addressed the screen directly for speed), he decided to make 80-columns work by mirroring the older 40 column text screen onto a 1K memory space parallel to it, with the even columns in main memory and the odd columns in this new "auxiliary" memory. To display 80-column text would require switching between the two memory banks. Broedner realized that with little extra effort he could do the same for the entire 64K memory space and get 128K of bank-switchable memory. They put this extra memory (the 1K "80-column card, or a 64K "extended 80-column card") in a special slot called the "auxiliary" slot that replaced slot 0 (the 16K Language Card was going to be a built-in feature). The 80-column firmware routines were mapped to slot 3, since that was a location commonly used by people who bought 80-column cards for their Apple II's, and was also the place where the Apple Pascal system expected to find an external terminal. The auxiliary slot also supplied some special video signals, and was used during manufacture for testing on the motherboard.

The engineers that worked on the IIe tried hard to make sure that cards designed for the II and II Plus would work properly in the new computer. They even had to "tune" the timing on the IIe to be slightly OFF (to act more like the II Plus) because the Microsoft CP/M Softcard refused to function properly with the new hardware. A socket was included on the motherboard for attaching a numeric keypad, a feature that many business users had been adding (with difficulty) to the II Plus for years. The full keyboard they designed was very similar to the one found on the Apple III, including two unique keys that had first appeared with the III – one with a picture of an hollow apple ("open-apple") and the other with the same apple picture filled in ("solid-apple"). These keys were electrically connected to buttons 0 and 1 on the Apple paddles or joystick. They were available to software designers as modifier keys when pressed with another key; for example, open-apple-H could be programmed to call up a "help" screen. The newer electronics of the keyboard also made it easier to manufacture foreign language versions of the Apple IIe.[6]

Overall, Broedner and Peter Quinn (the design manager for the IIe and later the IIc projects) and their team managed to decrease the number of components on the motherboard

from over one hundred to thirty-one, while adding to the capabilities of the computer by the equivalent of another hundred components.

FIRMWARE

Peter Quinn had to beg for someone to help write the firmware revisions to the Monitor and Applesoft for the IIe. He finally got Rich Auricchio, who had been a hacker on the Apple II almost from the beginning. Quinn said in a later interview, "You cannot get someone to write firmware for this machine unless he's been around for three or four years. You have to know how to get through the mine field [of unofficial but commonly used entry points]. He [Rick] was extremely good. He added in all the 80-column and Escape-key stuff." Quinn also got Bryan Stearns to work on the new Monitor.[6,7]

Changes were made in the ROMs to support the new bank-switching modes made necessary by having two parallel 64K banks of RAM memory. To have enough firmware space for these extra features, the engineers increased the size of the available ROM by making IT bank-switched. This space was taken from a location that had previously not been duplicated before – the memory locations used by cards in the slots on the motherboard. Ordinarily, if you use the Monitor to look at the slot 1 memory locations from $C100 through $C1FF, you get either random numbers (if the slot is empty), or the bytes that made up the controller program on that card. Any card could also have the space from $C800 through $CFFF available for extra ROM code if they needed it. If a card in a slot did a read or write to memory location $CFFF, the $C800-$CFFF ROM that belonged to that card would appear in that space in the Apple II memory. When another card was working, then ITS version of that space would appear. On the IIe, they made a special soft-switch that would switch OUT all the peripheral cards from the memory, and switch IN the new expanded ROM on the motherboard. The firmware in the new bank-switched ROM space was designed to avoid being needed by any card in a slot (to avoid conflicts), and much of it was dedicated to making the 80-column display (mapped to slot 3) work properly.

Also added were enhancements to the ESC routines used to do screen editing. In addition to the original ESC A, B, C, and D, and the ESC I, J, K, and M added with the Apple II Plus, Auricchio added the ability to make the ESC cursor moves work with the left and right arrow keys, and the new up and down arrow keys. The new IIe ROM also included a self-test that was activated by pressing both apple keys, the control key, and RESET simultaneously.[5]

SUCCESS

The new Apple IIe turned out to be quite profitable for Apple. Not only was it more functional than the II Plus for a similar price, but the cost to the dealers selling it was about three times the cost of manufacture. They had gotten their "Low Cost Apple", and by May of 1983 the Apple IIe was selling sixty to seventy

thousand units a month, over twice the average sales of the II Plus. Christmas of 1983 saw the IIe continue to sell extremely well, partly resulting from the delayed availability of the new IBM PCjr. Even after the Apple IIc was released in 1984, IIe sales continued beyond those of the IIc, despite the IIc's built-in features.[8]

MODIFICATIONS

Early Apple IIe motherboard's were labeled as "Revision A". Engineers determined soon after its introduction that if the same use of parallel memory was applied to the hi-res graphics display as was done with the text display, they could create higher density graphics. These graphics, which they called "double hi-res", also had the capability of displaying a wider range of colors, similar to those available with the original Apple II lo-res graphics. The IIe motherboards with the necessary modifications to display these double hi-res graphics were labeled "Revision B", and a softswitch was assigned to turning on and off the new graphics mode.

Later versions of the IIe motherboards were again called "Revision A" (for some reason), although they HAD been modified for double hi-res graphics. The difference between the two "Revision A" boards was that the latter had most of the chips soldered to the motherboard. An original "Revision A" board that had been changed to an Enhanced IIe was not necessarily able to handle double hi-res, since the change to the Enhanced version involved only a four-chip change to the motherboard, but not the changes to make double hi-res possible.[9]

THE ENHANCED IIE

This version of the Apple IIe was introduced in March of 1985. It involved changes to make the IIe more closely compatible with the Apple IIc and II Plus. The upgrade consisted of four chips that were swapped in the motherboard: The 65c02 processor, with more assembly language opcodes, replaced the 6502; two more chips with Applesoft and Monitor ROM changes; and the fourth a character generator ROM that included graphics characters (first introduced on the IIc) called "MouseText". The Enhanced IIe ROM changes fixed most of the known problems with the IIe 80-column firmware, and made it possible to enter Applesoft and Monitor commands in lower-case. The older 80-column routines were slower than most software developers wanted, they disabled interrupts for too long a time, and there were problems in making Applesoft work properly with the 80-column routines. These problems were solved with the newer ROMs.

Monitor changes also included a return of the mini-assembler, absent since the days of Integer BASIC. It was activated by entering a "!" command in the Monitor, instead of a jump to a memory location as in the older Apple][. Also added were an "S" command was added to make it possible to search memory for a byte sequence, and the ability to enter ASCII characters directly into memory. However, the

"L" command to disassemble 6502 code still did not handle the new 65c02 opcodes as did the IIc disassembler. Interrupt handling was also improved.

Applesoft was fixed to let commands such as GET, HTAB, TAB, SPC, and comma tabbing work properly in 80-column mode.

The new MouseText characters caused a problem for some older programs at first, until they were upgraded; characters previously displayed as inverse upper-case would sometimes display as MouseText instead.[10,11]

THE PLATINUM IIE

This version of the IIe, introduced in January 1987, had a keyboard that was the same as the IIGS keyboard, but the RESET key was moved above the ESC and "1" keys (as on the IIc), and the power light was above the "/" on the included numeric keypad (the internal numeric keypad connector was left in place). The CLEAR key on the keypad generated the same character as the ESC key, but with a hardware modification it could generate a Ctrl-X as it did on the IIGS. The motherboard had 64K RAM in only two chips (instead of the previous eight), and one ROM chip instead of two. An "extended 80-column card" with 64K extra memory was included in all units sold, and was smaller than previous versions of that memory card.

No ROM changes were made. The old shift-key modification was installed, making it possible for programs to determine if the shift-key was being pressed. However, if using a game controller that actually used the third push-button (where the shift-key mod was internally connected), pressing shift and the third push-button simultaneously causes a short circuit that shuts down the power supply.[12]

EMULATION CARD ON MACINTOSH LC

In early 1991, Apple introduced a new version of the Apple IIe. This one was designed to be exactly like the 128K Platinum IIe, with the modification that it had a color Macintosh attached to it. This Apple IIe cost only $199, but the required Macintosh peripheral went for about $2,495, which makes the combination the most expensive Apple II ever made. Apple engineers managed to put the function of an entire IIe onto a card smaller than the old Disk II controller card. With version 2.0 of the Apple II interface software, more of the memory allocated to the Macintosh can be used by the IIe (strange way of designing an Apple II!). However, unlike all previous versions of the IIe, there are no hardware-based slots on the IIe card; instead, there are software-based slots that are allocated by moving icons that represent various peripherals into "slots" on the Mac screen. (Oh, yes; it runs some Mac software, too).

To use 5.25 disks with this Apple IIe, there is a cable that attaches to the card. The cable splits into a game connector (for paddles or joystick operation) and a connector that accepts IIc and IIGS style 5.25 drives. The IIe card runs at a

"normal" (1 MHz) speed and a "fast" (2 MHz) speed.[13] It has limitations, however. For a 1991 Apple II, it is limited in being unable to be accelerated beyond 2 MHz (a Zip Chip can run a standard IIe at 8 MHz), and the screen response seems slow, since it is using a software-based Mac text display instead of the hardware-based Apple II character ROM. As a Macintosh it lacks the power and speed of the newer Macintosh II models (which also run in color). But if having a Apple II and a Mac in one machine is important, this is the best way to do it.

NEXT INSTALLMENT:
The Apple IIc

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13 Doms, Dennis. "The Apple II as Mac peripheral", Open-Apple, Jul 1991, pp. 7.43-7.44.
14 This was an early version of the Lisa project. When the 68000 microprocessor became available from Motorola, it was decided to use that as a single processor for the Lisa. Also, after Steve Jobs paid a visit to the Xerox lab and saw the Xerox Star computer with its icon interface and mouse pointing device, he pushed strongly for the Lisa to work in that way.

submitted by Gregory L. Carlson ❡
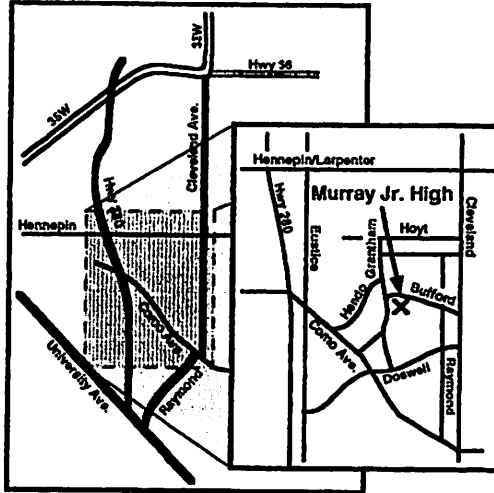
Murray Jr. High School
Location for Apple II Novice SIG,
AppleWorks SIG,
Mac Programmers' SIG,
and occasional others.
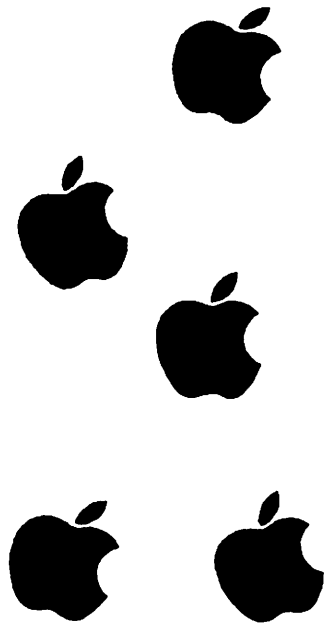
AppleWriter Quick Tip #4

by Steve George

Most of the examples in the manual use the 'less-than' character (<) as the delimiter for search strings. This is fine 'n dandy unless you want to be able to search for the characters used in defining the string: <, >, ?, or =. What to do... What to do?

Just pick an alternate delimiter character. *Somewhere* in your manual will be listed the acceptable delimiter characters, and the corresponding symbols which substitute for "any single character," "any length string of characters," and "the return character".

Here's a small chart showing the usage of the default (<) delimiter and the (#) delimiter:

Delimiter	Return Char	Any Single Char	Any Length String
<	>	?	=
#	%	&	$

For the other delimiters and corresponding special characters, consult your manual.

Steve George — stgeorge@pnet51.orb.mn.org

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City, State, ZIP: _____

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*Must be a full-time student at an accredited institution.

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Yes...
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If this is a new membership, or a renewal, please take a few minutes to fill out the questionnaire.

Your New Member kit will arrive in 3 to 6 weeks.

Which personal computer(s) do you use?

☐ Apple II
☐ Apple III
☐ Apple IIe
☐ Apple IIc
☐ Apple IIc+
☐ Apple IIGS
☐ Laser
☐ Other_____

☐ "Toaster" Mac – 68000 (128, 512, Plus, SE, Classic)
☐ Other 68000 (Mac Portable, PowerBook 100)
☐ Mac 68020 (II, LC)
☐ "Toaster" Mac – 68030 (SE/30, Classic II, Classic III, Performa 200)

☐ Mac IIx, IIcx
☐ Mac IIsi, IIci, IIfx, LC II, Performa 400
☐ Mac IIvx, Performa 600
☐ PowerBook 140–180
☐ PowerBook Duo 180–230
☐ Quadra 700–950
☐ Centris

What attachments or peripherals do you use?

☐ QuickDraw printer
☐ PostScript printer
☐ Modem
☐ Scanner/digital camera
☐ Drawing tablet
☐ Voice mail
☐ MIDI
☐ Other_____

What are your areas of special interest?

☐ Business applications
☐ Household applications
☐ Educational applications
☐ Desktop publishing
☐ Programming
☐ Networking
☐ Games
☐ Other_____

☐ Check if you want your name withheld from commercial and other non-club mailing lists

☐ Check if you are interested in volunteer opportunities (see other side)

☐ If you were referred by a club member, please give name:

_____

---

eDOM Orders

Prices:

5.25″ eDOM:	$3.00
5.25″ System:	$1.00
3.5″ eDOM:	$5.00
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(Prices include 6% Minnesota sales tax)

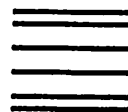| Disk size	eDOM #	Title or Description	Qty.	Price @	Total

Total merchandise	
Double price for non-members	
Add $1/disk shipping ($4.00 max)	

Make checks payable to "Mini´app´les"

Grand Total:	

Current Apple System Software

Apple II, II+ //c, //e	Version	Date	Format
DOS 3.3 System Master	n/a	09/10/85	5.25″
Apple II System Disk	3.2	07/16/90	5.25/3.5″
ProDOS 8	1.9	07/16/90	5.25/3.5″
Apple IIGS			
GS/OS System (6 disks)	6.0	4/92	3.5″
HyperMover (2 disks)	n/a	n/a	3.5″

2nd Fold

Last Fold – Seal with Tape

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