



mini' app' les

the Minnesota Apple Computer
Users' Group, Inc. \$2.00

newsletter

In this Issue:

**Good Deals for User
Group Members**

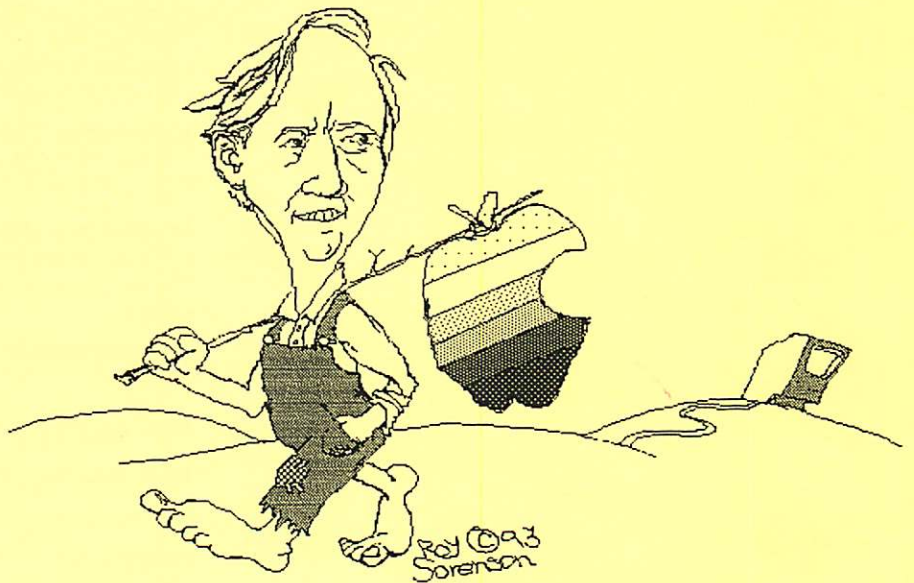
Publish It! Easy

Atelier Hello

**Getting Started with the
Apple IIGS**

**The History of the
Apple II – part 6**


**Upgrade your IIsi to ci
speed(?)**




October Events


Sun	Mon	Tue	Wed	Thr	Fri	Sat
N/A					1	2
3	4 7pm	5	6	7 7pm	8	9
10	11 7pm	12	13	14 7pm New Macs!	15	16 1pm
17	18 7pm	19 7pm	20	21 7pm	22	23
24	25 7pm	26 7pm	27	28 7pm	29	30

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


 **Board of Directors –**
Mini' app' les Members Welcome
– Washburn Lib., 5244 Lyndale
Ave. S, Mpls – Greg Carlson,
544-8252


 **Apple IIGS Main – Lexington**
Lib., University & Lexington, St.
Paul – Tom Ostertag, 488-9979


 **Macintosh Main – Apple rep.**
Curtis Juliber; new products –
Penn Lake Lib., 8800 Penn Ave.
S, Bloomington – Mike Carlson,
377-6553


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


 **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

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

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

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

 **Appleworks SIG – AppleWorks**
eDOMs – Murray Jr. High, 2200
Buford, St. Paul – Les Anderson,
735-3953

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



The Minnesota Apple Computer Users' Group, Inc.
P.O. Box 796, Hopkins, MN 55343

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
Treasurer	Jacque Gay 5226 W. Nokomis Pkwy Minneapolis, MN 55417	722-1239
Membership Director	Bob Demeules	559-1124
Operations & Resource	Allen Mackler	424-8889
Publications Director	Keven Kassulker	535-2968
Software Director	Samuel Goshorn	827-4948
SIG: Macs	Wade Brezina (715)	485-3585
SIG: Apples	Erik Knopp	636-3244
Past President	David E. Laden	488-6774

Cordinators

Beginners Consultant	Earl Benser	835-2523
Dakota County	Tom Michals	452-5667
Mac Users SIG	Mike Carlson (days)	866-3441
4th Dimension SIG	Ian Abel	824-8602
CAD & Engin. SIG	Bill Langer	937-9240
DeskTop Pub. SIG	Bob Grant	827-6294
FileMaker Pro SIG	Steve Wilmes	458-1513
HyperCard SIG	Peter Fleck	370-0017
Mac Computer Art. & Design SIG	Joy Kopp	440-5436
Mac Novice SIG	Tom Lufkin	698-6523
Mac Programming SIG	Gervaise Kimm	379-1836
MicroSoft Works SIG	Ken Edd	631-3679
North Shore Mac Users	Jim Ringquist (218)	387-2234
Apple II Users SIG	Tom Ostertag	488-9979
Apple IIGS SIG	Mark Evans	935-7251
AppleWorks® SIG	Les Anderson	735-3953
Apple II DTP		
Beginner's Basic SIG	Tom Alexander	698-8633
Languages/Tech SIG	Wesley Johnson	636-1826
Tech. Adviser (hardware)		

Software Director's Staff

Mac eDOMs:	<i>open</i>
Apple eDOMs:	Bill Job, Randy Peterson & Tom Gates
eDOM Sales:	Mac - Allen Mackler & Mary Kosowski Apple - Les Anderson

Liaison Contacts (Contact with non-Mini'App'Les SIGs)

Medical	Stewart Haight	644-1838
CP/M	Jim Rosenow (414)	261-2536
PACER Center	Karen Samuels	827-2966
TC/PC	Gervaise Kimm	379-1836

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 specifically copyrighted by the author. (Permission to reproduce these articles must be given by the author.) Please include the source when reprinting.

Questions - Please direct questions to an appropriate board member. Users with technical questions should refer to the Members Helping Members section.

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.

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 1st 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.

Meeting Information - Please phone calendar dates and changes to: Erik Knopp at 636-3244.

Mini'App'Les BBS - 892-3317, 24 hours: 8 data, 1 stop, 0 parity

Mini'App'Les Voice Mail - 229-6952

Advertising - call Lance Weber, 542-9331

Newsletter Publication Staff and Credits:

Publications Director	Keven Kassulker	535-2968
Publisher/Layout Editor	Hugh Johnson	780-6053
Calendar Updates	Erik Knopp	636-3244
AppleLink Liaison	Tom Mehle	-
Graphics Contributor	Roy Sorenson	870-7366
Story Contributor	Ken Slingsby (507)	263-3715
Story Contributor	Cliff Johnson	-
Story Contributor	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

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® logo, 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.

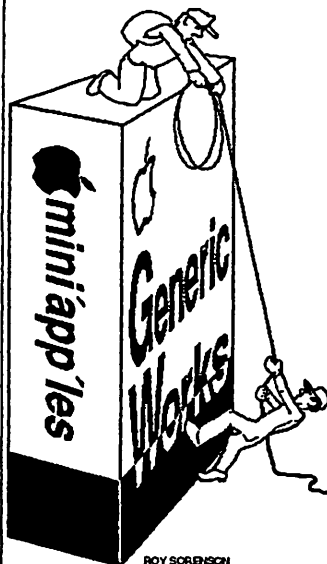
Next Month's Events

November, 1993

Board of Directors	7:00 Thr, Nov. 4	Penn Lake Lib., Blmngtn	Greg Carlson, 544-8252
Apple II/GS Main	7:00 Mon, Nov. 8	Lexington Lib., St. Paul	Tom Ostertag, 488-9979
ClarisWorks SIG	6:30 Tue, Nov. 9	Norwest Bank Lyndale S., Mpls	Denis Diekhoff, 920-2437
Swap Meet	10:00 Sat, Nov. 13	Apache Plaza, NE Mpls	Voice mail, 229-6952
Fourth Dimension SIG	7:00 Mon, Nov. 15	Metro II, Mendota Hts	Ian Abel, 920-5520
Apple II Novice SIG	7:00 Tue, Nov. 16	Murray Jr. High, St. Paul	Tom Gates, 789-1713
AppleWorks SIG	7:00 Thr, Nov. 18	Murray Jr. High, St. Paul	Les Anderson, 735-3953
FileMaker Pro SIG	7:00 Thr, Nov. 18	Highland Park Lib., St. Paul	Steve Wilmes, 458-1513
Macintosh Novice SIG	7:00 Mon, Nov. 22	Highland Park Lib., St. Paul	Tom Lufkin, 698-6523
Mac Programmers' SIG	7:00 Tue, Nov. 23	Murray Jr. High, St. Paul	Gervaise Kimm, 379-1836
Programmer's Workshop	1:00 Sat, Nov. 27	Brookdale-Henn Lib., Brkln Ctr.	Keven Kassulker, 535-2968
HyperCard SIG	-date pending-	-location pending-	Peter Fleck, 370-0017
Macintosh Main	-date pending-	-location pending-	Mike Carlson, 377-6553
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.

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

Members Helping Members

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 III	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 Kroff	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 Spiller	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	2
Mini' app'les Board Meeting Minutes – July, 1993	4
Mini' app'les Board Meeting Minutes – August, 1993	5
Mini' app'les Budget 1993-1994	6
News from the Software Director	7
Good Deals	8
Atelier Hello	10
The Last Sunrise	11
Publish-It! Easy	12
Upgrade your IIs to 25 MHz?	16
Creating a Watermark in Word for Use with Any Printer	19
The History of the Apple II – part 6	20
The System Utilities Disk ...	23
Toe Magic – Part 2	24
Getting Started with the Apple IIGS	26

Advertisers

Cactus Software & Communications	6
RAMCO Sales	7
HyperActive Software	9
TCCN	9
MHC Computing	11
MNS/Kodak	15
Solutronix	Back cover

Meeting News

Main Apple II Minutes

by Tom Ostertag

It was a nice change to meet at Highland Park Library... lots of chairs and table space. The computer was in the process of being set up by Erik Knopp and Tom Gates when I arrived. After a few minutes of conversation, we started the meeting with introductions. The announcements, which included the Apple II Novice SIG meeting, the AppleWorks SIG meeting, the next Main Apple II meeting and the upcoming Swap Meet. I also announced that I am retiring as the Main Apple II Program Coordinator as of 1 January 1994 and asked for someone to take this position. (BTW, if you are willing, it would be nice to coordinate the transfer of information, so volunteer for this position early.)

Next was the question and answer session which covered a wide range of topics such as how to edit and save icons, how to connect several hard drives to the IIGS, a patch to keep the second 5.25" drive icon from showing up under 6.0.1, FST's and reading MSDOS disks on the 800K drive and last, but not least a discussion of games and who would do the demonstration for the October meeting. Still no volunteers for this one either. The Q&A Session was so long that the presentation was cancelled and everyone packed up for Pie SIG at Baker's Square.

The Pie SIG discussion covered the usual range of topics from current graphics on Gizmode to trading broken power supplies for broken hard drives. Several other conversational threads were also going on at the same time. The out and out favorite for dinner was the Coney Island Burger and the favorite dessert was the Boisenberry Cobbler a la mode. I don't recall if anyone had a magnetic knife.

Anyway, the October meeting should be on games if a presenter will volunteer. Remember the location will again change to the Lexington Library in St. Paul. See you all there.

Tom 🍏

Mac HyperCard SIG Report

by Peter Fleck

At the August SIG, we discussed incorporating QuickTime into HyperCard. We also looked at the Power Tools stack Menu Maker and threw together some custom menus. With the Menu Maker, it took only 5 minutes!

Using the Menu Maker

Note: The Power Tools stack comes with the registered version of HyperCard 2.0v2 or 2.1.

The Power Tools stack's Menu Maker is an easy way to create custom menus. In addition to creating the commands for triggering menus, it also adds the scripting for menu housecleaning – updating your menu bar as you travel from stack to stack.

To make your menus, go to Power Tools and click on the Menu Maker button, then click on the light bulb icon in the upper right corner of the Menu Maker card. This will bring you to the help area. Follow the instructions and you shouldn't have any problems.

Menu Maker Tips

1. Every menu item *must* have a menu message! You will get an error message otherwise.
2. Follow through the options in Step 2 in order meaning edit the menu message last. There seems to be a bug which can remove the menu message if you choose Disable, Check Mark, or Command Key after you create a menu message.

HyperNotes

Both of these notes were posted by Kevin Calhoun on the Internet. Kevin is a programmer with Apple's HyperCard development team.

Has anyone ever received the error, "Script too silly to process"? It is listed in *HyperTalk 2.0: The Book*.

The error is "Script too silly to execute", and it never appears. That error string just sits in HyperCard's resource fork, representing Dan Winkler's sense of humor. The rest of HyperTalk represents only Dan's ingenuity and hard work, so I guess, wanting a fuller representation of himself in his creation, he stuck that error string in there to let us all know that he's not all work and no play.

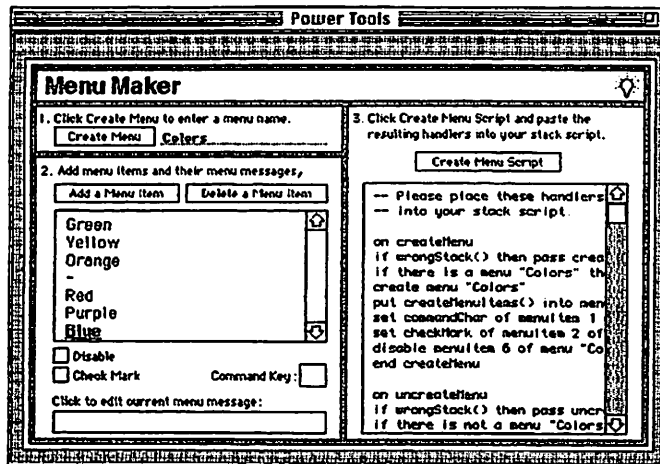
Buggy 2.0

HyperCard 2.0, which was shipped prematurely to support System 6.0.7 and the Macintosh Classic, LC, and IIsi, has several extremely regrettable flaws that were quickly corrected in HyperCard 2.0.1 (called "HyperCard 2.0v2" by Claris). Although HyperCard 2.0v2 was shipped just

two and a half months after HyperCard 2.0, many 2.0 users have never upgraded, perhaps because HyperCard 2.0 was the last version of HyperCard that was made available by Apple for broad distribution by user groups. And so bugs that have long been fixed have long lived on. The bug you describe is one of them.

The only solution to the problem noted above is to upgrade. As of now, the way to upgrade is to call Claris, who will sell you an upgrade to HyperCard 2.1 for \$99. (Users who purchased HyperCard 2.0 or 2.0v2 from Claris and sent in their registration cards were once entitled to a free upgrade to 2.1. I don't know whether there was a deadline on that entitlement.)

That's all for this month...



Next Meeting: Monday, October 4 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.
Upcoming Meetings: Stay Tuned

Pete 🍏

Notes:

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

Fall Swap Meet

Saturday, November 13, 1993
10:00 AM-2:00 PM

Apache Plaza Shopping Center
3800 Silver Lake Road
N.E. Minneapolis

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'apples Information line),
with Name, Phone #, Table
Requirements and Membership #
(if applicable).

Picnic in the Park

by Tom Ostertag

The weather was beautiful and warm. The mosquitos were close to non-existent, but the bees were out in swarms especially wanting to devour Burger King hamburgers. We arrived a bit late and found everyone eating. I tried to get people to introduce themselves, but everyone was too busy eating and talking. Tom Gates had the Club banner strung from one of the trees in the park with the "Since 1978" prominently displayed. The feeding frenzy continued for a while and died down enough to display all the desserts on one of the Picnic tables and then the frenzy started again. This time, the adults had a two minute head start on the youngsters. I'd like to personally thank each and every one of you that brought chocolate cakes, chocolate cookies (M&M's and regular...) and pies. My dessert offering? a poppy seed torte, Fran's allergic to chocolate. I did receive a suggestion for a

full blown potluck for next year, so people could choose what to bring. Sounds like a good idea as long as there's enough desserts.

Tom also brought along a number of computer related materials, books and programs for door prizes. The first prize winner was Jacque Gay and she picked an object entitled "SLOTZ" which is some sort of a disk organizer that sounds like it was invented by the infamous Dr. Willard (the inventor of Willard Water...) It sliced, diced, saved your wrist and organized your life in one fell swoop. After the door prizes, various groups of people gathered and talked about whatever. The group that I was in was talking about CadCam programs and their use on various platforms. DEC Vax, MSDOS, Mac, etc. Very interesting, but then the mosquitos arrived and the sun went down... and people picked up their picnic baskets, said their farewells and

headed for their cars.

We also had some entertainment arranged for the evening. The Teddy Bear Band was on stage, live while we were eating and talking. Ever tried to eat a tossed salad to the lyrics "throw your teddy in the air..." and get so excited you wanted to participate? I know we had a great time and I'll be more than willing to arrange next years... hmmm, full blown potluck, huh? That means getting calls and determining who brings what, so we don't get too many desserts, right? Naaa! Chocolate Forever!

Thanks to all of those who came. I enjoyed meeting your families. We will do this again. Next year, Erik Knopp will bring the computer for the joystick.

Take care and I'll see you at a meeting...

Tom 🍏

From the mini'app'les Board of Directors

Meeting Minutes – July 1, 1993

Washburn Library, Minneapolis

Presiding Officer: Greg Carlson,
President

Members Excused: Wade Brezina

Absent: Allen Mackler

Preliminary Attendance

Members: Greg Carlson, Jacque Gay,
David Laden, Tom Gates, Sam Goshorn,
Hugh Johnson, Erik Knopp, Bob
Demeules, Roy Sorenson

Guests: Susan Goshorn, Chuck Penson
(for the Science Museum), J.E. Wheeler,
Richard H. Peterson

Meeting called to order by President
Greg Carlson at 7:15.

Adoption of Agenda: moved, second-
ed and approved, with change that Chuck
Penson of the Science Museum be
moved up to first order of business.

SoftwareFair

Chuck Penson of the Science Museum
spoke about plans for the 2nd annual
SoftwareFair, to be held September 10
and 11, 9:30 – 6 pm:

The purpose of the SoftwareFair is to
inform the public about software
generally available and services provided
by the participating organizations.
Mini'app'les will host 10 Mac and 5
Apple II booths. TC/PC will host 10
booths. There will be more advertising
this year, in Star Tribune, Pioneer Press,
City Pages and TC Reader. Secondary
advertising will display scheduled
demonstrations and classes. The auditori-
um will not be used this year, but
classrooms adjacent to the display area
will be available for classes by
Mini'app'les, TC/PC and the Museum.
As last year, 2 phone lines will be
available.

Chuck said the Museum will match us
Mac for Mac – up to 5 – for booth use,
and provide another Mac for classroom
use (these are color Mac si's, with large
hard drives). They will also provide each
booth with a plastic vacuform sign (they
need to know what we want on the signs
by early August).

In question and answer, Chuck said
they are hoping for a larger attendance
this year. They would like to see (from
us) a stronger Mac presence, with a
preference towards educational, home
and business software. Software demon-

strated must be generally available, and
he reminded us that there will be no
vendors, in keeping with the information-
al focus. He added that TC/PC sounds
like it has lots of people eager to work at
their booths. Tom Gates is again
coordinating Mini'app'les effort this year
and encourages all club members to call
him to get involved, have fun, and make
our presence a success.

Science City BBS

Dick Peterson, Sysop of Mini'app'les
BBS, reported these conclusions about
the Science City BBS: they are capable
in hardware terms, having 4 lines, but
there is great need for more organization
and Sysop hours, and his big question
was are they willing to make the
commitment of person hours into the
BBS to make it run well?

Chuck Penson was on hand to answer
questions about the status of the Science
City BBS. He agreed that the BBS was
sometimes confusing, but said improve-
ments are underway. In assuring us of its
long term survival, he said the Science
Museum staff is committed to Science
City and gave his "guarantee that (the
BBS) won't fall apart in a year". They
"intend to invest enough to make it
successful", while admitting that the
Science Museum Board is only dimly
aware of the BBS, which has a "semi
clandestine" position. He said they are
working on getting an Internet account
soon, and are thinking of making a big
publicity push for the BBS as soon as the
first of the year. They continue to want
Mini'app'les on the BBS and there is no
deadline on us coming over. The board
thanked Chuck for attending.

Approval of minutes

The May minutes were approved with
a minor correction. The June minutes
were read and approved.

Reports from officers or committees:

Treasurer's Report – Jacque Gay

See Treasurer's Report.

Software Director – Sam Goshorn

eDOM income:

Apple II	\$78.00
Mac (+ 1 eDOM coupon redeemed)	\$148.00
Mail sale (+ 1 eDOM coupon redeemed)	\$89.00
Total	\$315.00

In addition, 3 new memberships were
purchased in connection with eDOM
sales. Sam affirmed he does intend to
continue the eDOM Catalog Stack. 3 new
eDOMs will be out for August.

Apple II SIG Director – Erik Knopp

The SIG's continue and are scheduled
through Sept.

Publications Director – Hugh Johnson

Reported a few complaints of missed
newsletters due to address changes or
problems; Membership Director Bob
Demeules said he is fixing the problem.
The crucial position of Advertising
Director is still vacant, but he had two
possible volunteers for the position.
Barney Barker may be willing to be the
Apple II editor. He also asked board
evaluation of proposed changes in
binding method for the newsletter, a "K-
bind" (where the pages are glued) and a
side stapled binding. Both methods
would offer a lower total cost for
publication of the newsletter because
they allow use of a lighter weight paper.
They would also allow changes in the
number of pages outside the current 4
page-at-a-time constraint. The consensus
was that these decisions fall within the
Publication Directors' authority, that the
binding samples were of acceptable
quality, and appreciation of the job Hugh
has been doing with the newsletter.

At this point Hugh deferred to Jim
Wheeler, who asked each contributor in
his publication scheme if they had the
requested submissions. Jim abruptly
resigned his volunteer position and left.
After discussion Hugh Johnson accepted
board request to continue editing the
newsletter.

Membership Director – Bob Demeules

See Membership Director's Report.

Adjournment motion seconded and
approved.

Next board meeting:
Thursday, Aug. 5, 7pm
Location: Norwest bank,
5320 Lyndale Ave. S. Mpls.

submitted by Roy Sorenson, secretary 

Meeting Minutes – August 5, 1993

Norwest Bank, Minneapolis

Presiding Officer: Greg Carlson,
President

Preliminary Attendance

Members: Greg Carlson, Tom Gates,
Jacque Gay, David Laden, Erik L.
Knopp, Al Mackler, Hugh Johnson, Sam
Goshorn, Roy Sorenson, Bob Demeules,
Wade Brezina.

Guests: Lance Weber, J.E. Wheeler,
Susan Goshorn, Richard H. Peterson,
Brian Elfrink, Keven Kassulker.

Meeting called to order by President
Greg Carlson at 7:10.

Adoption of Agenda: moved, second-
ed and passed.

July 1 meeting minutes approved with
minor corrections.

Treasurer's Report –

Jacque Gay

see Treasurer's Report.

Vice President's Report –

Tom Gates

SoftwareFair: Apple has been sounded
out about having the new AV Mac's and
the Newton MessagePad on display at
our booth. Tom hasn't reached Chuck
Penson about the signs for our booths.
Tom has gotten commitment of 4 Mac's
for the Fair from our members (for a total
of 8 with matching Science Museum
Mac's). The Apple II's are lined up. John
Rollwagen (formerly of Cray) or Earl
Joseph (U of M futurist) were suggested
as keynote speakers. Tom will forward
suggestion to Chuck (since Science
Museum is hosting event).

Voice Mail has been updated.

Membership Director's Report –

Bob Demeules

Reported some newsletters have been
returned marked "temp. held", indicating
member is on vacation or has moved.
Some membership renewals have come
in with old rate of \$15: these have been
renewed pro-rated (for 8 months rather
than 12).

Software Director's Report –

Sam Goshorn
Sales: \$5 Mac, \$24 mail orders, Total
\$29.

3 new eDOMs are coming out, and 3
updated eDOMs, including the new
Disinfectant.

Mac SIG Director's Report –

Wade Brezina

Mike Carlson needs to talk to Erik to
get updates on main Mac meeting
locations into the calendar. Apple will

demo the Newtons at one of the main
Mac meetings, maybe October.

Apple II SIG Director's Report –

Erik Knopp
Tom Ostertag will check Highland
Library for meeting room availability for
rest of 1993.

Publication Director –

Hugh Johnson
The business reply mailers enclosed
with the newsletter will cost us 69 cents
for each mailed, in addition to the annual
fee. Lance Weber has agreed to become
the newsletter advertising director! He is
already getting ads, and plans a mail
campaign.

The printing cost for August newslet-
ter was \$491. Hugh resigned as publica-
tion director, but was willing to continue
as newsletter editor and layout person.
Greg Carlson announced Keven Kassulk-
er agreed to become Publication Director
pending board approval; the Board
approved Keven's replacement of Hugh
as Pub. Director.

Operations & Resource Director –

Al Mackler

No report this month.

MOM report

Greg Carlson announced the first
Member of the Month award, as selected
by the Executive Committee, as going to
Hugh Johnson for his hard work at
improving the timeliness, accuracy, and
appearance of the newsletter. The board
gave Hugh a round of applause as a
MOM certificate and badge were
presented to Hugh.

Old Business

Business Reply

Through a misunderstanding, the
newsletter business reply form was
renewed at a non-refundable cost of \$75/
yr (and cost of .69 per piece when
mailed). Discussion: is the bus. reply too
expensive for us? If the bus. reply form
in the newsletter is redesigned so it can
be used by advertisers to place ads, will it
generate more money for the group?
Motion passed to affirm the decision to
renew the business reply, subject to
review within a year's time. Membership
and Software Directors are to track the
bus. reply mail they get so that the cost/
benefit to the club may be evaluated at
that time.

Membership List eDOM

Bob Demeules will see that a notice
will appear twice in the newsletter, and
will track member preference on eDOM
listing as part of membership database.

Fall Swap Meet

Discussion: Tom said many members
asked for another swap meet at the last
one. As the last swap lost money for the
club, should we charge members
something for their tables to cover cost,
or should that be maintained as a benefit
of membership? The sign (made for last
swap meet) is paid for, the site charge is
\$100, refundable after the event, so the
only charges are for advertising and table
rental (\$10 each). Consensus was that
drumming up more dealers to rent tables
was preferable to dropping the free half-
table offer to members. Volunteers will
be needed to set up tables, and be at the
club booth.

Decision: motion passed to direct Tom
to start planning for a late fall swap meet,
with the possibility of coordinating a SIG
meeting or having demos at same time.
Hugh will announce in newsletter when a
date is confirmed.

Anoka Apple Computer Club

Keven summarized his discussions
about coordination with this user group
(associated with the Anoka school
district). They have about 70 members,
with good meeting facilities and lots of
equipment. Possible areas of coordina-
tion include selling space to them in our
newsletter, or a "sister club" association.
In the absence of any proposal no
decision was made, but Keven and Tom
G. will continue talking with the Anoka
folks.

Misc.

Roy distributed name tags and phone/
address list to board members. Greg will
check with Rand to see if he has more
club stationery.

Donate newsletters

Sue Goshorn reported the MN
Historical Society may be interested in
housing a collection of the club newslet-
ter. The James J. Hill library is reportedly
already collecting them. She will submit
two newsletters to their selection
committee.

Budget

A budget as proposed by the executive
committee was examined. Jacque agreed
to submit a budget and checkbook
register as part of monthly treasurer's
report. A move by Wade to approve
budget as proposed was amended by
Jacque and Dave to adjust newsletter cost
to \$6000, and renewal income to \$6550.
The amendment passed 7 – 3, with Tom,
Wade and Al opposed, and Erik abstain-
ing. The amended motion to approve the
budget passed 7 – 2, with Al and Tom

opposed, Wade and Erik abstaining.

Grants

Sue Goshorn reported her investigation into pursuing grants. She proposed a tentative 5 year plan and committees be set up to examine applying for grants. Some questions were how much work will the process involve, and what are our chances? The board gave informal approval for continued investigation in this area.

Adjournment moved, seconded and approved.

Next board meeting:
Thursday, September 2, 7pm
Location: Norwest bank,
5320 Lyndale Ave. S. Mpls.

submitted by Roy Sorcnson,
secretary

**Mini'app'les Budget
1993-1994**

Budgeted Income

Memberships

Membership - New\$3,000.00
Membership - Renewal\$6,550.00
Membership - Sustaining\$400.00
Membership - Corporate\$200.00
Total Memberships\$10,150.00
Advertising\$1,500.00

Software Sales

Apple II eDOMs\$300.00
Macintosh eDOMs\$400.00
Mail eDOMs\$700.00
Total Software Sales\$1,400.00
Swap Meet\$160.00
TCF Interest\$120.00
Sales Tax Payments(\$100.00)
Total Income\$13,230.00
Gross Profit\$13,230.00

Expenses

General/Admin. (President)

Pres: Mailing, copies, phone\$25.00
State Filing Fees\$35.00
Total General/Admin. (President) ..\$60.00

Gen Mbrshp Mtgs/Shows (VP.)

VP: Mailing, copies, phone\$25.00
Meeting sites\$400.00
Shows and conventions\$50.00
Advertising\$200.00
Total Gen Mbrshp
Mtgs/Shows (VP.)\$675.00

Financial (Treasurer)

Treas: Mailing, copies, phone\$100.00
Bank service charges\$20.00
Insurance: liability/equipment . \$1,800.00
Total Financial (Treasurer)\$1,920.00

Secretary

Sec'y: Mailing, copies, phone\$25.00
Post office box rent\$100.00
Stationery, biz cards, etc\$50.00
Total Secretary\$175.00

Publications/Newsletter

Pub: Mailing, copies, phone\$175.00
Newsletter production\$6,000.00
Labeling/Mailing\$600.00
Bulk mail/BRM permits\$75.00
Newsletter postage\$1,200.00
Advertising expense\$50.00
Total Publications/Newsletter ...\$8,100.00

Software Production and Sales

Sftwre: Mailing, copies, phone\$25.00
eDOM production\$500.00
Total Software
Production & Sales\$525.00

Hardware/Resource Support

Hdwre: Mailing, copies, phone\$10.00
Maintenance contracts/repairs\$100.00
BBS (phone, software expenses) ..\$275.00
AppleLink account\$160.00
Information Line\$210.00
Total Hardware/Resource
Support\$755.00

Apple II Interest Groups

ApISIG: Mailing, copies, phone\$25.00
Meeting expenses, room rental\$25.00
Total Apple II Interest Groups\$50.00

Macintosh Interest Group

MacSIG: Mailing, copies, phone\$25.00
Meeting expenses, room rental\$25.00
Total Macintosh Interest Group\$50.00

Membership and Promotion

Mbrshp: Mailing, copies, phone\$25.00
Membership processing\$100.00
Postage: membership packs\$400.00
Membership promotion\$200.00
Total Membership
and Promotion\$725.00

Total Expenses\$13,035.00

Net Profit/(Loss)\$195.00



**Cactus Software &
Communications, Inc.**

Documentation Services for:

- Computer Software
- Technical Manuals
- Military Standards
- Training Courses
- Presentations
- Proposals
- Brochures

'Sharp and to the point'

612 / 757-6916

Fax 757-4515

Supplying quality services since 1983

12 TWIN CITIES COMPUTER STORES REFER APPLE COMPUTER OWNERS TO RAMCO

NOW AVAILABLE:

- 300 Brand-New Apple II Programs
 - Games
 - Educational
 - Productivity
 - Science, etc.
- Memory Expansion
- Disk Drives
- System Manuals
- Program Instruction
- Modems
- Hard-to-Find Items
- Free Software Catalogue Sheets

JUST CALL!

What's not in stock
can be here by 10 AM
the next day!



RAMCO Sales
Call: (612) 561-8144
Ask for Rodger Kent

News from the Software Director

Virus Alert

The WDEF virus has been found on three disks in the Macintosh eDOM set. These are numbers 859, 861 and 862. If you have one of these disks you can either exchange it for a clean disk or remove the virus yourself as described below.

WDEF only infects the invisible "Desktop" files used by the Finder. WDEF does not infect applications, document files, or other system files. Unlike other viruses, it is not spread through the sharing of applications, but rather through the sharing and distribution of disks (usually floppy disks.)

Fortunately, System 7 is completely immune to the WDEF virus. Although an infected disk that is used on System 7 will cause no problems for you, someone else without System 7 can still be infected. For this reason it is important to remove it.

You can remove a WDEF infection from a disk by rebuilding the desktop (holding down the Command and Option keys when inserting the disk) or by using the anti-virus program Disinfectant. I highly recommend getting a copy of Disinfectant (available on eDOM#815) since this is the best way to detect and eliminate a virus before it does any damage.

The latest version of Disinfectant is 3.2 (April 93). If you have an earlier version you should exchange it for the newer one (at no cost to you).

Software Updates

The following Macintosh software has been updated:

RamDisk+ v3.1.4 to 3.17
JPEGView v0.9 to 3.0

RamDisk+ v3.17

RamDisk+ is an INIT (Extension) which allows you to set aside some portion of your Macintosh memory (RAM) and use it as though it were a mounted floppy or hard disk. This will increase the speed at which your Mac works with files since accessing RAM is very much faster than accessing any mounted volume. RamDisk+ remembers the contents of the RamDisk you set up and will automatically re-create it at startup. It will also automatically copy

the files it contains back to a "real" volume at intervals you specify so that if anything goes wrong you will not lose your work. It is compatible with System 6, System 7, and MultiFinder. Works on any Mac from the 512E to all the Mac II family.

Special Features

- Will recognize up to 128 Megabytes of memory even when the Finder only recognizes 8 Megs.
- Optionally switches control to the RAM disk and ejects the startup floppy.
- MultiFinder may be automatically started when the INIT's functions are complete.
- Optionally installs a "Crash Saver" to continue from BOMBs.

\$35 shareware from Roger Bates.

JPEGView 3.0

JPEGView is a fast, flexible JPEG, PICT, and GIF viewer for the Macintosh. This latest release adds a number of substantial new features, including full AppleScript support, new high-quality dithering routines, a greatly improved slide show, floating windows and more.

IMPORTANT NOTE: JPEGView *requires* System 7.0 or later *and* any version of QuickTime to run including the latest version of QuickTime (1.6.1).

Here are the important new features in version 3.0:

- full AppleEvent support, allowing scripting and recording with AppleScript
- new dithering routines for better image quality on displays with at least 256 colors
- floating windows showing image statistics, colors, and comments
- vastly improved slide show functionality, including offscreen rendering
- extensions to QuickTime to allow the display of JPEG/JFIF thumbnail images
- support for creating custom icons when saving images

Freeware from Aaron Giles.

submitted by Sam Gashorn 🍏

GOOD DEALS

by Ken Slingsby

This is the first of perhaps several articles which will 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 material in its entirety, 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!

DEALS

WHOLE EARTH ONLINE ALMANAC PUBLISHED

Contact: Brady Publishing
15 Columbus Cir
New York, NY 10023

NEW YORK, NY – July 27, 1993. The Whole Earth Online Almanac, the latest book by Don Rittner, hit the bookstores last week. The nearly 600 page book details every subject from astronomy to zoology that can be found in Cyberspace.

The book is broken down into more

than 50 categories listing forums, discussion lists, bulletin boards, CD-ROM titles, and bibliographical databases that can be found and accessed on the Internet, Bitnet, Usenet, Fidonet, America Online, GENie, CompuServe, the Well, Knowledge Index, BRS AfterDark, ORBIT, NewsNet, and more. The book is published by Brady Books and is priced at \$32.95 ISBN: 1-56686-090-3

Offer valid until December 31, 1993.

CD-ROM disc, MACnificent 7.1

KENNER, LA – August 1, 1993. Digital Diversions Software Inc. and the National Home & School Macintosh User Group announced the publication of a major upgrade of their low cost (Retail: \$59, User Group/Educator Price: \$29) CD-ROM: MACnificent 7.1 – Education & Games (2nd Edition). The definitive shareware disc for education (K-12 and Higher Ed) and home entertainment (children and adults) features:

Education & Games (2nd Edition). It retails for \$59, but we make it available to user group members and educators at the 50% discounted price of \$29. If your user group or school district would like to make a group buy of 5 copies or more, we could arrange for even greater discounting.

1000+ Games * 650+ Educational Programs * 70+ Commercial Demos
2500+ Game Support Files * the Complete Works of Shakespeare. In all, the 7000+ files take up over 465 megabytes! If anyone is not satisfied with our disc, it can be returned for a full refund.

Digital Diversions Software, Inc.
3349 Ridgelake Dr., Suite 106
Metairie, LA 70002
(800) 879-1150 * (504) 838-0190 *
(504) 837-0880 Fax
(Purchase Orders, Personal Checks, Credit Cards accepted)

Shipping: North America: \$3 1st Disc, \$1 Each Additional Disc
Outside North America: \$7 1st Disc, \$3 Each Additional Disc.

PRESS RELEASES

SAN MATEO, Calif., USA, July 22, 1993 – Connectix Corporation today released CDU®, Connectix Desktop Utilities, a new Macintosh® software utility designed to support the U.S. Environmental Protection Agency's Energy Star power efficiency initiative for personal computer products. CDU carries a US suggested retail price of \$99 and is available now through leading resellers worldwide.

In addition to Power Manager, CDU offers fifteen other indispensable utilities in one integrated package. CDU combines easy-to-use modules for energy conservation, screen saving, security, hot keys, keyboard shortcuts, file synchronization, desktop customization and more in a single, affordable package. – 30 –

Canto Software Inc. would like to introduce itself as the newly established San Francisco based subsidiary of Canto Software GmbH from Berlin Germany. Canto is specializing in professional Graphics / Imaging products that are already well established in Europe.

Two major products:

* Cumulus 1.1, a client/server image and multimedia database software that recently won the "Software Innovation Prize" rewarded by Apple Germany.

~ and ~

* Cirrus 2.0, a high end scan program that fully supports AppleScript, Color-Sync calibration and almost every scanner in the market.

a demo version of Cumulus is on AppleLink: – 30 –

San Diego, California: WestCode Software, Inc. is pleased to announce TypeSet, a powerful three-part TrueType font management and productivity package for the Apple IIGS. TypeSet provides Apple IIGS users with several essential tools currently missing from their TrueType toolbox, including: a What-You-See-Is-What-You-Get (WYSIWYG) Font menu, font sets, and font reporting. WestCode spokesman

Tony Gentile said, "If you're working with TrueType fonts on the Apple IIGS, you need TypeSet."

System requirements for TypeSet are an Apple IIGS with 1.25 megabytes of RAM, GS/S System 5.0.4 or later, and Pointless 2.0 or later.

TypeSet will be available in late July, at a suggested retail price of \$49.95.

WestCode Software, Inc.

15050 Avenue of Science, Suite 112
San Diego, CA 92128

- 30 -

(San Rafael, CA.) Joe Kohn and Shareware Solutions is proud to announce a brand new publication for the Apple II family of computers - Shareware Solutions II: The Newsletter. Written and published entirely by long-time in Cider/A+ Contributing Editor Joe Kohn, the premiere issue of Shareware Solutions II is scheduled to debut in July, 1993, just a few short weeks after the final issue of inCider/A+ is published.

Shareware Solutions II will provide timely information about new and classic public domain, freeware and shareware software, and will continue to provide subscribers with low cost access to that software via the mail. Shareware Solutions II, however, will include much more information than Shareware Solutions: The Column. Shareware Solutions II will also provide general information and solutions that will help Apple II users, educators, and hobbyists continue to use their current computer systems well into the next millennium.

Available by subscription only, Shareware Solutions II will provide readers with at least 12 pages of fact filled and professionally written articles in each issue. There will not be any advertising. The North American subscription price is only \$25 for 12 issues; for overseas air mail delivery, the cost for a subscription is \$40.

Subscribe to Shareware Solutions II today!

Joe Kohn

166 Alpine Street
San Rafael, CA 94901 USA

- 30 -

Balloons Software is proud to announce a new bi-monthly disk-based publication for Apple-using parents, teachers, and librarians. Commencing Sept. 1993, Helium Balloons will include how-to articles, software reviews, book reviews, first-person anecdotes, general education news, along with selected creative writings by and for children. The Apple II version will be distributed on

two double-sided 5.25 inch disks. The Macintosh™ version will be distributed on a single 800K floppy. Each issue will be accompanied by a short hard-copy newsletter.

The content will include regular columns on creative expression, low-end classroom solutions, special needs computing, telecommunications, gifted/ talented topics, emergent literacy, problem solving, community involvement in schools/libraries, student community service, public access computing, and computer equity issues.

5 issues per school year. Sept./Oct., Nov./Dec., Jan./Feb., March/Apr., May/June. Subscription rates: \$35/yr. for United States and Territories; \$40/yr. for Canada and Mexico; \$50/yr. Overseas air mail subscriptions.

School site license: \$60/yr. Includes both Apple II and Mac versions of Helium Balloons.

Balloons Software

5201 Chevy Chase Pkwy. NW
Washington DC 20015.

(202)244-2223.

- 30 -

Parkhurst Micro Products is proud to announce the latest revision of its popular PMPUnzip utility: PMPUnzip Version 2.0! Version 2.0 is now compatible with the new PKZIP Version 2.0x archive files and works better with multitasking software and text files.

PMPUnzip 2.0 is SHAREWARE. The shareware fee is only \$15. For this, you will get a diskette with the most current version of PMPUnzip 2.x, free updates in the mail for Version 2.x, and a 20% discount on ANSITerm Version 2.0. If you have sent in your shareware fee for a previous version of PMPUnzip (1.0.1.0.1, or 1.0.2), the shareware fee for Version 2.0 is only \$5.

NOTE: This is NOT the same company that produces the well known

EDUCATIONAL PROGRAMS COMMUNICATIONS

**Your Standard Equipment
will get you there...**

**If you have
the Right
Key**



HyperActive Software
professional HyperCard® solutions
(612) 724-1596

CUSTOM DATABASES ONLINE DOCUMENTATION

FAST-TURN-AROUND

MULTIMEDIA

STAND-ALONE APPLICATIONS

PC product, PK-ZIP. They were unaware of this product.(KS) - 30 -

Oviedo, FL - Econ Technologies Inc. announced the addition of a new member to its line of software. "Addressed For Success" is a GS/OS, desktop-based database management package that elegantly manages large lists of names and addresses. It includes powerful features not found in any other software package, wrapped up in a friendly, easy-to-use interface.

Addressed For Success supports a variety of methods to create an address database. Addresses can be entered using the built-in editor or imported directly from AppleWorks Classic database files. Additionally, any database that has been saved as a standard ASCII file can also be imported.

Addressed For Success will be available this summer with a suggested retail price of \$49.95. - 30 -

Special thanks go to Tom Mehle, our AppleLink liaison, who collected most (if not all) of this material from the national online service 🍏

TCCN

Twin Cities Computer Network


7-E-1
349-6200

Logon Please: TCCN

We're Growing & Changing.
Give us a call. You'll like what you see.

- Many Forums •E-mail
- PBS Schedules •USA Today
- Private SIGs •Flea Market
- Star Tribune Roundtables
- Product Testing & MORE!!!

IT'S FREE!!



Atelier Hello

Macintosh software review

by Gregory L. Carlson

Atelier Hello is billed as a "Personal Communication Manager". What this actually means is that the program is an address book, simple word processor (with spell checker, mail merge, and envelope address routines built-in), and a general all-around note-filing system.

Atelier Hello comes on an 800K disk, and takes up about 600K of hard disk space when installed. This space includes the main program, a dictionary, a sample file, and Claris Translators for MacWrite 5.0, MacWrite II, and Plain Text to allow importing and exporting from the word processor (called typewriter).

When you first start Hello, you are presented with a sample address book (see figure 1). The buttons on the bottom show the functions that can be performed with this program. The first screen shows the "address book" with one entry. As you add entries, you can sort into various categories.

Buttons are provided for deleting, sorting, marking and searching for

selected entries. To get a full view of an entry, press the "Entry View" button (see figure 2). Here you have space for up to 7 phone numbers, notes, and search categories. Once you select a phone number, you can dial it (either through your modem port, or by holding your touch-tone phone up to the Mac's speaker!).

The "Typewriter" is linked to the particular address-book file (see figure 3), so you can keep all your correspondence with a particular person in one place.

That's about all there is to Atelier Hello. If you are in sales/marketing with a large list of contacts, this program may be quite useful. For the ordinary person, a simple address book will probably do the job quit well. If I had a Mac at work, I would consider using Hello as my personal phone directory.

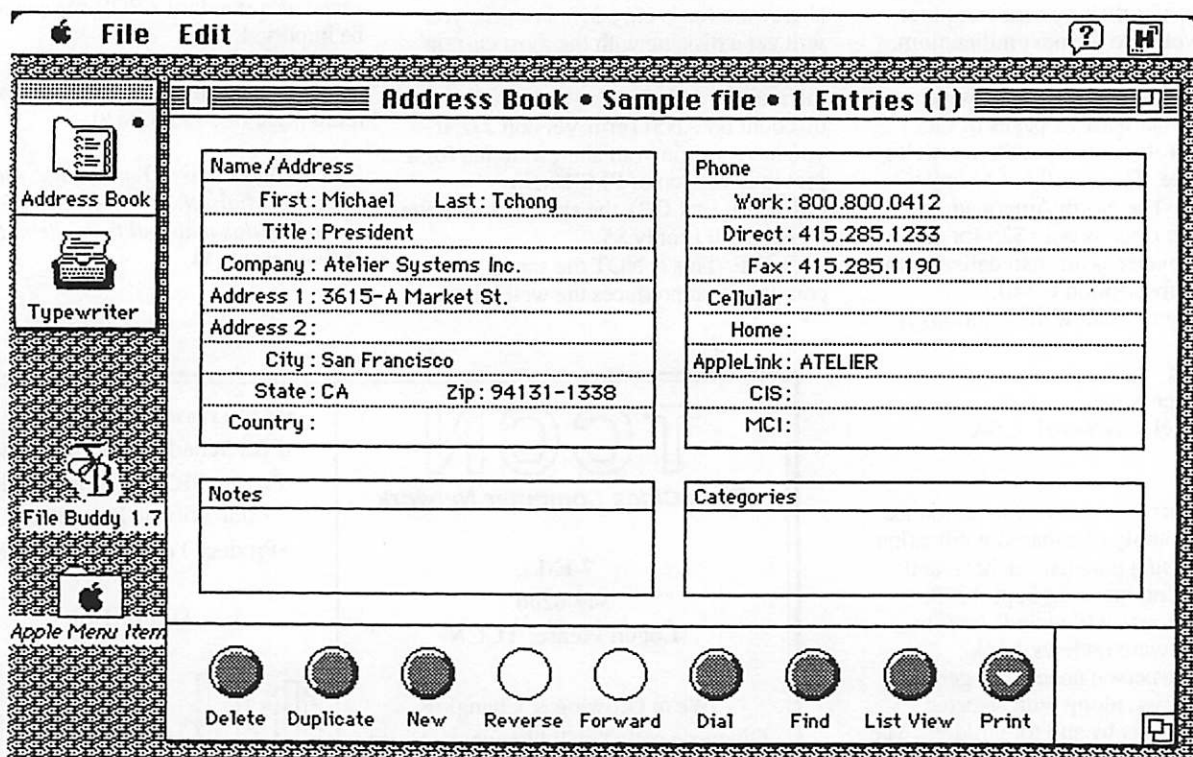
Atelier has an 800 number for assistance, and an AppleLink address (ATELIER). The company has stated "If

you are having trouble importing address or database files, Atelier offers a two-day service to translate files to Atelier Hello format".

A thumbnail review in August 1993 MACWORLD gives Hello two stars. They say "Unusual combination of contact management and word processing in a compact package. This first release is hampered by several notable flaws, such as text documents that must be linked to a contact name".

Personally, I think that someone that needs a method of keeping track of various contacts and notes to them, would find this program perfect. In my case, I find it not as useful as it could be (my phones are pulse type, and as such, the dial feature – the most useful feature – is rendered useless).

Atelier Hello
by Atelier Systems, Inc.
Retail: \$99 🍏



The Last Sunrise

The Meaning of Macintosh

by Guy Kawasaki

If you were to believe recent business publications, you would think that the only important news about Apple is how many Macintoshes have been sold, how much money has been made (or lost), and how many employees have been laid off. These publications are wrong. Harold Gordon, and others like him, are what's important about Macintosh.

Harold Gordon is a Holocaust survivor whose only crime was being a Jew when the Nazis were trying to conquer the world. In 1993, shortly after retiring from running a service station in Salinas, California for forty years, Gordon self-published *The Last Sunrise*. He self-published the book because when he contacted established publishers, they told him to get a agent, but thirty agents turned him down. Were it not for Macintosh, his story may have never been told.

I first met Harold Gordon as he was standing in a bookstore in Monterey, California, hawking his book. Since my wife and I have soft spots for authors, he reeled us in for two copies. We got to talking, and I found out that he is a member of Club Macintosh of Monterey. He wrote and printed his book and runs his business with a Centris 650 and a NEC Silentwriter. (Gordon's not stupid: he didn't buy a IIvx.)

Gordon grew up in Grodno, Poland, a city of 60,000 people of whom about one-third were Jews. His father was a barber; his mother, a homemaker. He had a brother who was eighteen months younger. In September 1939, when Gordon was eight years old, the Nazis attacked Grodno. Soon afterward, the Russians made a nonaggression pact with Germany to partition Poland, and Russia received the part of Poland that contained Grodno. Now the Gordons thought they would be safe from the Nazis; however, in June 1941 the Nazis took over Grodno. One of the Nazis' first acts after conquering the territory was to round up Grodno's 20,000 Jews and to imprison them in a Jewish ghetto completely surrounded by a brick wall.

One night, the entire Gordon family and about 3,000 other Jews were marched out of the ghetto to a detention camp called

Kelbasin. Gordon and his father were able to escape from this camp, but they were separated from his mother and brother. Gordon never saw his mother or brother again. After their escape, Gordon and his father had nowhere to go except back to the ghetto in Grodno. They hid in the ghetto until all 20,000 Jews had been removed by the Nazis—and then, for lack of a better plan, they walked seventy miles to another Jewish ghetto, called Bialystok.

In 1942 the Nazis transported Gordon and his father from Bialystok to one of the infamous death camps, Buchenwald, where they worked as camp barbers, shaving the heads of fellow prisoners to reduce problems with lice. Nine months later they were transported to another death camp – Auschwitz – to be executed. Gordon and his father were in line to be gassed when they were pulled out by a Nazi officer to work in the crematorium as laborers. One of their tasks was to retrieve the clothes of fellow prisoners after they had been ordered to strip and step into the gas chamber. They lived in Auschwitz for one year.

In 1943, when Gordon was thirteen, he and his father were transported from Auschwitz to Oraninburg, a detention camp near a Nazi airplane factory. After Allied planes destroyed the factory, Gordon and his father were taken to Sachsenhausen where they stayed until the spring of 1944 when they were transported to Dachau, another death camp. By the spring of 1945, the war was going poorly for the Nazis, so Dachau was deactivated. To dispose of the remaining prisoners, the Nazis started them on a sixty-mile death march to Tyrol.

On the third day of the march, two American planes attacked the Nazi guards overseeing the prisoners, and Gordon and his father escaped in the confusion. Early in the morning of May 5, 1945, they were rescued by a column of American tanks as they hid in the forest from the Nazis. At that point they were badly malnourished and near starvation. For two months, they lived in a Displaced Person's camp. Eventually Gordon found a job working for a battalion of American soldiers as a kitchen helper. After a year, Gordon and

his father accumulated \$1,200 and were able to buy boat passage to the United States. Gordon was fifteen years old when he arrived in America.

The Last Sunrise has soul. It is a must-read, not only for its historical content, but because it represents the fruition of the Macintosh vision: empowering people to think, write, communicate, and play. The book could use some proofreading and editing—naughty, naughty, Harold: use an em dash instead of two dashes—but nothing that reading Robin Williams's *The Macintosh* is not a typewriter and a few hours of work couldn't fix. To order a copy, contact Harold at H and J Publishing, P.O. Box 2253, Salinas, CA 93902-2253, 408-422-7360, 408-422-4098 (fax), and HaroldG9 (America Online).

And after you read *The Last Sunrise*—you may finish it in one sitting—think about this: Macintosh stands for more than what Wall Street, the business press, and even some folks at Apple could ever understand.

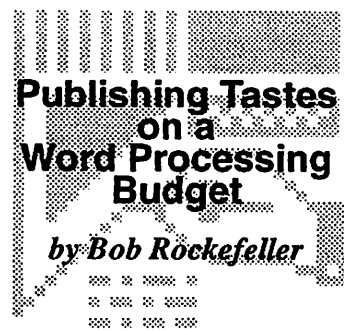
Guy Kawasaki is a columnist at Macworld magazine. His latest book, Hindsight, will be available in December, 1993. (Harold Gordon is a chapter in this book, so portions of this article are from the book.) To order a copy of Hindsight, please contact Beyond Words Publishing at 800-284-9673, (503) 647-5109, or electronically at Beyondwords@AppleLink.Apple.Com.

submitted by Tom Mehle 🍏

After thirteen years, I have left Apple computer sales. Now I am available for Macintosh computer consulting to include individual and group training, purchase decisions, installations, and other related services. For sensitive handling of tense computing situations call: Mike Carlson at (612)377-6553.

MHC Computing

Publish It! *Easy*

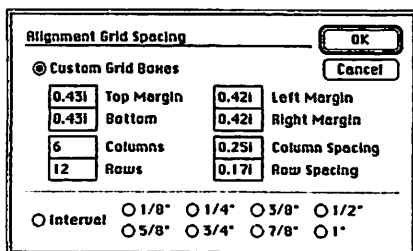


Publish It! Easy (henceforth "Easy") has evolved to its present state in a somewhat backwards manner. When first released, it was little brother to Publish It!, the page layout program reviewed some time ago by SMUG and found to be full of bugs. Over time, Easy grew and Publish It! withered until now there is no Publish It!, and Easy has more features than its big brother did anyway! I will be discussing Easy, in version 3.0 (version 2.12 was reviewed in the January 1992 Mac Monitor), the low end page layout program from Timeworks.

In a publishing world filled with the likes of PageMaker, QuarkXPress, and Ready, Set, Go!, there must be room for a less expensive alternative. Easy fills that niche and competes with Aldus' PersonalPress. These programs are intended for the less than industrial strength crowd; perhaps they offer page layout for the rest of us. Let's see what kind of job Timeworks has done with Easy to provide the tools needed in this special market.

Beginning Your Design

To get started on any design project you need to set up page sizes. Easy allows pages from 4" x 4" to 40" x 40" and provides menu selections for several favorite sizes such as folded letter, tabloid, and Mac Screen (for presentations). An alignment grid may be established to help provide a structure for the design of each page. The grid can take the form of big chunks of space (a 2 x 12 grid for a two column layout perhaps) or a fine grid (maybe 1/4" x 1/4") as in a drawing program.



Clicking on a ruler produces a ruler guide. But objects do not snap to these guides, only to the alignment grid. This is too bad, as I like to use ruler guides for alignments falling outside my established grid pattern. There are also floating rulers, which look just like real rulers, that can be dragged around for measurement and alignment.

Adding Text

If you are doing page layout (as opposed to poster design), you're going to need lots of text. You can type directly into Easy like using a word processor, or you can import other word processor files. Importing is common, and Easy provides filters for most popular text formats, including ASCII, RTF, MacWrite II, Word, WordPerfect, Works, and WriteNow. An autoflow feature allows text to be imported while Easy creates the text frames for you as the text comes in.

Text is kept in text frames which are created with the text frame tool from the tool palette. This seems almost standard in page layout programs, with the notable exception of PageMaker. Frames are just blocks to hold text. They make laying out the format of a publication easy without having to actually have all the text before you begin.

Moving text is somewhat one-sided in Easy. Importing is very nice but exporting copy for editing elsewhere is limited to text only format. This is too bad because Easy has separate filters for importing various text formats, it shouldn't be too great an imposition to export these formats too.

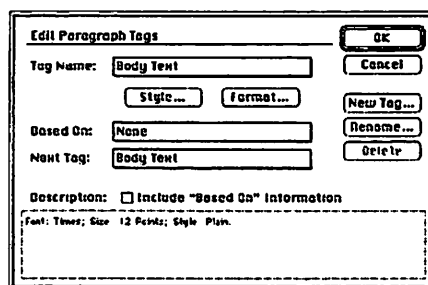
Importing files that are open in another application does not work, which is not surprising; but there is no message to tell you about the trouble. Easy just doesn't import anything. This is a problem sure to crop up from time to time if you prepare your articles in a word processor under System 7 or Multifinder. Easy should give a warning dialog that the file is open and cannot be imported.

Formatting Text

Easy has very powerful text formatting abilities similar to a good word processor. All the usual fonts, sizes, styles, etc. are there. Text can be stretched for special effect, baselines can be positioned, and leading adjusted. Letters can be kerned (automatically or manually), but only in units of points which is quite non-standard (real typographers use ems which are proportional to type size, points are an absolute measure). Even hyphenation is available (albeit with limitations).

Paragraph formatting is flexible too. Justification, paragraph leading (often called paragraph spacing), margins, tabs, and indents are all at your disposal. Text frames can even have vertical justification. Although space after paragraphs is selectable, space before is not.

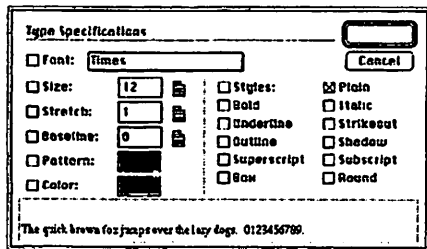
Best of all, Easy has paragraph tags, also known as style sheets. Once you



define the character and paragraph format for each tag you need, just apply that tag to the appropriate paragraphs. If you change your mind later – perhaps sub-headings should be 12 point Gill Sans instead of 14 point Futura Bold – just change the tag definition, and all tagged paragraphs change.

Local formatting of text is supported, even with style changes in Easy. Here's the normal condition: You prepare a story in your word processor and assign some words a bold style to show emphasis. When this file is imported, you

need to assign a body text style from within Easy; it is important that this applied style not overrule the local bold formatting. QuarkXPress does not respect this local format while Easy does – at least with the WriteNow (version 3.0) files I tried.



Easy has a spelling checker (112,000 word dictionary) and a Thesaurus (240,000 listings).

Graphics Too

After reading Mac Monitor, you know how important graphics are to liven up the look of your publication. Easy has several drawing tools to create graphics directly in Easy as well as import filters for popular graphic file formats. Included are TIFF, EPS, PICT, PICT2, and MacPaint. Pasting is limited as Easy only allows pasting bitmapped and PICT format graphics from the clipboard.

Unlike text, you cannot create graphic frames for anything except bitmapped art. All other art is imported, and Easy creates the frame at that time. This makes it hard to create standard format documents with empty graphic frames as place holders for graphics to be imported later. You can get around this by importing and resizing blank documents and replacing them when you're ready with the real graphic.

If you want to draw within Easy, there are many tools available. For bitmapped art, most of the familiar MacPaint-type tools appear on the tool palette. If more accurate and smoother printing objects are required, many MacDraw-like tools are provided. You can find all of your favorites: ovals, rectangles, lines, polygons, paint brush, spray paint can, pencil, and eraser.



An anomaly struck me in the use of pen sizes in the drawing tools. The length of a line changes when you change the pen width used; so, to maintain the same length line you must change only the pen height (for a horizontal line), not the pen width. If you are used to stroking line weights in MacDraw or Illustrator, you

will stub your toe on this.

PageMaker should take note that Easy can rotate graphics (text frames too) in one degree increments. Easy cannot create anchored graphics (graphics that move with text as it reflows). For TIFF and PICT2 images, Easy provides image control in the form of basic brightness and contrast adjustment.

The Bad News on EPS

Easy simply does not handle EPS graphics well! Encapsulated PostScript is an established Macintosh standard and a cornerstone of resolution-independent, smooth-printing graphics. I spoke to a Timeworks technical support person about my EPS printing problems and got this reply (PIE! stands for Publish It Easy!):

"PIE! does not currently use the Print Manager in the system when printing EPS files. If the document does not go through the print manager, the printer has no way of knowing what fonts to download when it encounters the EPS file. This will be changed in future versions of PIE! but you can't do it yet.

There is a possible work around. Try to use at least one character of the font you need in the document before you import your EPS file. Text does cue the printer to download, and it will usually stay resident long enough to be of use in printing the EPS file. Something as simple as a period should be enough.

If that approach does not help I have no other work arounds for now."

Another option is to use a font downloading program to manually move the required PostScript fonts to the printer before printing the file. This uses additional printer memory and could cause some jobs not to print. If the "unlimited download-able fonts" option is checking in the page setup dialog, the font may be flushed from the printer's memory before they are used, causing trouble.

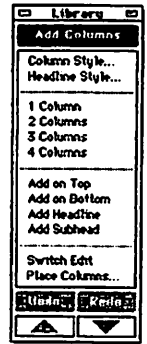
This shortcoming is a fatal flaw. A page layout program that does not properly handle EPS files is crippled. The System 7 subscribe feature does not work with EPS either. A graphic which had been published from Illustrator printed only the PICT screen preview instead of the real thing. Timeworks explains that EPS is not a "standard" format for publish and subscribe as defined by Apple. This is technically true, but QuarkXPress does not have this fault. Timeworks has a real problem here.

The Interface

How do all these features fit together? Pretty well. Floating palettes put the most common commands right at hand (or

mouse). There are palettes for tools, page navigation, status information, and user selectable menu items.

This last feature is quite interesting. The Library palette can be filled with the menu or sub-menu commands of your choice by holding the Option key while selecting the menu. If you'd rather, Easy comes configured with many common menus already in the palette's popup menu of choices. I really liked this one.



Menus seem well organized and most menu items have a command key equivalent. The defacto standard command-A is there for selecting all. Several sub-menu items, such as bold and italic styles, have keyboard equivalents too. With all the features of Easy, looking at all the menu commands can be a little disconcerting at first. After working with the program for a while, it began to feel better.

It's unfortunate that Easy makes all the menu backgrounds, including the main menu, a sea foam green. This is most unusual and not too attractive, especially since it cannot be changed. It sure makes it easy to tell when you've switched applications to Easy!

An online help system with a nice index is only a menu command away. And System 7 balloon help is available too. If you make an error, a 10-level undo is there to back you up.

The status palette shows the dimensions of the selected object, but you cannot edit those dimensions directly. Too bad. You must resize the object by dragging its handles or use the object specifications dialog box.

Performance is good. I'm running Easy on a IIci, and it feels about as fast as the big boys. PageMaker and QuarkXPress; scrolling, screen updates, and text reflowing all responded well. Some things may be a little slower and others faster. I was not disappointed, and working through a document was smooth; I wasn't waiting for Easy.

I wish the many dialog boxes had "apply" buttons; buttons that show you the effect of your choices on the current selection before you OK them. Dialogs such as tag editing, paragraph formatting, or object specification would benefit most.

Documentation

After you have played with Easy for a while you will want to read the manual to get at every little feature. As you may

have gathered by now, Easy is full of features. The manual is divided into a Getting Started introduction, a Quick Start Mini-Manual, and a Reference Section. It progresses well from installation through general familiarity. The reference pages are arranged alphabetically by command or topic, so it is easy to use after you are generally familiar with the program.

The CD-ROM version has an extra manual. It contains thumbnail views of all the clip art on the disc, and samples of the pre-constructed document layouts there too. This makes it very convenient to find what you need on that huge volume of data. Both manuals are perfect bound which makes it hard for those of us with nine books open at once to keep them flat on the desk.

CD Extras

The CD-ROM version of Easy comes on a CD-ROM disc (can you believe it?!). Besides the same application that comes on the floppy disc version, there are zillions of clip art images and document layouts.

There are 353 megabytes of TIFF format clip art files on the disc! The storage format may not be the most efficient, but there are over 3000 files in 300 dpi resolution. Every topic you can think of is included from sports scenes, to tools and borders, to holiday images. Then there are the fonts. On disc is the KeyFonts library of 100 PostScript and TrueType fonts; all fonts are included in both formats. These are mostly knock-off copies of famous Adobe fonts; I can't vouch for their quality as I did not try any of them.

Many sample layouts are provided for your use. These templates can be opened and filled with your text and graphics. Many different styles of brochures, business cards, envelopes, newsletters, and letterheads are included; they may not be graphically dramatic, but they provide a solid foundation for the new designer or business publisher.

I'm impressed with this collection of CD extras. The Easy CD version provides the first real incentive to own a CD-ROM drive beyond adventure games, public domain collections, and encyclopedias.

Factors

Many programs these days provide for extensions to their feature set. Easy is no different and calls these drop-in additions factors. Several factors are provided with the program including the Thesaurus and image enhancement tools. There is also a utility that will convert PICT objects on the clipboard to Easy items.

The most impressive factor is File

It!, a built-in database and mail merge program. File It! is very unique; I've never heard of such capabilities included in a page layout program anywhere. While meant mostly for mail merging a database of names and addresses, it could be used for more advanced tasks, perhaps even catalog creation.

Missing in Action

Although Easy has many, many features, it doesn't have them all. Color support is very thin; limited to seven color layers for spot colors only. No Pantone color matching or even CMYK or HSB color systems. There are no provisions for color separation.

You won't find advanced typographic tools such as tracking or real kerning. Hyphenation is functional but not full featured; for example, automatic hyphenation is either on or off for the whole document. To be useful, the user needs to be able to turn hyphenation on for body text, but off for headlines and subheads.

A side note (and another point in my objection to background compression utilities) is a comment on the Timeworks forum on America Online: "Do not AutoDouble any part of Publish It! Easy. AutoDoublor does not always open the parts of the program when you try to use it."

The Future

Timeworks is currently in the process of a complete program re-write. Easy began in 1986 as the work of a single programmer and has continued through several updates retaining the original core code. It may take as long as a year, but Easy will emerge with new features and a foundation on which a team of programmers can build. I hope the EPS shortcomings are addressed in that update.

Summary

As a reviewer, I must admit my prejudice concerning page layout software in general. I am not a graphic designer, and I do not publish glossy color magazines. My needs are modest, but greater than can be provided by the super word processors such as Word or WordPerfect. I like tools suited to my purpose and little beyond - you know, the fly swatter or sledgehammer argument.

Publish It! Easy is a fine page layout package with a surprising breadth of tools at an extraordinary price. The lack of real PostScript graphic support is a serious drawback for professional or even semi-professional use. PICT format is not the best for graphic design.

If you need the highest level of control of your publication, or if real color is a part of your design, you'll have to have the features of QuarkXPress. With a few exceptions, notably EPS support, Easy competes well with PageMaker at one-fourth the price. For the casual, business, or beginning graphic designer I recommend Easy; call the toll free number below and order it now. At \$99, with a sixty day money back guarantee, you can't miss.

Publish It! Easy

Timeworks

Retail Price: \$199.95.

MacConnection Price: \$109.00.

Special Direct Price: \$99.00

(call 1-800-323-7744)

Requires: Mac Plus or above, hard disk, 1074K of free memory. The complete installation used 2.6 megabytes of my hard disk space. Note: the CD ROM version is the same price as the normal version.

MUG NEWS SERVICE 1993

©1993 Savannah Macintosh Users Group



Now
compatible with
MACINTOSH
Computers.

The KODAK DICONIX 701 Printer. The affordable, mobile printer that offers laser-quality text and graphics for both MACINTOSH and DOS Computers. And the only printer in its class to include a built-in sheet feeder.

The KODAK DICONIX 701 Printer is so compact, so mobile, it works everywhere you do. Your office, your home, or far away from either one. So you can produce smart-looking letters, contracts and other documents where and when you need them.

The 701 Printer measures a mere 7.4" x 11.7" and weighs in at under 6 lbs., making it easy to take along anywhere. And now you can even hook it up to your MACINTOSH Computer (including the PowerBook) with the KODAK Mpower 701 Interface Kit. And enjoy 300-dpi, laser-quality text and graphics in a whole new environment.

Sleek and easy to use, the 701 Printer prints fast in either portrait or landscape, and features a built-in 30-page cut-sheet feeder, for even greater convenience. To get affordable printing that'll move you—and move with you—simply call 1 800 344-0006 for the dealer nearest you.

**LASER QUALITY
THAT'LL MOVE YOU.
AND MOVE WITH YOU.
KODAK**

KODAK DICONIX 701 Printer



Upgrade your IIsi to 25 MHz?

by Matt Friedman

Editor's note: Mini'app'les does not endorse the assertions or opinions expressed in this article, and may not be held liable for any consequent actions taken by the reader.

Here's the FAQ sheet I compiled on the 25MHz upgrade for the IIsi. A couple of people requested that I send it to you for archiving in your reports section.

FAQ: Upgrading your Mac IIsi from 20MHz to 25MHz

Version 1.3

Compiled by Matt Friedman
27 January 1993

This FAQ was compiled from comments, letters, and posts to comp.sys.mac.hardware. I apologize for the many instances where I have not been able to include attributions and sources. Maybe in version 2.0... :)

Q: What does the "upgrade" do?

A: The upgrade involves swapping the 40MHz oscillator in your IIsi for a 50MHz one, thus increasing the CPU speed by 25%, from 20MHz to 25MHz. Some systems speeds, like displaying 8 bit graphics, have been noted to improve even more than 25%. All this for around \$4.11.

Q: What are the stats on the performance increase?

A: Numbers below are speed relative to a Mac classic, so bigger is better:

	BEFORE	AFTER
CPU	5.24	6.69
Graphics	6.17	7.64
Disk	1.30	1.34
Math	5.45	6.91
Overall		
Performance	4.75	5.92
		(25% faster)
Graphics:		
1 bit (mono)	1.72	2.15
2 bit	1.83	2.31
4 bit	1.92	2.47
8 bit (256 colors)	1.22	1.89
	(50% FASTER!)	
Avg:	1.67	2.21

Q: Why does the upgrade work?

A: Well, a caveat first. Most of what follows is conjecture, so while it *does* make sense, take it with a grain of salt rather than a shovel full of earth. Only Apple's engineers know for sure, and they ain't saying.

The main difference between the IIsi and the more expensive IICI is expandability and speed. But aside from these differences, it's been asserted that the guts of the two machines are more or less identical.

If you think about it, it does make engineering sense to reuse as much of the IICI's design as possible. With chip prices falling these days, it might be cheaper to use essentially the same board and chips in the two machines. Putting a 20MHz CPU in the IIsi would then be a smart marketing decision - would you buy a IICI for \$3500 if you could buy an equally fast IIsi for \$500 or \$1000 less and sacrifice only expandability? So the IIsi may have been "crippled" for marketing reasons, slowed down to allow the price of its faster sister to be raised.

Again, the above paragraphs may have no basis in fact, and are really only rumors and whispers made over the net. For all we know, the IIsi chips were designed to run at 20MHz which resulted in considerable savings which was passed on to the consumer. Its up to you to draw your own conclusions from the reasoning and testimonials of those who've made successful upgrades (given below).

Q: Won't this void my warranty?

A: Yes, absolutely. In fact, some Apple service technicians will refuse to work on any machine that shows any evidence of user tampering at all. If you attempt this upgrade, you may need to find a new service outlet.

Q: Where do I get what I need, and how much will it cost?

A: You'll need a soldering "pencil" (preferably >30W), and it's strongly recommended to have a desoldering iron

or a solder sucker, such as the Soldapull Model DS 017, as well. Thanks to James MacPhail for pointing out that most soldering guns are step-down transformers that generate heat by passing a large AC current through the tip. While this generates lots of heat, there is also a large magnetic field at the tip. Some kinds of electronics are destroyed by strong magnetic fields (similarly with electrostatic discharge) so in most cases, a "soldering gun" is a no-no for this kind of job. Use something that does not build up a large magnetic field. You'll also need something small to pry with. These tools you can get at any local Radio Shack.

You'll need to install a heat sink as well. While this may not be mandatory for every single machine, some people have reported that the upgrade worked only after installing a heat sink on the CPU, so better safe than sorry. Nothing fancy is necessary - just about anything the size of the 68030 will do. You'll also need something to attach the heat sink with: thermal tape and thermal glue have been reported to do the job handsomely.

Also required is a 50MHz TTL oscillator package and a 14-pin DIP IC socket for the oscillator (you may need to go back to 20MHz if your upgrade fails).

Fry's electronics in Palo Alto, CA is one place that sells the oscillator package and socket. If you walk in off the street it costs around \$4.00 for the oscillator, and the socket will put you back about 11 cents. Mail order from Fry's is considerably more expensive, possibly by a factor of two to three times. Their phone number is 415-496-6000. Fry's has another outlet in Fremont at 510-770-3797. Or, you can fax them: 408-735-6800 in Sunnyvale CA, 415-496-6060 in Palo Alto CA, and 510-770-3700 in Fremont CA.

Other suppliers include B.G. Micro: \$1.49 for the oscillator and \$3.25 for postage. \$10 minimum for MC/Visa. P.O. Box 280298, Dallas, TX 75228 (214) 271-5546. Digi-Key will also take MC/Visa, the part number is CTX121,

\$3.44/ea + \$5 handling and actual shipping charge for orders under \$25 only. 1-800-Digi-Key. I have no info on whether these two sell the sockets also.

Q: So how to I do it?

A: Here's the procedure. It's an amalgam of the information posted by Jim K. H. Yu and George John, who attributes the pioneering of this procedure to "<forgot his name> at CalTech and Paul A. in Australia."

Open the case. (It lifts off from the back.) Don't forget about static – an anti-static bracelet would be an A+ idea.

Begin disassembly of the machine. This is kind of easy: the IIsi is a really well-designed machine from an assembly-time standpoint. No screwdriver involved in disassembly.

Remove the floppy drive. (Unplug it from the motherboard and lift it out of the case while holding in the 2 small latches on the sides of the floppy drive.)

Remove the hard drive. (Same thing, unplug the SCSI cable from the motherboard and the power cable, then just lift it out. In this case the latches on the case need to be pushed out so you can remove the drive.)

Remove the fan. (You have to squeeze the plastic on the sides near the bottom and back of the case to get it out. Just lift it up while squeezing.)

Remove the power supply. (Again, just lift up while holding the two latches in on the sides of the power supply's case.)

Remove the SIMMs. (They snap out easily. Again there are little metal latches that hold them in place.)

Remove the motherboard. (Pull it towards the front of the case while pushing the two tabs on the case that hold it in place to the outside.)

Prepare the oscillator's socket by cutting all pins except 1, 7, 8, and 14.

Warning: The soldering iron stuff comes next. If you have never used a soldering iron before, DON'T START NOW! Virtually all of the people who have attempted this upgrade have reported the soldering to be extremely difficult and dangerous. Have an experienced solderer with you to help. The IIsi's motherboard is a multi-layered board and can easily be damaged by excessive heat or force. If you pull too hard, you can ruin the contacts between the crystal and the motherboard, and then you might as well buy a new mac.

Desolder the 40MHz oscillator. You should see a row of little silver boxes just to the right of the SIMM slots. The one closest to the SIMMs should say 40.000

MHz on it. This is the guy to desolder. First note the oscillator's orientation on the board by looking at the positioning of the sharp corner (the other 3 corners are round). The sharp corner marks pin #1.

You could really screw things up here, so be careful with the soldering iron. Try working on a pair of pins at a time – get one pin hot enough to melt the solder, then quickly switch to the adjacent pin and heat that pin while prying the oscillator gently away from the motherboard on the other side. Switch back and forth between the pair while prying until one side has been completely detached from the motherboard, then work on the other side. Leave pin 7 for last, make sure your iron is good and hot. Before doing pin 7, heat up the case of the oscillator near the location of the pin (The pin is actually connected to the case, so the case draws away a lot of the heat, and the gradient through the board keeps the solder from melting all the way through).

To help with desoldering you might consider using a solder-sucker, or a soldering wick to help draw away the old solder. One person suggested cutting the crystal's pins, so you can remove them one by one. Of course, if you plan to use this method of attack, order a new 40MHz crystal along with your faster one in case the upgrade doesn't work for you.

Put the socket into the holes where the oscillator used to be. This is the same thing in reverse – instead of prying off the old chip you're pushing in the new socket. Warm up the solder in one hole in the motherboard until it's melted and push that pin of the socket in a bit, then repeat going around clockwise until the socket is set firmly, all the way into the motherboard.

Glue the heat sink on the 63030 with a bit of thermal paste, or use the thermal tape. This solution allows the heat sink to be removed easily. On the other hand, too heavy a heat sink with too little paste may render it loose inside the IIsi case, a very dangerous situation.

Reassemble everything and you're done. You might want to put your 40MHz oscillator into the socket first, just to make sure your computer still works. Be sure to put it back the same way it was facing when you took it out. All of the oscillators have 3 rounded corners and one square corner. On my machine the square corners are all facing the bottom right on my motherboard.

If it works, congratulations. Pop the 40MHz crystal out of the socket and put in the 50MHz crystal. (Do this while the computer is off, of course!) Fire up your

computer and run a benchmark. Giggle like a maniac.

Q: My CPU's only rated at 20MHz. Can the upgrade still work?

A: Possibly. In fact, virtually all of the reported successes have been on machines with CPU's rated at only 20MHz. However, it's possible that a percentage of those CPU's won't work at 25MHz.

The practice of engineering products with margins of safety to cope with random variations in component characteristics has been normal practise for many years. Very few CPU's rated at 20MHz will work *only* at 20MHz. Without this buffer zone, it would be possible for a CPU rated at 20MHz to have occasional errors when the operating environment (such as temperature) fluctuated. Without this safety zone, a CPU operating at its rated speed might occasionally fail.

This means that in some instances the upgrade might be pushing the CPU to its absolute limit, removing some if not all of this safety margin. Computers that appeared to work flawlessly in the colder winter months might possibly begin to exhibit failures on warmer summer days, or when other environmental variables begin to change.

On the other hand, your particular chip may have a safety margin that can comfortably handle the increase. Your 20MHz 68030 might share the same design as the 25MHz 68030, but due to irregularities in the silicon wafer and fabrication process, just didn't pass a parameter tests at 25MHz (plus the 25MHz safety allowance). Such chips are then retested at 20MHz (or even 16MHz) and sold as such.

Marketing may also play a roll here. If demand for 20MHz CPUs is higher than fabrication yield, some chips that might have achieved a 25MHz rating could simply have never been tested beyond the 20MHz range.

What this means is that some people may find that the upgrade won't work at all, while others may find that a heat sink solves the problem (if perhaps the only failed parameter test is related to excessive heat) and still others will have no problem at all. To check and see what speed your CPU is rated, pop the hood and look at the square chip near the bank of four vertical plug-in memory modules. The CPU will have a label like MC68030fe20b, where the 20 represents the highest speed rating that particular chip was successfully tested at. A couple of people have reported that their si's

have actually come with CPU's rated at 25MHz installed.

Q: Why don't I just replace my CPU with one rated at 25MHz?

A: (From James MacPhail) The answer is that it is a much more difficult and expensive operation, and almost certainly requires expensive surface-mount rework equipment. (And will probably destroy the old 68030 in the removal unless the right equipment is available).

Q: Can I go higher than 25MHz?

A: There were two reports that people had gone higher. One reported 27MHz off of a 54MHz crystal, and another claimed to be running off of a 59.4MHz crystal. However, do remember too that the assumption this upgrade bases its validity on is that the IIsi is essentially the same as the 25MHz IIsi - going past that speed may be really pushing an uncertain thing as it is.

Q: Do I have to have SIMMs with a certain speed for this to work?

A: Nobody has tested whether a successful upgrade can be foiled by putting in slower SIMMs, however the logic is appealing. The SIMMs in the IIsi are 80ns chips while the SIMMs in the early IIsi's are 100ns. This seems to follow along with the 25% increase in speed the upgrades gives. 80ns = 25% faster than 100ns. More recent si's have included 80ns chips. Keep in mind that even though you may have upgraded your ram, there are still SIMMs soldered directly onto the motherboard which may be rated at only 100ns.

Q: What if I have a NuBus card or FPU.

A: These seem to be the wild cards in most people's upgrade attempts. Some successful upgrades have been made to systems with NuBus cards, but on the other hand, most of the failures have been experienced on systems with NuBus cards or FPU's. Nobody really seems to know why.

Note that there is a 40MHz oscillator in the Apple NuBus card, but this does not need to be replaced. That oscillator apparently generates signals for the NuBus only and the FPU runs off the motherboard. The fact that some third party PDS cards contain an FPU and no oscillator supports that conjecture. Also, one successfully upgraded machine with an FPU tested increased FPU performance, which would again seem to suggest the FPU takes it timing off the motherboard. But again, this is only conjecture.

Q: What's the fail/success ratio?

A: A poll was taken by Tom Savard over comp.sys.mac.hardware. Here were the results he posted:

Summary of IIsi 20->25MHz Upgrade Log Through 11/1

17	na	NuBus w/FPU	success
na	na	empty	success
na	na	empty	success
17	na	NuBus w/FPU	success
9	na	empty	success
na	na	na	success
5	80 (ns)	NuBus w/FPU	success
9	80	Quicksilver w/FPU	success
5	na	empty	success
17	na	030-direct w/FPU	success ¹
na	na	NuBus w/FPU	success ²
na	na	cache card w/FPU	fail ³
na	na	NuBus w/FPU	fail ⁴
17	80	NuBus w/FPU	fail ⁵

¹ only to 22 MHz - didn't have correct crystal

² computer locked up after 5-10 Min. w/o Heatsink

³ possibly a bad oscillator

⁴ did not have a heat sink installed

⁵ failed with and without NuBus w/FPU installed

It is important to note that any conclusions drawn from the log may be irrelevant because the data sampling is very small and represents only computer owners willing to post news to the net or email me.

And, ironically, computer owners with permanently damaged systems may no longer have the means or the desire to access the net.

In all the reported failures to the net, no hardware damage occurred, and the machines were restored to operable condition by reinserting the original 40MHz crystal back into the socket. (This is the reason for not soldering the new crystal directly onto the motherboard.)

Q: Why doesn't someone just check the chips' speed ratings?

A: Timing calculations must be done for each and every signal pathway in the entire machine because if *any* signal pathway is too slow for the faster clock, then you cannot guarantee that the upgrade will work reliably.

Furthermore, some of the chips are almost certainly Apple-proprietary, e.g. custom PALs and/or ASICs, so a data sheet won't be readily available for them. That makes it even harder to guarantee that all timing is within spec.

Q: Does the upgrade increase the amount

of heat produced by the si, and is this a bad thing?

A: Yes and yes, if untreated. Running the si at a faster clockspeed will increase the heat produced. $P=(I^2)/R$ (power equals current squared divided by resistance) and the upgrade increases the current by 25%, which will increase the power by... well... at least 25%.

Is this a problem? Untreated it could shorten the life of the CPU. Also, the increased heat might cause more processing errors, depending on the quality of your CPU. But the general net consensus seems to be that no permanent damage could befall your hardware if you install a heat sink. Whether you will encounter software errors or not is another question altogether.

Q: Are there any other drawbacks to the procedure?

A: Yes. One area that really hasn't been adequately tested is regarding machines using LocalTalk (this is an area where accelerator boards usually cause difficulties.) So far there has been one report that the speeded up si works fine on LocalTalk, and none claiming problems.

Another area where accelerator boards often have problems is formatting floppy drives, but again there have been nothing but positive reports from those with 25MHz machines in this area as well.

Probably the largest drawback, though, is that altering the system clock may have unexpected and disturbing effects in some instances. Worse still, its effects may be completely unpredictable. There's no worse problem than an intermittent one. This alone is a good reason to keep a 40MHz oscillator close to the computer. But the biggest drawback seems to be basic uncertainty about the process. In a nutshell, it's a gamble, and on top of that no one really knows the long-run ramifications yet.

Q: What does Apple say about this?

A: Nothing. Apple probably won't ever comment on the effects of unauthorized modifications to the logic board (other than that it voids your warranty).

Q: Who should try it?

A: The general opinion on the net seems to be that people should try this upgrade if:

1. They are experienced with a soldering iron, or can get someone who is to help them.
2. Their machine is out of warranty.
3. They are willing to gamble that even if the initial installation process goes successfully, somewhere down the

line they may start to experience random errors, or even data loss.

4. They don't plan to use their machine for any extremely important, expensive, or deadline related work for the above reason.

If you can live with those, then its possible that you could get the closest thing to a free lunch that you may come across in many many years.

Q: Don't you, as the compiler, want to include a disclaimer?

A: Yes. I haven't tried this process - just followed the discussion with interest. I haven't even made up my mind about whether or not I think it's safe. For all I know, your computer will burst into flames, taking your house, apartment building, block, city, etc., with it. But at least you'd get on the evening news...

All the people whose comments I compiled here expressed more or less the same sentiment. If you try this, its your own decision and you have no one but yourself to blame/congratulate if it fails/succeeds. But whatever the result, if you have any corrections or additions you'd like to make to this FAQ list, please email me at eepmatt@casbah.acns.nwu.edu and I'd be glad to include them in the next revision.

Good Luck,
Matt

information provided by Jim Matthews and BMUG

submitted by Gregory L. Carlson

Creating a Watermark in Word for Use with Any Printer

The information in this article applies to Microsoft Word for the Macintosh, version 5.0 and 5.1

Summary:

In Word for the Macintosh, you can use the Picture command to create a watermark in a document header that prints on any printer, including Post-Script printers.

Overview

To create this watermark, set the top margin in your document for an exact, or absolute, measurement. Then create a header into which you insert a gray or light-colored picture that will appear beneath the document text.

Procedure

To produce a watermark in a document header, do the following:

1. From the Format menu, choose Document.
 2. Select Exactly from the list next to the Top Margin setting. Choose the OK button.
 3. On the View menu, verify that Normal is checked.
 4. From the View menu, choose Header.
 5. From the Format menu, choose Paragraph. Type "10 li" (without the quotation marks) in the Spacing Before box and choose the OK button.
- Note: This provides space above the watermark text. You may need to adjust the Spacing Before setting or insert additional paragraph marks in your header in order to achieve the proper vertical spacing.
6. On the View menu, verify that Ruler is checked. On the ruler, choose the Centered paragraph alignment button.

7. Type the watermark text (such as "Confidential" or "Draft").
8. Select the watermark text. From the Format menu, choose Character. Select a large font size (such as 72 pt). Select the Outline option and choose the OK button.
9. The watermark text should still be selected. Copy the watermark text as a picture by pressing COMMAND+OPTION+D.
10. From the Insert menu, choose Picture. Choose the New Picture button.
11. From the edit menu, choose Paste. The watermark text should appear. Note: If the watermark text wraps when you paste it in the picture window, set the left and right document margins to 0 (zero) inches before you press COMMAND+OPTION+D in step 9 above.
12. Select the watermark text in the picture window. Click the rotation tool and drag one of the sizing handles to rotate the text approximately 40 degrees.
13. Close the Edit Picture window.
14. A border appears around the graphic in the header window. To remove this border, select the graphic, and from the Format menu, choose Border. Select None and choose the OK button.
15. Close the header window.
16. From the File menu, choose Print Preview to view the watermark.

Information courtesy of Microsoft

submitted by Cliff Johnson

Classifieds

FOR SALE:

Quadra 950 -
28mb RAM
Mac Plus -
4mb RAM
9600 baud
modem
ImageWriter II
printer
Apple CD 300e

Call Bob
at 559-1124

FOR SALE:

Apple 800k
external disk
drive - \$40

Apple 1200 baud
external modem
- \$25

Call Tim at 571-
1910

New SIG

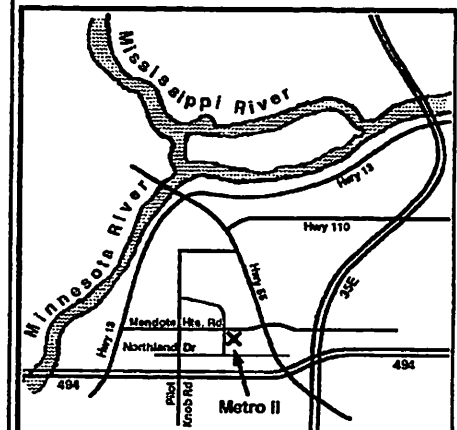
Beginning next month, ClarisWorks users will have their own Special Interest Group. It debuts

Tuesday, Nov. 9, in the Norwest Bank at 5320 Lyndale Ave. South. The meeting will begin at 6:30. Enter through the back door. *Please do not park in the liquor store parking lot next door!* For information, call:

Denis Diekhoff, 920-2437



Meeting Maps...



The History of the Apple II – part 6

APPLE II HISTORY
(PART 6 – THE APPLE II PLUS)
[v1.1 :: 12 Dec 91]

*Compiled and written
by Steven Weyhrich*

©Copyright 1991, Zonker Software

THE APPLE II PLUS: HARDWARE

We now go cruising ahead in time about one year, to June of 1979. Applesoft BASIC had been in heavy demand since the introduction in late 1978 of an improved version. It was needed by those wanting to write and use applications that needed the capability of floating-point math. Because of this, Apple engineers had begun working in 1978 on the Apple II Plus, a modest enhancement to the Apple II. The main attraction of this newer Apple would be Applesoft in ROM, available immediately without having to load it from cassette or disk. Also, having it in ROM would move it out of the part of memory where RAM Applesoft conflicted with hi-res graphics (after all, Applesoft had commands specifically written into it for manipulating those graphics, something that Integer BASIC could only do via special CALLs to the routines in the Programmer's Aid #1 chip).

With the decision made to upgrade the Apple II, other changes were made to make it more attractive to new computer buyers. The cost of RAM chips had dropped considerably, so most new II Plus systems came standard with a full 48K of RAM. Since the disk operating system consumed about 10K of memory, having the full complement of available RAM made it easier to use the Disk II with either version of BASIC. Since users would not need to add the smaller 4K memory chips, the strapping blocks that had made it possible to use either 4K or 16K RAM chips on the original Apple II were removed.

Small changes had already been made to the product since it first began distribution. Most of these changes were made primarily to simplify it and decrease costs of manufacturing. First of all, the original Apple II motherboard, designated as "Revision 0", was changed

to make it possible to display two more colors in hi-res graphics. The Revision 0 board had only four colors (green, violet, black, white), but Wozniak had learned that by making a simple alteration he could get two more colors (blue and orange) and two more varieties of black and white. The Revision 1 and later boards were capable of displaying all eight colors. The means of making this modification to Revision 0 Apples was described by Wozniak in his reply to an article by Allen Watson III about hi-res graphics (in the June 1979 issue of Byte magazine). With that change, people who were not afraid of doing a little electrical work on their computers had some of the benefits of an updated Apple II.

Hardware bugs that Apple engineers fixed included one that caused text characters to be displayed with green and violet fringing, whether in graphics mode or text mode. The "color killer" circuit they added fixed things so that non-graphics text would display in black and white only. Another problem involved RAM configurations of either 20K or 24K (a 16K RAM chip plus one or two 4K RAM chips). In those systems a hardware bug caused the 8K of memory from \$4000 to \$5FFF to be duplicated in the next 8K of memory, from \$6000 to \$7FFF, whether there was RAM present at those locations or not. This made a 20K Apple appear to have 24K, and a 24K Apple appear to have 36K. The Revision 1 motherboard fixed this problem as well.¹

Revision 1 boards also modified the cassette input circuit to respond with more accuracy to a weak input signal, making it easier to load data and programs from cassette. Also, one "feature" of the original Apple II was that any sound generated by the internal speaker also appeared as a signal on the cassette output connector; this was fixed in the new motherboards. Lastly, the RESET cycle was made part of the power-up circuitry, eliminating the requirement that the RESET key be pressed after turning on the computer.^{2,3}

THE APPLE II PLUS: FIRMWARE

More important than the minor hardware changes, however, were the changes in the ROM code. The new

ROM replaced the original Monitor with one that, among other things, better supported the new Disk II drive. Since RESET was now automatically activated when the power was turned on, the new ROM code had the computer automatically do a few things. It cleared the screen (displaying "APPLE II" at the top), and began a scan down the slots, starting at slot 7 down to slot 1. It examined the first few bytes of code in each card's ROM for a specific sequence that identified it as a Disk II controller card. If one was found, control was passed to that card, causing the disk drive to startup and begin loading the disk operating system into memory. If no disk controller was found, the ROM code jumped instead to the start of BASIC (instead of leaving the user in the Monitor, as in the old ROM). This "Autostart ROM", as it was called, made it possible to have a system that started up a program on the disk with little action needed by the user.

The RESET code was more intelligent in the Autostart ROM than in the Old Monitor ROM. There was now a "Cold Start" RESET (which functioned as described above), and a "Warm Start" RESET. A Warm Start RESET could occur without re-booting the Disk II (if it was present); in fact, it ensured that the disk operating system remained "connected" after RESET was pressed. This feature was implemented by setting three bytes at the end of page \$03 in memory. Two of the bytes were the address of the place in memory to which the Apple should jump if RESET was pressed. The third byte was a specially coded byte created from half of the address byte. When RESET was pressed, this special "power-up" byte was checked with the address byte. If they didn't properly match, the Monitor assumed that the power had just been turned on, and it executed a Cold Start RESET. This feature was extensively used by writers of copy protected software, so users could not modify or copy the code in memory simply by pressing the RESET key.

The other major change, mentioned earlier, was the BASIC that was supplied in ROM. Gone was Steve Wozniak's hand-assembled Integer BASIC, in favor

of the newer Applesoft. Since these ROM versions of BASIC used the same memory locations, they could not be used simultaneously. With the introduction of the II Plus, Apple also released the Applesoft Firmware card. This card, which plugged into slot 0, made it possible for previous Apple II owners to have some of the benefits of the II Plus without having to buy an entirely new computer. Even with that card, however, you could not use features of one BASIC while the other was active, and switching from one BASIC to the other erased any program that was being used at the time. The two BASICs could be told apart by the prompt they used; Integer BASIC used the ">" character, but Applesoft used the "J" character.

Another change made to the Monitor ROM made screen editing easier. The original Apple II's procedure for editing a line typed in BASIC or in the Monitor was tedious at best. To change a line of text in BASIC, you had to list the line, move the cursor up to the start of the line, and then use the right-arrow key to "copy" text from the screen into the input buffer. If you wanted to skip part of the line, you had to move the cursor past the text that you wanted to eliminate WITHOUT using the arrow keys. If you wanted to INSERT something into the line, you had to move the cursor off the line (above it or below it), type the additional text, and then move the cursor back into the line to finish copying the original part of the line.

For example, suppose you had typed this line in Applesoft and displayed it on the 40-column screen:

```
JLIST 100
100 FOR I = 1 TO 100: PRINT "I
    LIKE MY APPLE": NEXT : END
```

To change that line so the PRINT statement read "I REALLY LIKE MY APPLE" meant either retyping the entire line, or using the edit feature. (If the line was particularly long, it was preferable to edit rather than retype the entire line). To edit this line, you would have to move the cursor up to the "1" of "100" and begin pressing the right arrow key. When you got to the "L" of "LIKE" you would have to move the cursor above or below the line, type the word "REALLY" followed by a space, then move the cursor back to the "L" of "LIKE", and continue copying with the right arrow key. After editing a line, the screen might look like this:

```
100 FOR I = 1 TO 100: PRINT "I
    LIKE MY APPLE": NEXT : END
    REALLY
```

(In this example, I moved the cursor

down one line, typed "REALLY", and then moved it back to the start of the word "LIKE"). If you didn't make any mistakes it would read like this:

```
JLIST 100
100 FOR I = 1 TO 100: PRINT "I
    REALLY LIKE MY APPLE" : NEXT
: END
```

However, if you didn't take care to skip over the extra spaces inserted in front of the word "LIKE" by the Applesoft LIST command, it could appear this way:

```
100 FOR I = 1 TO 100: PRINT "I
    REALLY LIKE MY APPLE"
: NEXT : END
```

The big problem with these cursor moves for editing under the Old Monitor was that each move required two keypresses. To move the cursor up, you had to press "ESC" and then "D" EACH TIME you wanted to move the cursor up. "ESC A" moved right, "ESC B" moved left, and "ESC C" moved the cursor down. With a long line that needed much editing, this would get old real fast. Not only was it cumbersome, but the layout of the keyboard made it difficult to remember the correct letters used for cursor movement; although "D" (up) was above "C" (down), it seemed that "D" should stand for "Down". Also confusing was that "A" was to the left of "B", but their functions were the opposite of their position!

The new Autostart ROM improved this screen editing process just a bit. Now, pressing "ESC" turned on a special editing mode. Repeated presses of "I" (up), "J" (left), "K" (right), and "M" (down) continued to move the cursor until a key other than ESC was pressed. On the keyboard these letters were arranged in a sort of "directional keypad" or diamond, which made remembering the moves a little easier. The previous ESC editing codes were still supported, but still with their previous limitations. Unfortunately, however, you still couldn't tell whether you were in the regular text entry mode or in the ESC editing mode, and often attempts at changing a line took several tries to get it right.^{4,5}

Other features added in the new Autostart ROM included the ability to pause a listing by pressing Ctrl-S (VERY helpful when trying to scan through a long program!) As mentioned above, pressing RESET would return control through the soft-entry vectors on memory page \$03. This would allow a user to exit from a runaway BASIC program by pressing RESET, and still keep program and variables intact in memory (which

could not be guaranteed with the old Monitor ROM).⁵

John Arkley at Apple wrote the changes to the original Monitor ROM and created the Autostart ROM in November 1978 (he's the "John A" mentioned in the source code listing found in the 1981 edition of the APPLE II REFERENCE MANUAL). After he had done the work and the ROMs had been created, Apple wanted to publish a new version of the Reference Manual to cover the Apple II Plus. The older Reference Manual (affectionately known as the "Red Book") had included an assembly language source code listing of the Monitor ROM. They wanted to include the source for BOTH versions of the Monitor, but a problem came up. While developing the Monitor, Apple had used a local mainframe computer dial-up service known as "Call Computer." They used a cross-assembler on that computer, assembled the code, and then used the resulting object code to create the ROM. (A cross-assembler is an assembler that creates object code for a processor other than the one the cross-assembler runs on. For example, if you can write 8080 machine code with an assembler running on a 6502-based computer, you are using a cross-assembler). Unfortunately, Call Computer had accidentally done a system backup with the source and destination disks reversed, erasing all the files containing the source code for the Apple II Monitors. There were no disk or cassette copies of the source code for the Autostart ROM back at Apple. Working from the source listing in the Red Book, John recreated the source file for the original Monitor, and then disassembled his own modifications for the II Plus and re-created his Autostart ROM source file. Those reconstructed listings are what appeared in the 1981 edition of the Apple II Reference Manual.⁶

Not everyone was pleased with the modifications made in the Autostart ROMs, however. Some of the authors of the magazine CALL-A.P.P.L.E. liked to refer to the new computer as the "Apple II Minus", since Arkley had to remove some of their beloved routines from the ROMs to make room for the new features. Missing from the Apple II Plus ROMs were Integer BASIC, the miniassembler, and Woz's SWEET 16 interpreter (that entire space now being used by Applesoft). Missing from the Monitor were the assembly language STEP and TRACE features, and a set of sixteen-bit multiply and divide routines.⁵

THE APPLE II PLUS: COST

The new Apple II Plus, at \$1,195, sold for over \$100 less than the original Apple II, although it came with more memory and had Applesoft (previously an added expense item) in ROM.

THE APPLE II PLUS: BELL & HOWELL

Apple made a deal early on with Bell & Howell to let them sell the Apple II Plus with a Bell & Howell name plate on it for use in schools. These Apples were black colored (instead of the standard beige), and had screws on the back to keep the lids on (apparently to keep students' hands out). These Apples (sometimes called "Darth Vader" Apples) also had the "shift-key mod" (see below) applied. Since Bell & Howell was a major supplier of school equipment, this was a means for Apple to get a foothold in the school environment.^{7,8}

Bell & Howell also had electronics correspondence courses, and used the black Apple II Plus for one of their courses. They offered a one year warranty, instead of the ninety-day warranty offered by Apple.^{9,10,11}

THE APPLE II PLUS: EARLY USER EXPERIENCES

An Apple II veteran on GENie, Dennis Ulm, kindly provided me with the following reproduction of his ORIGINAL Apple II Plus packing list. It gives a little picture of what early non-disk users had to work with:

APPLE II PLUS PACKING LIST

This package should contain the following items:

part#	description
600-2023	cassette tape: LITTLE BRICKOUT, COLOR DEMOSOFT
600-2024	cassette tape: RENUMBER/ APPEND, ALIGNMENT TEST
600-2025	cassette tape: FINANCE I, PENNY ARCADE
600-2026	cassette tape: LEMONADE, HOPALONG CASSIDY
600-2027	cassette tape: BRIAN'S THEME, PHONE LIST
030-2057	manual: Introductory Programs for the Apple II Plus
030-0044	manual: The Applesoft Tutorial
030-0013	manual: Applesoft II BASIC Programming Reference Manual
030-0004	manual: Apple II Reference Manual

030-0035	publication: Apple Magazine
600-0033	1 pair of game controls
590-0002	cable: to hook up a cassette recorder
590-0003	cable: power cord for the Apple II Plus
030-0001	Apple Warranty Card
600-0816	Apple II Plus System 16K
-or-	
600-0832	Apple II Plus System 32K
-or-	
600-0848	Apple II Plus System 48K

(LITTLE BRICKOUT was an abbreviated Applesoft version of Woz's Integer BASIC Breakout game (the reason he designed the Apple II in the first place). BRIAN'S THEME was a hi-res graphics program that drew lines on the screen in various patterns. HOPALONG CASSIDY was a "guess who" program that also used the hi-res screen).^{12,13}

Also included in Dennis' II Plus box was this photocopied instruction sheet:

TAPE LOADING INSTRUCTIONS

If problems are encountered in LOADING tape programs, it may be necessary to "queue" (sic) the tape before LOADING. To queue a tape, use the following procedure:

1. Rewind the tape.
2. Disconnect the cable from the tape recorder (so you can hear what's on the tape).
3. Start the tape recorder in PLAY mode.
4. When a steady tone is heard, STOP the tape recorder.
5. Connect the cable to the tape recorder and adjust the volume and tone controls on the tape recorder to the recommended levels.
6. Make sure your computer is in BASIC.
7. Type LOAD.
8. START the tape playing.
9. Press RETURN.

The program should LOAD properly. If an error message occurs, repeat the procedure, but try readjusting the tone and volume controls on the tape recorder.

Dennis says that in his experience it took at least five to ten tries to get anything to load properly from tape!

THE APPLE II PLUS: MORE HARDWARE ADD-ONS

Lower-case was still not supported on the new Apple II Plus, though it was a popular user-modification. The thriving

industry for Apple II peripherals made up for this shortcoming, with various vendors supplying small plug-in circuit boards that fit under the keyboard, allowing display of lower-case on the screen (and sometimes direct entry of lower-case from the keyboard). By 1981, when the Revision 7 motherboard was released for the Apple II Plus, a different method of character generation was used, which reduced radio-frequency interference that was generated. For Revision 7 boards, lower-case characters could be displayed with the addition of only a single chip. However, unless a user changed the keyboard encoder with a third-party product, only upper-case characters could be typed.¹⁴

The keyboard itself underwent some changes, both by users and by Apple. The original RESET key was in the upper right-hand corner of the keyboard. The problem with that key was that it had the same feel as the keys around it, making it possible to accidentally hit RESET and lose the entire program that was being so carefully entered. One user modification was to pop off the RESET keycap and put a rubber washer under it, making it necessary to apply more pressure than usual to do a RESET. Apple fixed this twice, once by replacing the spring under the keycap with a stiffer one, and finally by making it necessary to press the CTRL key and the RESET together to make a RESET cycle happen. The keyboards that had the CTRL-RESET feature made it user selectable via a small slide switch just inside the case (some people didn't want to have to press the CTRL key to do a RESET).

Another keyboard limitation was addressed through a modification that became known as the "shift-key mod". This was such a widely used trick that Apple ended up supporting it in hardware when they designed the Apple IIe. Since the II and II Plus keyboards could not directly generate lower-case characters, early word processing programs had to find some way to make up for that deficiency. Apple's own Apple Writer program used the ESC key as a shift and shift-lock key, displaying upper-case characters in inverse video and lower-case in regular video. Other programs suggested installing the shift-key mod to allow more natural entry of upper-case, using the SHIFT key already present on the keyboard. The user had to attach a wire to the contact under the SHIFT key, and run it to the game port where the input for push-button 2 was found. (This push-button PB2, \$C063 in memory, was for one of an optional second pair of

game paddles that third-party hardware companies supplied for the Apple II). The program would assume that all letters being typed were in lower-case, unless the SHIFT key (attached now to paddle button PB2) was also being pressed; in that case the letter would be entered as upper-case. Since the PB2 button was not often used for a second pair of game paddles, it was unlikely that this modification would be accidentally triggered by pressing one of the game paddle buttons. This modification did NOT use buttons PB0 or PB1, which were on the first pair of game paddles. (PB0 and PB1 now correspond to the Open-Apple and Solid-Apple/Option keys on modern Apple II computers).

NEXT INSTALLMENT: The Apple IIe

NOTES

- 1 "Memory Organization", APPLE II REFERENCE MANUAL, 1979, 1981, pp. 70-73.
- 2 APPLE II REFERENCE MANUAL, 1979, 1981, pp. 25-27, 34-36.
- 3 Bruce Field, "A.P.P.L.E. Doctor", CALL-A.P.P.L.E., Jan 1984, pp. 74-75.
- 4 "Apple and Apple II History", THE APPLE II GUIDE, Fall 1990, pp. 9-16.
- 5 APPLE II REFERENCE MANUAL, 1979, 1981, pp. 25-27, 34-36.
- 6 John Arkley, (personal telephone call), Sep 9, 1991.
- 7 Joe Regan, GENie A2 ROUNDTABLE, Category 2, Topic 16, Apr 1991.
- 8 Dan Paymar, "Curing A Shiftless Apple", CALL-A.P.P.L.E., May 1982, pp. 63-64.
- 9 Tom Vanderpool, GENie A2 ROUNDTABLE, Category 2, Topic 16, Mar & Aug 1991.
- 10 Tom Zuchowski, GENie A2 ROUNDTABLE, Category 2, Topic 16, Mar 1991.
- 11 Steve Hirsch, GENie A2 ROUNDTABLE, Category 2, Topic 16, Mar 1991.
- 12 Dennis Ulm, GENie A2 ROUNDTABLE, Category 2, Topic 16, Apr 1991.
- 13 Wes Felty, GENie. A2 ROUNDTABLE, Category 2, Topic 16, Apr 1991.
- 14 Bruce Field, "A.P.P.L.E. Doctor", CALL-A.P.P.L.E., Jan 1984, pp. 74-75.

submitted by Gregory L. Carlson 🍎

The System Utilities Disk

by Phil Shapiro [P.Shapiro]

[This article is the first in a series of GENieLamp articles aimed at novice Apple II computer users. It's hoped that some of these "Beginner Corner" articles might be re-printed in user group publications, to help meet the needs of newcomers to the Apple II.]

The Apple II System Utilities disk is a useful disk that was bundled in with every new Apple IIe, IIc, IIgs, and IIc+ computer sold. Many persons who have bought second-hand Apple II computers might be unfamiliar with what the System Utilities disk can do. This article is being written to give an overview of the functions of the System Utilities disk, pointing out the handful of useful "file management" tasks the disk can perform for you.

In its early form, between 1983 and 1985, the System Utilities disk was named the "ProDOS Users' Disk". If you're still using the ProDOS Users' Disk with your Apple II, you may want to obtain the latest Apple II System Utilities disk from your local Apple user group. The latest version of the System Utilities disk offers some important disk copying enhancements not found on either the ProDOS Users' disk, nor on the later Apple IIc System Utilities disk. (These earlier utility disks took upwards of 17 disk swaps to copy a single 5.25 inch disk. The newer System Utilities disk, with its Fast Copy routine, can copy any 5.25 inch disk in two passes, or fewer.)

As mentioned above, one of the most useful functions of the System Utilities disk is in making back-up copies of your data disks and your software programs. (Software programs that you buy in the store are also commonly referred to as "applications".)

Note, though, that the System Utilities disk can only copy software that is not copy-protected. Since 1990, most software publishers have removed copy-protection schemes from their commercial software.

A second important function of the System Utilities disk is to format blank data disks. Data disks are most frequently used to store writing that is created with word processors. But a data disk can equally well be used to store graphics created with a paint program, or music

created with a music program.

Most Apple IIe and IIc users will be using 5.25 inch floppy disks with their systems. To format 5.25 inch disks you need to specify in which disk drive your data disk is residing. If you have a single 5.25 inch disk drive, that drive is designated as: "Slot 6, Drive 1". If you have a second 5.25 inch drive, that drive is designated as: "Slot 6, Drive 2." These slot and drive designation are purely historical. You do not need to understand why your 5.25 inch disk drive is designated as a "Slot 6" disk drive. To help you remember the slot designations of your drives, you may want to attach a piece of masking tape, showing the slot designation, to the front of the disk drive.

In rare instances Apple IIe and IIc users may have a 3.5" "UniDisk" disk drive attached to their computer. Such a disk drive would be designated as "Slot 5, Drive 1". The internal 3.5 inch disk drive on all Apple IIc+ computers also has the designation of "Slot 5, Drive 1."

When formatting disks with the System Utilities disk, the formatting program will first check to see if there is any existing Apple II programs or data on the disk. If there is, the program will prompt you to make sure you truly intend to overwrite the existing material on disk. If you have any doubts about what is contained on the disk, you can always press escape and then go back and "Catalog" the disk. Doing so reveals the directory, or table of contents of the disk.

It may be helpful to know that it's possible to format a "double-sided, double-density" floppy disk that was previously used on an IBM computer system. There happen to be several gazillion of these lying around now that homes and businesses are using high-density 3.5 inch floppy disks for their data and programs.

You can't, however, format a high-density IBM 5.25 inch floppy disk on an Apple II disk drive. The formatting program will likely tell you: "Disk is damaged," or, "Having problems accessing disk". High density IBM 5.25 inch disks look almost identical to the standard "double-sided, double-density" disks. The telltale difference is that the high-density disks don't have a reinforcing circular ring in the middle of the disk.

Another way to distinguish the two types of disks is the storage capacity listed on the label of the disk. Double-sided, double-density disks have a capacity of 360 kilobytes (360K) on an IBM-style computer. High-density IBM 5.25 inch disks have a capacity of 1.2 megabytes (equivalent to 1200 kilobytes).

When formatting a disk, you need to keep in mind the rules ProDOS has for naming disks and naming files. The rules for both types of names are identical. Here they are:

- 1) Names must be fifteen characters long, or less.
- 2) Names must start with a letter, but may include numbers within the name.
- 3) Spaces are not allowed within a name. But periods can be used within the name.

It goes without saying that you should give a little thought to how you name your files. Naming of disks is not as important. For reasons that are too complicated to explain in a short space, it's often helpful to keep your disk names short. You may even wish to name your disks with a single letter. (Commonly, your first initial.)

A third useful function of the System Utilities disk is to catalog a disk. By cataloging a disk you can view the disk's directory, or table of contents. This can be very useful when you need to refresh your memory about which files are contained on a given disk. Cataloging a disk also shows you how much free room is left on the disk.

Knowing how much free room is left on a disk can be helpful in letting you know when you need to format another data disk. If the System Utilities disk indicates that you have less than 10K on a given disk, the time is ripe to format another data disk. For those of you who may be wondering how much writing can fit in a given amount of disk space, you might recall that 2K of disk space is roughly equivalent to a single typed, double-spaced page. So a formatted ProDOS 5.25 inch disk holds (140K) holds about 70 typed pages of writing. Likewise, a formatted 3.5 inch floppy disk (800K) holds about 400 typed pages of writing.

The Apple II System Utilities disk will catalog the older DOS 3.3 disks, as well as the newer ProDOS based disks. Many of the earlier public domain and shareware programs can be found on DOS 3.3 disks. DOS 3.3 was the standard disk operating system for the Apple II, up until ProDOS was introduced in 1984. These two disk operating systems are incompatible with one another, although it's

possible to transfer text files quite easily back forth between DOS 3.3 and ProDOS disks.

A fourth useful function of the System Utilities disk is in deleting files that you no longer need. It's not uncommon for someone to save some writing that they've done, expecting that at some time in the future they might possibly have a need for it. Two years later, they then discover, that this earlier writing no longer has much usefulness.

The System Utilities delete function can then be used to delete the file that no longer has much use. By doing so you can free up disk space that can be used for newer data.

Some of the functions on the System Utilities disk are very seldom used by anyone at all. You can use the System Utilities to lock and unlock files. This simple procedure helps you protect against accidentally overwriting a file that contains important information. Very few people lock their files, however, because the whole idea advantage of using computers is to update data files with newer, edited versions of the data.

Another seldom used function of the System Utilities disk is the function to create subdirectories. Subdirectories, also called folders, can be helpful in organizing your files on a disk. But using subdirectories requires that you have a mastery of ProDOS pathnames. Beginners can safely stay away from subdirectories without missing out much.

Even if you don't use its functions very often, it's good to be aware of what the Apple II System Utilities disk can do. And if you've bought a second-hand Apple IIe, IIc, or IIc+ computer that didn't come with the System Utilities disk, you would do well to get a copy of it from your local Apple user group. The latest Apple II System Utilities disk is also available for downloading from the Apple II libraries on GENie, America Online, and CompuServe.

Reprinted with permission from GENieL-amp Apple II "A T/TalkNET OnLine Publication" Vol.2, Issue 15 - © Copyright 1993 T/TalkNET Online Publishing and GENie. To join GENie, set your modem to 2400 baud (or less) and half duplex (local echo). Have the modem dial 1-800-638-8369. When you get a CON-NECT message, type HHH. At the U= prompt, type: XTX99014.DIGIPUB and hit the [return] key. The system will then ask you for your information. Call (voice) 1-800-638-9636 for more information.

submitted by Tom Gates 🍏

Toe Magic - Part 2

by Scott Barber

In my last Toe Magic article I began describing the Adaptive Firmware Card (AFC) that the student, a disabled child with Cerebral Palsy, uses to communicate with her computer. Her only access is with a single on/off switch she activates with her right foot, and she cannot verbally communicate. I described some hardware functions that the AFC uses to control the computer and stated that a user could have complete control over the computer even in the event of a system crash.

This article deals with the special software that the AFC uses to interface with the student, and some background history on her experience with the AFC.

The AFC software allows the student to program her own macros and keys into a keyboard buffer. This keyboard buffer is not accessed through the IIGS, but is replaced by the AFC's buffer. This allows the user to define up to 1024 characters allowed by IBM or the 128 (256) characters allowed for the Apple II's. By entering special menus, she can create specific macros that can restart the system, run special applications, or load different NDA's [New Desk Accessories] or CDA's [Classic Desk Accessories] automatically after entering only four different keys.

The AFC special menu also allows the user to 'latch' keys such as Option [Closed-Apple], Control, Command [Open-Apple], and Reset. Latching refers to the holding down of necessary keys to perform a function. Just as we hold down Command, Control, and Reset to 'warm start' our computers, the student must do the same. Her limitation is that she can only type one key at a time. Provisions have been made so that these keys can be held down, or 'latched' down until the sequence is completed.

The AFC also allows the user to change the 'blinking rate' of the menus. When I originally met this student, her rate was set to 5. The parameters are 1 to 29, 29 being the fastest. Since the discovery of this function she has increased her response time to a comfortable 7, after initially complaining that 5 was too slow. Future plans are to coax her to 10, but now that she can control her own speed, she attempts 12 and 13 occasionally to test her skill.

Finally, the AFC sports an external amplifier/speaker that voice synthesizes the letter chosen. The IIGS itself is a ROM3 machine, and has 1MB internal memory with a donated (full) 1MB card from Margaret Comer. It has an external 3.5" GS

drive and 5.25" drive. The IIGS software is System 6.0 which was provided by our group as a donation. Two disks, containing freeware and shareware NDA's and CDA's were also donated by the club (I donated these specific disks to the club earlier the second day).

When I first met this student, her knowledge of the abilities of the AFC card allowed her to activate the mouse within draw and text programs. She could write short letters using AppleWorks 2.x and use tools in Platinum Paint to do small drawings. When prompting her, she remarked that at her previous school she had a bit more access that was allowed at this school, in that she knew how to double-click on applications from the Finder.

The student's teacher had no previous experience with computers, and had just received this new computer two weeks before our first visit. She's not only a wonderful woman, but is one of the most patient and caring teachers I've ever met. I cannot say she was in any way to blame for the student's lack of access, because she was learning the computer, too. In the next week, I think we all learned a lot at a very quick pace, from the student's realization of what she was missing, to my astonishment at how good the AFC really was, to the teacher's constant need to write all this down (the girl and I were to busy exploring new ground together, so the teacher's notes came in very handy from day to day).

The student soon discovered access to her computer on a level of which she had never dreamed. Ironically, her educators were not to blame for her limitation: the makers of the AFC accidentally created the problem themselves.

When I first met this student, she was extremely dependent on other people to run the computer for her. Someone had to turn on the computer, exchange disks when necessary, restart the computer if it crashed, and double-click on applications to open them. Desk Accessories weren't even known, because neither the girl nor her teachers had been trained to use the IIGS on the level the AFC allowed.

As I recall, our first step was upgrading to System 6.0. Margaret provided all the system disks per our user group's distribution rules. Compatibility with the AFC was crucial, and after several minutes with the new system disk no problems were discovered.

Following instinct, my next move was to discover what all the student SHOULD be able to do. Her teacher dug through the computer bookshelf and pulled out a medium sized notebook 2-1/2 inches thick. This intimidating blue manual suggested an immediate complexity that I expected to be

challenging. I was right.

My complaints about the AFC are few, because, in hindsight, I've never seen a better interface system, once configured right. This system allows hands-off access to the computer, even the ability to turn it on and off using the card. Open-Apple commands, Control Panel settings, even warm-starts are all available using the student's interface.

But my complaints about the AFC manual are often followed and filled with unmentionable words. This manual was not written for novice or intermediate users. In fact, with my college technical background, my hardware experience, my software experience, and my programming experience, I feel just adequate to wade through the redundant garbage and intricate nondescript detail of this AFC manual that is reminiscent of IBM technical manuals.

Categorization is not easily understood in the 26 chapters of this manual, and when reading the Chapter titles one cannot be sure what the Chapter covers without an in depth understanding of the AFC interface itself. I think Marty and Walt would be sympathetic to this because I'm sure they've had to look at an IBM manual at one time or another.

Because of the complexity of this manual, the student never realized that she could use the Command, Option, Control, Esc, or Reset keys. Tabs were unheard of; macro was a foreign word.

Two things helped me with this manual: photographic memory and speed reading. By the next day, after a fitful sleep dreaming of this manual, I walked into this girl's life with a few dozen commands that she didn't recognize. After six hours of configuring and re-configuring she could restart the computer, double-click on icons, was familiar with most Open-Apple commands (instead of running the mouse all over the screen) and even changed screen and text colors in the old (CDA) and new (NDA) Control Panel.

That's when her teacher asked if there were a calculator program available for the IIGS.

Instantly I realized that instead of loading Platinum Paint all the time, and having to switch disks constantly, she could use NDA's and CDA's to access many sub-applications under the Apple [in the graphic menu bar] instead of launching into them all the time. The programs that came to mind immediately were D. T. Painter, and WRITEIT.

Now to a IIGS user without knowledge of certain specific NDA's, one can only fill up the 800k system disk so far before it's full. But there is a new disk accessory called LOADDA that allows the user to

load any NDA or CDA AFTER booting into the Finder, thus saving disk space on your system disk. It's written by A. W. Van Santen, and I'm currently using v1.3. IT Takes up only 9K, and allows any combination of NDA's and CDA's to be used, limited only by the memory of the computer.

This prompted me to look even farther and introduce the student to Teach, a word processing program provided with System 6.0. She liked the WYSIWYG (What You See Is What You Get) interface on Teach, and started playing with the font menu.

This student now preferred to write things with Teach, and a helpful NDA for her was LOADFONT, because of similar reasons compared with LOADDA. This allowed her to access any disk based (bit-mapped) font from within any 16-bit word processor, such as TeachReader, Teach, AWGS [AppleWorksGS], et. al. without taking up precious space on the system disk.

This student had discovered only the power she had within System 6.0. In the next installment, she discovered what she can do outside the computer's control, showing her that the IIGS is not just an interface, but a tool. This discovery showed her computers weren't too complex for her, and her fear of working with them subsided when she learned that if something went really wrong, she could just "pull the plug" and start over.

P.S. - Because of the student's special handicap, word processing is still a time consuming task. Knowing other User Groups read this newsletter, and knowing companies like Quality Computers and Apple read it, too, I'm asking for help.

If someone knows of a "word bank," a program that allows a user to use macros to type words and phrases quickly using few keystrokes, that works with AppleWorks 3.0, AppleWorksGS, Teach, or any other commonly used word processor I'm very interested. The student can now type 7 words a minute with her interface, with hope of around 10 wpm as she gets used to the more streamlined configuration that's been constructed for her. I've done some work with HyperStudio, but my success has been limited.

From "Worm's View" newsletter of the "Apple Squires of the Ozarks" Springfield, MO 2/93 via "Sandy Apple Press" published for Apple Corps of San Diego 5/93

submitted by Steve George, whose minor editing is in []'s.

*stgeorge@pnet51.orb.mn.org or
stgeorge@pro-algonquin.cts.com*

GETTING STARTED WITH THE APPLE IIGS

by Steve Weyhrich

BACK TO THE BASICS

This is the beginning of a series in which I plan to focus on helping the user who has just acquired his or her Apple II computer. This article, and subsequent ones, will assume that the reader knows NOTHING about their computer beyond how to turn it on. I hope that the information will be useful to someone who is not currently able to use their computer to its fullest, but wants to learn more. Reader feedback is welcomed and encouraged, as I am no longer a beginner myself, and have only a certain dwindling understanding of what information would be useful to the beginner; understanding what YOU want to learn more about will make this monthly feature more valuable for all of us.

I have chosen to start with the Apple IIGS, rather than with the older versions of the Apple II (the II, II+, IIe, and IIc), because I've recently begun to use this model, and the "beginner" experience for it is most fresh in my mind. I plan to turn the discussion eventually to the older models, but the IIGS is more complicated and I believe it to be a somewhat more difficult computer on which to get "up to speed".

Some of you may not own an Apple IIGS, and you wonder whether there is any reason to make the change. Some have made the change, but just can't get the hang of it, and can't really do what they'd like to with it. This article and the ones to follow should help you out.

(By the way, in the course of this article I make reference to "8-bit" and "16-bit" computers. This relates to the amount of information that the microprocessor is able to handle at one time. The models from the original Apple II up through the IIc Plus are 8-bit computers; the Apple IIGS is a 16-bit computer. The IIGS can handle up to 8 megabytes of RAM in a single block; the older Apple II's can only handle 64K bytes of RAM in a single block, though some programs can use switch-banks of memory to make use of extra memory.)

FINDING THE RIGHT IIGS FOR YOU

Okay, so you've been thinking for a while about getting one of those Apple IIGS systems. You've been envying all those neat features that the IIGS users are always talking about on the A2 Round-

table on GENie, or at the Apple User Group meeting. Or you feel frustrated that there are just not that many new applications (besides educational games) being released for your Apple IIe or IIc. What steps can you follow to make the move to 16 bits?

Most of the decision depends (as usual) on how much money you have to spend. The ideal Apple IIGS system, fully decked out, may require more disposable cash than you have sitting around. That was where I was about 18 months ago, when I first began to seriously consider changing from my souped-up Apple IIc to a IIGS. I had gone as far as I could with my IIc. It had an 8 MHz Zip Chip, a one-meg Apple RAM card, and a Chinook 40 meg hard drive (the CT-40c, which plugs into the disk port on the back of the IIc). This gave me a nice, fast machine, both in terms of speed of disk access and speed of the programs I ran on it.

The system that I REALLY wanted was one with 4 megs of memory (minimum), an RGB color monitor, a fast SCSI card (for a hard disk, and possibly a tape drive), an accelerator card, one or maybe two Apple 3.5 drives, and one Apple 5.25 drive. I decided I could stick with my old reliable ImageWriter I printer for the time being. But the COST of getting my ideal IIGS system seemed prohibitive. I had to try another approach to achieve my goal.

IT COSTS HOW MUCH?!

Let's look at the expenses involved in getting a IIGS. You can't buy it from Apple dealers any more (assuming they even know ABOUT the Apple IIGS), since it was dropped from the dealer list in December 1992. There may be a few new systems out there that you CAN buy from dealers that want to clear out their old inventory, but most people today will have to look to the resale market. If you can find someone who wants to sell his or her entire SYSTEM for a good bundle price, and if you have that much cash available, that is the best way to go. You'll have most (if not all) of the pieces you need to comfortably run the most popular software, and very possibly some of the IIGS programs you've been drooling over. But to know if the price someone is asking for their system is reasonable, you need to know what it costs to buy the pieces via

commercial mail order businesses.

The most consistently available sources for refurbished Apple II and IIGS systems are Sun Remarketing in Logan, UT (800-821-3221), and Shreve Systems in Shreveport, LA (800-227-3971). Both Sun and Shreve have been selling Apple computers (usually discontinued or refurbished models) for some time. There have been modest changes over time for the prices on pieces necessary to create a basic Apple IIGS system; here are their prices as of June 1993

	Sun	Shreve
Apple IIGS CPU, ROM 01 with 256K RAM	\$449	\$349
Apple RGB Monitor (for IIGS)	\$249	\$229
Apple 3.5 Drive	\$199	\$169
Apple 5.25 Drive	<u>\$139</u>	<u>\$169</u>
	\$1036	\$916

(NOTE: prices are for used equipment)

Shreve seems to be the less expensive source of an Apple IIGS basic system. I do not know anything about the relative quality of the equipment available from Shreve compared to Sun. I DO know that the IIGS CPU that I ordered from Sun in February 1992 appeared to be a never-used computer; if it WAS used, it was SO well restored and refurbished that I could not tell the difference (with the exception that the system disks supplied with the computer had Sun's label on them). If you're about to call Sun, however, you will be out of luck: They are currently completely out of IIGS computers as of June 1993, and have a waiting list of about 38 names. Shreve DOES have them in stock (as of mid-June). Neither company is supplying the ROM 03 IIGS, which has 1 meg of memory built-in, instead of the 256K built into the ROM 01 version. Also note that the above prices do not include shipping charges, so allow for that. There are probably differences as well in the warranty offered by either company.

MOVIN' ON UP

Now with this set of building blocks, you do have a IIGS computer, but you will be VERY limited in what IIGS software you can use on it. To have a computer that is capable of running System 6, the latest

version of Apple's powerful 16-bit operating system for the IIGS, you need a minimum of 2 megabytes of memory to do anything useful. You can upgrade the memory on this 256K computer

most inexpensively at this time by either buying it used, as with the computer, or new from the major Apple II mail order houses. Since there were other items I originally wanted on my ideal IIGS system, let's price these as well:

Sequential Systems

GS 4 meg RAM	\$115
Zip GS Card, 8MHz/16K cache	\$173
RamFAST/SCSI card, 256K cache	\$139
127 meg SCSI hard drive	\$304
	\$731

(NOTE: prices are for new equipment)

These prices were taken from the ad for LRO Computer Sales of Woodstock, IL (800-275-4576, or 800-ASK-4LRO) in the July issue of inCider. Very similar prices can be found in the ad for TMS Peripherals of Boca Raton, FL (800-275-4867, or 800-ASK-4TMS), so shop around. These items, along with the cost of the basic system itself, brings the price of the ideal IIGS complete system to \$1650-\$1770 (again, excluding shipping charges).

These prices were approximately the same when I started to build up my system last year, though the hard drive, memory, and SCSI card prices were higher then. Consequently, I immediately ruled out the idea of getting my ideal system all at once; I couldn't afford that. With this information, however, it did make it easier to determine what systems being sold in classified ads REALLY should cost.

BUILD A GS ON A BUDGET

It would be best to find a complete system being sold used by someone who is changing computer platforms to something else. That way, not only can you get all the basic pieces you want, but there may be some nice additional goodies (such as a hard disk or accelerator). If you decide that even a used system is not affordable because you cannot come up with the full price all at once, ask if the seller is willing to have the payments spread out over several months.

If not, then the next best solution is to collect the components one by one. You will not necessarily spend LESS over the long run (and you might possibly spend more), but you will at least be able to get a IIGS and begin enjoying the benefits of a more powerful computer.

The most basic, stripped-down Apple IIGS you can get is simply the CPU (ROM 01 or ROM 03), keyboard, and mouse. You will then need to add a monitor and disk drives. This is where those who are moving up from an earlier Apple II such as the IIe or IIc will find the going easy. For a monitor, you can use the monochrome monitor from your Apple II Plus, IIe, or IIc. You will find, however, that a composite color monitor, although it worked well for graphics, will not display 80-column text clearly.

For a disk drive, you can usually use the ones from your existing Apple II. The disk drives used on the IIc, either the Disk IIc or the UniDisk 3.5, will plug directly into the disk port on the IIGS. The older style Disk II drives used on the II Plus and IIe can be used also; you can just put the same disk card in slot 6 on the IIGS. You can also buy or build a converter plug to allow an older style 5.25 drive to plug into the IIGS disk port. The only disadvantage to the UniDisk 3.5 on the IIGS is that it will run slower than an Apple 3.5 drive, due to a different interleave.

(To get a better explanation of "interleave", see the segment on advances in disk drives in Part 9 of my Apple II History, in the February 1993 issue of the A2 GENieLamp.) [Also available in the eDOM library - ed.]

However, the UniDisk 3.5 will not run any slower than it did on your earlier Apple II, so you haven't lost anything by going with the slower drive.

With a ROM 01 IIGS, you now have the equivalent of an Apple IIe that runs at 2.8 MHz (instead of 1 MHz), and has 256K of memory (instead of the maximum 128K memory on the IIe or IIc). If your IIe or II Plus had a slot-based RAM card, that can be used on a IIGS as a RAMdisk. (Unfortunately, the memory cards used with the IIe auxiliary slot or with the IIc memory expansion cannot be used on the IIGS.) With this arrangement, you have something that is close to what you had before, and you can continue to upgrade from there.

When I was finished with my initial conversion, I had a ROM 01 IIGS, using my Monitor IIc (the "ET" monitor). For disk storage, I used my UniDisk 3.5, a non-Apple brand 5.25 drive, and my Chinook CT-40c hard disk, all of which plugged into the disk port on the IIGS just as it had on the IIc. Because I REALLY needed more memory, I added a C.V.Tech memory card, and installed 3 megs of chips on it, giving me a total of 3.25 megs of usable RAM - almost three times as much memory as my 1.125 meg IIc. I had lost the speed of the 8 MHz Zip Chip

(which I noticed most when using certain AppleWorks macros), but I finally had an Apple IIGS. It was a start.

For those readers who plan to move beyond this start with their IIGS, what you add at this point depends on what you want to do with your new computer. Are you still going to use lots of 8-bit applications? Adding more memory may help with certain programs (AppleWorks, Publish-It!, and ProTerm are examples that come to mind). Want to avoid the floppy shuffle? Getting a hard disk will ease your way. Graphics or games? If you want to get into 16-bit quality, you will eventually need to get that color RGB monitor. Music? A sound board will let you plug your IIGS into stereo sound. And any of these things will enhance the GS operating system, GS/OS, which can be used when you pass the 1 meg barrier: older versions like v5.0.4 will run with 1 meg; newer versions like System 6.0 or 6.0.1 will require 2 megs or more to run well.

In the next edition of Polishing Green Apples, I would like to take a closer look at what you can do with a REALLY bare-bones IIGS system (i.e., 256K RAM and one 5.25 drive), and what it takes to continue upgrading it into a good, productive system.

(If you have any comments or questions that you would like to have addressed in a future Polishing Green Apples column, please send stamped, self-addressed E-mail to S.WEYHRICH. If you cannot find a place to put a stamp on your E-mail, then just send it anyway.)

[Disclaimer: The mention of Shreve Systems, Sun Remarketing, TMS Peripherals, and LRO Computer Sales is NOT to be taken as an endorsement of these companies by Steve Weyhrich, General Electric Information Services, A2 GENieLamp, or the staff and employees of any radio or TV station you might think of. As with ANY mail order company, the buyer should take proper precautions to inquire about warranty, return guidelines, and other such issues. I have no reason from personal experience to believe that any of these companies would treat you poorly; however, I've only ordered from two of them and cannot comment on any others with any assurance.]

Steve Weyhrich
[S.WEYHRICH]

© Copyright 1993 TITalkNET Online Publishing and GENie.


submitted by Tom Gates 🍏

APPLE MacIntosh *REPAIR*

- 1 YEAR WARRANTY ON LOGIC BOARDS
- COMPONENT LEVEL REPAIR
- ROCK BOTTOM PRICING
- FAST TURNAROUND
- ANALOG BOARD REPAIR
- FLOPPY DRIVES (800K & FDHD)
- HARD DRIVES
- POWER SUPPLY UPGRADES

1-612-943-1306
FAX: 612-943-1309

SOLUTRONIX CORPORATION
7255 FLYING CLOUD DRIVE
EDEN PRAIRIE, MN 55344

 mini'app'les
Box 796
Hopkins, MN 55343

ADDRESS CORRECTION REQUESTED

Non Profit Org.
US Postage
PAID
Hopkins, MN
Permit 631

EXPIRE 7-31-12 ID NO: 2333

THOMAS OSTERTAG
1568 HURON ST
SAINT PAUL MN 55108