mini'app'les

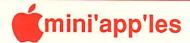
Apple Computer user group newsletter

Volume XI No.10 October 1988

Calendar of Meetings and Events

WHO	WHEN	WHERE	WHAT
Mac Computer Art &	Mon. Oct. 10	Mpls. College of Art and Design	Note 7 or call 870–3268 for most
Design Group	6:45 pm	133 East 25th Street, Room 325	current meeting info (recording).
MicroSoft® Works™ S.I.G.	Tues. Oct. 11 7:00 pm	Edina Library—50th and Hwy 100	Note 13
Languages/Technical S.I.G.	Wed.	Recess—no meeting until further notice. Call for information.	Note 5
The Smalltalk Group	Wed. Oct. 12 7:00 pm	250 S. Milton St. St. Paul, MN	Programming in Smalltalk Note 10
Board Meeting	Thur. Oct. 13 7:00 pm	Brookdale Hennepin Area Library 6125 Shingle Creek Pkwy., Brooklyn Ctr.	Members welcome, Note 1.
Mac Users	Thur. Oct. 13	Eisenhower Community Center	Guy Kawasaki demos 4D Version 2.0!
Note special date & location	(6:30) 7:00 pm	1001 W. Highway 7, Hopkins, MN	Map on page 23. Notes 14 & 4 Note 2
Fourth Dimension™ Group	Mon. Oct. 17 7:00pm	Hennepin County Library, Southdale Branch, 70th & Xerxes, Edina, MN	Small Meeting Room, 2nd Floor
HyperCard™ Group	Mon. Oct. 17 7:00 pm	Hagen Office Equipment 801 W. 77-1/2 St., Richfield, MN	Note 4
MacCAD/E User Group	Tues. Oct. 18 7:00 pm.	Heath/Zenith Computers Shady Oak Road, Hopkins, MN	Note 8
Beginning Macintosh TM	Tues. Oct. 18	Hennepin County Library, Southdale	Note 15
Programmer	7:00 pm. Wed. Oct. 19	Branch, 70th & Xerxes, Edina, MN St. Louis Park Sr. High School	Small Conf. Room, 2nd Floor HELP for Beginners
Apple II Users	7:30 pm	Room 4	and Intermediate users. Note 11
Mac Novice User Group	Mon. Oct. 24 7:00 pm	Highland Branch Library 1974 Ford Parkway, St. Paul, MN	Note 9
Northwest Branch	Tues. Oct. 25 7:00 pm.	Rockford Road Library 6401 42nd Av. N., Crystal, MN	Note 6
Apple IIGS S.I.G.	Wed. Oct. 26 7:30 pm	1st Minnesota Bank 31-9th Ave. S., Hopkins, MN	Note 12
Mac Desktop Publishing S.I.G.	Wed. Oct. 26	First Tech Computer	Note 3
(New Group) AppleWorks© S.I.G.	7:00 pm Thur, Oct. 27	2640 Hennepin Ave., Minneapolis, MN Murray Junior High School	Word Processing—Basic, Intermediate,
Apple works 5.1.G.	7:00 pm	2200 Buford, St. Paul, MN	and Advanced, Note 1
Mac Users	Thur. Nov. 3	Hennepin County Library, Southdale Br.	Notes 14
Microsoft® Works™ S.I.G.	Tues. Nov. 8	Edina Library—50th and Hwy 100	Note 13
Languages/Technical S.I.G.	Wed.	Meeting cancelled—watch for notice	Note 5
The Smalltalk Group	Wed. Nov. 9	250 S. Milton, St. Paul	Note 10
Board Meeting	Thur. Nov. 10	Brookdale Hennepin Area Library	Members welcome, Note 1
Mac Computer Art & Design	Mon. Nov. 14	Mpls College of Art and Design	Note 7
MacCAD/E User Group	Tues. Nov. 15	Heath/Zenith Computers, Hopkins	Note 8
Beg, Macintosh™ Programmer		Hennepin County Library, Southdale Br.	Note 15
Apple II Users	Wed. Nov. 16	St. Louis Park Sr. High School	Possible CD-ROM demo. Note 11
AppleWorks© S.I.G.	Thur. Nov. 17	Murray Jr. High, 2200 Buford, St. Paul	Troubleshooting in AW, Note 1
Fourth Dimension™ Group	Mon. Nov. 21	Hennepin County Library, Southdale Br.	Note 2 Note 4
HyperCard™ Group	Mon. Nov. 21	Summer Recess—No Meeting	Note 12
Apple IIGS S.I.G.	Wed. Nov. 23	1st Minnesota Bank, Hopkins First Tech Computer, 2640 Hennepin Ave.	
Mac Desktop Publishing S.I.G. Mac Novice User Group	Mon. Nov. 28	St. Paul Highland Branch Library	Note 9
Northwest Branch	Tues. Nov. 29	Rockford Road Library, Crystal	Note 6
Holdiwest Branch	1 ues. 140v. 29	Rockford Road Elorary, Crystar	1000

1. Dick Marchiafava, Pres. 572-9305 6. Jere Kauffman535-6745 11. Tom Ostertag488-9979 2. Ian Abel824-8602 7. Joy Kopp440-5436 12. Dick Peterson473-5846 13. Ed Spitler......432-0103 4. Mike Carlson 866-3441 14. David Stovall474-8015



The Minnesota Apple Computer Users' Group, Inc.

P.O. Box 796, Hopkins, MN 55343

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œ.	AppleWorks	Dick Marchiafava	572-9305
œ's	Beginner's Basic	Tom Alexander	698-8633
et	Languages/Tech	Wesley Johnson	636-1826
œ	Tech. Adviser (hdwre)	Roger Flint	771-2868
	Mac Users	David Stovall	474-8015

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Beginning Prog.	Tom Vind	473-0455
HyperCard	Mike Carlson	866-3441
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4th Dimension Prog	Ian Able	824-8602
Novice	Tom Lufkin	698-6523
Smalltalk	Martin McClure	227-9348
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CP/M	Open	

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Circulation this issue: 1350

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Questions — Please direct questions to an appropriate board member. Technical questions should be directed to the Technical Director.

Membership — Send applications for membership directly to the Membership Coordinator:

Anne S. Charity 935-4845

PO Box 796

Hopkins, MN, 55343

Current membership dues are \$20 for the first year and \$15 thereafter. All members receive a subscription to the newsletter and all club benefits. New members receive a special package of member lists and software catalogs.

eDOMs	М	At leetings	Mail Order
Members:	5 1/4" eDOMs	\$3.00	\$4.00
3 1/2'	'Apple/MaceDOMs	\$5.00	\$6.00
Non-Members:	5 1/4" eDOMs	\$7.50	\$8.50
3 1/2'	'Apple/MaceDOMs	\$10.00	\$11.00

Send orders to Mini'app'les at PO Box 796, Hopkins, MN 55343, attention eDOM Sales or MaceDOM Sales.

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 on Mac 3 1/2" disks, or via telecommunications, directly to the Newsletter Editor. Contributions on 5 1/4" disks should be sent to the club PO Box, and marked: "Newsletter Submission".

Deadline for publication is the **1st day** of the month preceding the month in which the item might be included. An article will be printed when space permits if, in the opinion of the Newsletter Editor, it constitutes suitable material for publication.

Meeting Dates – Please phone calendar announcements to John Hansen 890-3769.

Mini'app'les Mini'Info Exch BBS — Club members may utilize the club's BBS: Telephone No. 831-6235

Advertising — Direct all advertising inquiries to the club's Advertising

Coordinator: Bob Lowe 612-933-0464 14717 Idylwood Road Minnetonka, MN 55345

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The Fine Print

The Mini app'les newsletter is an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by Apple Computer, Inc. or any other computer manufacturer. The opinions, statements, positions, and views stated herein are those of the author(s) or publisher and are Computer manufacturer. Apple®, the Apple®, Apple IIGS®, Apple Tademarks of Apple Computer Inc., or any other Computer manufacturer. Apple®, the Apple® &, Apple IIGS®, AppleTalk®, AppleWorks®, Macintosh®, ImageWriter®, LaserWriter®, are registered trademarks of Apple Computer, Inc. LaserShareTM, FinderTM, MultiFinderTM and HyperCardTM are trademarks of Apple Computer, Inc. PostScript® is a registered trademark of Adobe Inc. Times® and Helvetica® are registered trademarks of LinoType Co.







System Finder HyperCard 1.2

HyperCard 1.2.1 is now available!

System Updates for Macintosh

✓ ProDOS and DOS 3.3 systems for Apple II/IIGS

Oct 19

St Louis Park High

for beginners and intermediate users

MacUsers

Eisenhower Center

Kawasaki demos 4D v 2.0

Special Guy, Day, Place

Mini'app'les BBS — 831-6235 (New Software)

October Mini'app'les Newsletter goes to press Oct 17. Please observe minimum one week leadtime.

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Membership Application and Renewal Form

Name:		1 75,159	
Address:			
City:			
State:			
ZIP:			
Home Phone: ()_		
Work Phone: ()_		
New Member ()	or	Renewal ()
Spouse's name:		1 2	
Childrens names:		- 11	

I own or use a:

Sponsored by: _

computers)

Mac+()	SE()		MacII ()		
Apple //or //	+or //e ())	//GS()	//c(
Other (()		- 10		

Special Interests - Check all that apply.

Programming	()	Spreadsheets	()
Business	()	DT Publishing	()
Education	()	Novice	(1

Send to: Membership Coord

Anne S. Charity PO Box 796 Hopkins, MN 55343

Club Dues: \$15/yr + \$5 application fee .



Mini'app'les 1988 Membership Drive

The Club is looking for: New members

Cooperative Dealers and Schools

Renewals and Referrals

With your help and enthusiasm, we are embarking on a concentrated effort to build and strengthen member resources within Mini'app'les to GROW IN 1988!

Add YOUR helping hand!

Sponsoring Members:

Your name will be listed here, each time that you are listed as the sponsor of a new member. Here's the latest honored folks... Congrats!

Dick Marchiafava Joy Kopp Bill Langer

New Members this month:

First—Last	Zip	Phone
Gene Patrin	55013	612-462-2141
Timothy N. Heasley	55013	(none given)
Dave Young	55014	612-781-2332
Steven Axdal	55016	612-853-5830
Julie & Tony Pecors	ro	
•	55044	612-924-8523
Wallace J. Sapp, Jr.	55075	612-944-8559
Paul Spilseth	55082	612-439-2215
Mary E. Kraft	55105	(none given)
Henry C. Brom	55303	(none given)
Cindy Sandstrom	55344	(none given)
Bradley Molitor	55369	(none given)
Barbara Lerschen	55372	612-553-4781
Michael Ferrier	55406	612-332-8300
Thomas Rossin	55412	612-330-1270
Katsuhiko Momoi	55413	(none given)
Doug S. Roerden	55416	612-863-5888
Lael Eginton	55422	(none given)
Dick Rentsch	55423	(none given)
Mark Dantuono	55425	612-853-5414
Todd Gardner	55435	612-546-3481
Kwok Ng	55443	612-633-0735
Kelly D. Breit	55447	612-379-3950
Ron Strand	56001	(none given)

Cooperating Schools:

Anoka Technical Institute 1355 West Main Anoka, MN 55303

Bloomington Comm. Ed. Service 8900 Portland Ave. Bloomington, MN 55420

Brooklyn Park VoTech 900 Brooklyn Boulevard Brooklyn Park, MN 55445

Dakota County Technical Institute 145th Street East Rosemont, MN 55068

Hennepin Technical Institute South Campus 9200 Flying Cloud Rd. Eden Prairie, MN 55344

Kennedy High School 9201 Nicollet Ave. So. Bloomington, MN 55420



Cooperating Businesses:

Businessland 7400 France Avenue Edina, MN 55435

893-1343

Computer Applications

7101 France Avenue

Edina, MN 55435 920-1154

Computer Pavilion

Pavilion Place - 1655 West County Rd B2 Roseville, MN 55113 631-2766

Computerland-Hopkins

11319 Highway 7 Hopkins, MN 55343 933-8822

Computerland

2471 Fairview Avenue North
Roseville, MN 55113 636-2366

Computerland

7025 France Avenue Edina, MN 55435 920-6100

First Tech

2640 Hennepin Ave. South Minneapolis, MN 55408 377-9300

Hagen Office Equipment

801 West 77-1/2 Street Richfield, MN 55423 866-3441

Heath-Zenith - Hopkins

101 Shady Oak Road Hopkins, MN 55343 938-6371

Hutch Computer Industries (H.C.I.)

8017 Glen Lane

Eden Prairie, MN 55344 944-1356

IND Corp

1620 County Road C Roseville, MN 55113

Moore Business Forms

3650 Hazelton Road Edina, MN 55435

na, MN 55435 929-4334

Twin Cities Computer Network
75 South 5th Street — Suite M-100

75 South 5th Street — Suite M-100 Minneapolis, MN 55402 (modem) 349-6200

The GIZMODE Data Bank

3519 West 50th St.

Mpls, MN 55410 (modem) 929-6879

A Challenging Goal:

To have 1,988 members by Dec. 31, 1988

HAMFEST minnesota & COMPUTER EXPO!

OCTOBER 29, 1988 7:30 AM - 3:00 PM

Midwest's Largest Fall Indoor Hamfest & Electronic's Show!

- World Famous Guest Speakers: Roy Neal, K6DUE, NBC Television Science Correspondent and Host of New World of Amateur Radio; and Will Steger, Artic Explorer!
- Second year of Hamfest Minnesota Annual CW Contest! \$100 First Prize.
- Expanded Indoor Flea Market and Huge Retail Display Area with Amateur Radio Dealers from throughout the Midwest, Computer Retailers, and Electronic Supliers.
- Best indoor hamfest location in beautiful, roomy, well-lit HENNEPIN TECHNICAL INSTITUTE, 9000 Brooklyn Blvd., Brooklyn Park, MN. Parking for 2,000 cars.
- Tickets available at all Dayton's Stores, or by mail. Just \$4.00! Tickets day of show \$5.00.

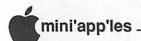
Flea Market Display Tables \$10.00.

Advanced Registration: Mail SASE to Hamfest Minnesota, Box 5598, Hopkins, MN 55343.

Grand Prize: Kenwood TM-721A Dual Bander

Advanced Registration Prize: Kenwood TH-25AT Handheld

Hamfest Minnesot For Information call: (612) Name:	7 - Send a self-addressed, <u>stam</u> a & Computer Expo, Box 5598, Hopl)474-8682(weekdays) & 542-8450	kins, MN (evenir	55343
Street:	State:	Zip:	
TICKET AND FLEA MARKET - 6' x 2 1/2' Tables in Main A - 8' x 2' Tables in Hallway A - Maximum of 4 Tables per Sel Tickets: Flea Market Tables:	INFORMATION: rea - \$10.00 (Full) or \$5.00 (Half) rea - \$10.00 (Full) or \$5.00 (Half) ler in Main Area - No limit in Hallwa	ıy Area	Reserve Early for the Best Location!
Main Area (6' x 2.5' Ta Hallway (8' x 2' Ta You must have an	bles) TOTAL =\$	a marke	t area. Dayton's Stores.



Announcements

AppleWorks S.I.G. Meeting Schedule & Announcements

by Dick Marchiafava

New Fall Meeting Location

AppleWorks SIG meetings are at a new location, which began with the September meeting. We now meet at Murray Jr. High School, 2200 Buford Avenue, St. Paul. Parking is at the north side of the school, on Buford. Enter the main door, inquire for the room location.

Murray Jr. Hi is centrally located a few blocks east of Highway 280, near Como Avenue which, near the border of Minneapolis and St. Paul. See the map for directions.

On the coming schedule:

October 27th: Word Processing; basic, intermediate, advanced.

November 17th: Trouble Shooting in Apple-Works.

December 22nd: Data Base; basic, intermediate, advanced.

Corrections to the published meeting calendar will be posted on the Mini'app'les BBS.

Meetings are monthly, on the 4th Thursday, unless there is a conflict with a major holiday. In that case, the meeting will be the 3rd Thursday of the month. Call 572-9305 if you need information about meetings.

Schedule of Meetings: Apple II User Group

by Lee Reynorlds

All meetings take place on the third Wednesday of the month from 7:30 to 9:00 p.m. in Room 4 of St. Louis Park Senior High School, 33rd and Dakota, St. Louis Park, MN.

The September 21st meeting will be an educational software demo.

The October 19th meeting's theme is "Help!" Beginning and intermediate users: bring your software, questions, and problems. Experienced users are strongly encouraged to bring expertise, patience, and goodwill.

The meeting on November 16th will be a CD-ROM demonstration, if any Apple II volumes are available by then. Otherwise, Sensible Writer, Sensible Grammar, and Sensible Speller will be demonstrated.

December: No meeting. See you at the Swap Meet Saturday, Dec. 17, 10 a.m.- 2 p.m. in the St. Louis Park Senior High School Cafeteria.

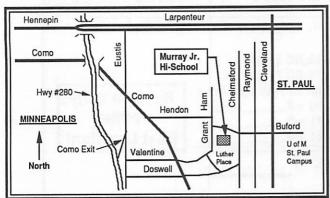
January 18, February 15, March 15, April 19, and May 17, 1989: We have the site booked for these dates, and request suggestions for topics. We may do another Help! session in winter or spring, depending on perceived need.

More information: Tom Ostertag, 488-9979, or Lee Reynolds, 874-7820.

Guy Kawasaki to demo 4D version 2.0 Oct. 13

Thursday, October 13 at 7:00 pm, we fill the theater at the Eisenhower Community Center in Hopkins (Map on page 23) for a return engagement of Guy Kawasaki of Acius. The focus will be a premier demo of 4th Dimension, version 2.0 (real soon now), but Guy is a very animated and interesting speaker. Expect to hear a lot of comments about the computer industry, and Apple, when Guy is in front of the group.

This meeting will be hosted by Mac Users for the enjoyment of all Mini'app'le members. You are urged to attend. (This will be the only Mac User meeting in October. Please mark your calendar for this change of date.)



Location Map for AppleWorks Meetings, Fall of 1988.

Thanks to Frank!

by Joe Carroll MacEDOM Coordinator

rank Van Alstine's article in the August Newsletter, "A Survey of Mini'app'les MacEDOMs for Mac II Compatibility", was a magnificent piece of work and VERY much needed! As your poor MacEDOM coordinator, I only have access to a Mac Plus and sometimes an SE. Thus most of the programs put out so far have not hed the

a Mac Plus and sometimes an SE. Thus most of the programs put out so far have not had the quality control which I would like to see - i.e. full testing on all possible machines and a compatibility chart for each month's production. In addition, MacEDOMs prior to the middle of last year actually predate the Mac II.

Thanks, Frank continues GOTO 8

Current Apple System software available through Mini'app'les:

Software	<u>Ver</u>	<u>Date</u>	Format
DOS 3.3 Master	n/a	09/10/85	5.25"
ProDOS 8	1.6	06/13/88	5.25"
Apple IIGS			
Syst. Disk *	3.2	06/14/88	3.5"
ProDOS 8	1.6	06/13/88	3.5"
Macintosh			
System Tools	6.0	05/01/88	3.5"
Print Tools	6.0	05/01/88	3.5"
Utilities 1	6.0	05/01/88	3.5"
Utilities 2	6.0	05/01/88	3.5"
HyperCard	1.2	04/25/88	3.5"
H. C. Update	1.2.1	05/25/88	3.5"

Apple System Software disk prices are as follows:

3.5" Systems disks \$3.00 each. 5.25" Systems disks \$1.00 each.

Notes:

- The Macintosh System Tools and Utilities disks are available only as a set of 4 disks.
- ProDOS requires 64K of memory on the Apple II and II+
- Apple IIGS System Disk 3.2 also contains:
 ProDOS 16 (P16) v1.6 06/13/88
 ProDOS 16 (ProDOS) v1.6 06/14/88
 BASIC.SYSTEM v1.2 12/14/87
 System Utilities v3.1 03/03/88



The AppleWorks Advisor

A Column For Users Of AppleWorks

by Dick Marchiafava

AppleWorks Update Version 2.1



laris has released version 2.1 of AppleWorks. As gleaned from various sources, this update offers several improvements which include:

- ☐ ProDOS 8, Version 1.5
- ☐ Permits use of @ character in commands
- ☐ Use of 64 character pathnames
- Fixes "disk full delete file" bug which can trash files when saving
- ☐ Intelligent spreadsheet recalculation
- Page number bug fix
- ☐ Supports up to 8 Meg of RAM on llgs
- Ilgs printer buffer bug fix

According to the information sheet I received from Claris, this update is free to users of AppleWorks version 2.0. This sheet says the offer expires September 30. That is a short time to offer the update, considering the announcements were released in August. Hurry!

To find out how to update to AppleWorks V2.1 from whatever version you have, call Claris at 1-800-544-8554. There may be a charge to update from early versions of AppleWorks. I suggest AppleWorks users order this update.

Note: The release of AppleWorks version 2.1 appears to have been sudden. Other vendors whose products work with AppleWorks are scrambling to update their software expansion, patch or installation utilities to be compatible with this new version. Some updates required to work with AppleWorks are Beagle Bros TimeOut version 2.0, Checkmate Multi-Ram version 5.2 and Applied Engineering AW2 Expander version 3.0, or later.

When you get AW 2.1, you may have to park it on a shelf for awhile until the updates for various enhancement products catch up.

Operating System Caution

There has been much discussion in the user community about problems with the recently released ProDOS 8 version 1.5. Without being specific about the bugs being discovered, the consensus emerging from these discussions is that it is probably best to continue to use ProDOS 8 version 1.4 with a patch for a minor bug, or skip onto ProDOS 8 version 1.6 which is beginning to circulate.

Beagle Bros Replies

I recently wrote a letter to Beagle Bros with comments directed to particular people. I

described the repeated initialization delay I experience each time I access Dialer and reiterated my request that Alan Bird make available a mail merge for TimeOut, like the excellent mail merge in AutoWorks. I also expressed my interest in a TimeOut product, "Accountant," which is in development.

Mark de Jong, author of some TimeOut software and Beagle tech support person sent a reply to my letter. He said he would take a look at the delay in the Dialer which I described. Mark says Alan Bird has been swamped with requests for a mail merge and it is probably just a matter of time until he begins working on that.

My interest in Accountant has been relayed to the authors of that package. Perhaps I may be contacted to test it when development reaches that stage.

TimeOut PowerPack

This recently released addition to the TimeOut product line from Beagle Bros is a collection of 10 "Power Tools" for AppleWorks. I have added most of these utilities to my list of desk tools.

ASCII Values

This is a converter to display ASCII, decimal, hexadecimal, binary, code and the screen equivalent for numbers between 0 to 65535. This will be useful when working with printer codes and writing macros.

AWP to TXT

This utility restores to AppleWorks a capability that was removed in the upgrade from 1.3 to version 2.0. In the early versions of AppleWorks, the print ASCII file to disk produced a text file on disk which had carriage returns placed where AppleWorks places them in a word processing document. This type of text file when transferred by modem to other computers, can be reformatted and manipulated.

For those needing text files with hard carriage returns for each line of text, it was necessary to create a "print to disk" driver in the printer section of AppleWorks. Perhaps that may have been considered difficult to do. The ability of producing text files with hard carriage returns was implanted into AppleWorks 2.0, replacing the ability to produce a text file without hard carriage returns.

AWP to TXT restores the ability of producing text files on disk without the added carriage returns of the built-in function. A specific location to save such files to can be

defined and saved as a default. Now I can get the type of text file I need without quitting AppleWorks 2.0 and starting AppleWorks version 1.3.

Category Search

A utility for use with the data base, Category Search lets the user pick a specific category to search. This speeds searches and reduces false finds. Single and multiple wildcard characters are supported in the search.

Desktop Sorter

Lets the user arrange the order of files on the desktop by alphabetizing the files or manually positioning files in the order desired. This could be useful to position files on the desktop when the order of files is critical to the operation of a macro command.

File Librarian

Resembles the similar feature of MacroWorks and the Disk Librarian in AutoWorks. A special data base file is loaded to desktop. File Librarian will read the directory of any ProDOS disks into this data base file, creating a data base catalog of the disks read. Help Screens

A user can change word processing documents into Help Screens. These screens can use normal, inverse and Mouse text in making up the screen. One can create custom help screens or reference lists. I easily converted the word processing file which contains the command summary and description for my macro list into a help screen.

I expect that individuals who are more creative than myself will create some very imaginative screens.

Line Sorter

This utility will alphabetize (A-Z, Z-A) a range of lines in word processing documents. It works best on lines with a carriage return at the end (such as a list). The cursor is used to a define block which contains the lines to be sorted. Sorts are based on the character at the left edge of each line in the defined block.

Program Selector

A great utility for those who need to jump in and out of AppleWorks frequently. This is a more sophisticated utility than program selectors such as "Squirt" or "Bird's Better Bye," which are modifications to ProDOS and operate when one exits a program.

Program Selector launches a specified program directly from AppleWorks and returns to AppleWorks when you quit that application. Up to 4 programs can be defined as applications to launch from AppleWorks. This is a



great time saver if one jumps in and out of AppleWorks, as I do.

If the user exits via the normal AppleWorks "Quit" command, control is given to the external program selector, or the ProDOS Quit command.

Triple Clipboard

Clipboard full? Transfers getting complicated? How would you like to have the equivalent of 3 normal AppleWorks Clipboards?

Well, now you can! Each clipboard is independent. The user can easily switch between clipboards. When accessed, Triple Clipboard indicates the type of data on each clipboard including the number of lines.

Triple Desktop

The complementary utility to Triple Clipboard. Each desktop can use any or all the clipboards. This desk tool lets one have up to 36 files on desktops at once. This can be a handy way to keep different tasks separated when it is necessary to leave one for another.

Most people operate in an "interrupt mode" instead of in a linear manner. Perhaps this is natural to us, or a learned behavior. Regardless, most of us do not (or are not permitted to) complete a task without interrupting the process. I recall times while I worked for the big corporation that I had as many as 6 to 8 projects in work and on hold, while I was directed to proceed elsewhere.

Triple Desktop will allow users to keep the files required for different tasks separate, until ready to return to them.

That is it for PowerPack. On the whole, I find the utilities included to be most useful.

More On Printer Manager

Last month, I left this desk tool (from Desk-Tools II) after only a brief examination. I have had more time to examine it since and have yet to arrive at an understanding of how this print utility enhances AppleWorks.

Once configured with the correct codes, Printer Manager will let the user preset some printer modes globally. Since most of the modes, such as characters per inch, are adequately supported by AppleWorks, I fail to see the point of using Printer Manager. Especially since there is no indication or trace of what features have been invoked with Printer Manager.

Presumably, it could be useful to preset your printer to do entire documents in bold, or some such print mode, where AppleWorks may force a print mode off after a line or paragraph.

I had expected to be able to use Printer Manager to use print modes which the Apple-Works Custom driver does not support. The built-in printer drivers in AppleWorks support proportional printing, the custom printer driver does not. All my efforts to trick Apple-Works into giving me proportional printing failed. Similar efforts using Printer Manager produced the same results.

Somehow, AppleWorks manages to prevail. The hex code for proportional print is 1B 50. With this code entered in Printer Manager and this mode selected, the printer set to hex dump mode (a diagnostic mode), the printout shows the code 1B 50 followed by 1B 4E which is the command for 10 characters per inch, which is also the command to turn off proportional printing. So, the command is being sent and immediately canceled.

A hex dump for an ImageWriter, which will print proportionally, shows a different sequence of codes. I am puzzled about how to use Printer Manager. More about this another time.

AppleWorks questions and tips from anyone are welcome. Send to: 7099 Hickory Drive N.E., Fridley, MN 55432. Include your address and phone number. Or call 612-572-9305, no collect calls. Dick



Thanks Frank, from pg 6

Despite Frank's mammoth work, don't expect such quality control anytime in the near future. The plain fact, as Frank mentions, is that it takes far longer than one would expect to put together and publish a DOM. Actually acquiring the programs is only the start. I periodically survey GEnie's 10,000 Macintosh entries, downloading those which appear interesting. Then starts the real work! Each has to be arranged (after unpacking!) into appropriate folders so I don't lose track of the documents, files, and the actual application.

Then I attempt to make sense of any "Read Me First" or documentation files to try to understand what the thing does and how to install it (if necessary). If I still think the Club could use it, I then actually try it, being mindful that Vaccine is on and watching out for any other squirrelly things! Most of the time things run immediately and display yet (or perhaps the only) instructions. I try out a few of the options and do a slight (usually VERY slight) amount of playing around and finally quit. If any crashes or other hitches occur in this process, I usually trash the thing immediately. You can see from Frank's article that much remains to be done.

Having concluded that the Club could use this goodie, I then to create a write-up. This is usually pieced together from the descriptions and instructions I encountered. Of course, I need to encapsulate it in a short and to-the-point paragraph including several pieces of data and points to look out for which I feel are unique to the Club useage. This miscellaneous information is scattered about, and necessitates returning again and again to the application or one of its documents. What I really need is three Macs: one for the application, one to contain the instructions, and one upon which to perform the write-up.

The above process must be repeated for every program downloaded or given to me. Then there is the problem of a "THEME" for the EDOM. We usually try to collect things such as utilities, games, viruses [Egad! I hope not! Ed.] and the like onto their separate disks. This takes a lot of mulling around to chose a collection of programs that will just about fill a disk, including a written description of the disk (in Take A Letter format). This final part requires a lot of jockeying in order to make things come out right.

The write-up is sent off to your friendly Newsletter editor and the disks are reproduced for your eager hands (and machines).

That's all there is to it! Do you get some idea of what Frank went through as he tried to review some 45 disks full of the stuff (junk?)! You also, I hope, get some appreciation of why I now ask if you would like to help with this mess? What I could really use are people who are willing to periodically (say every 3-6 months or so) put together such a disk. I can help with the final editing - that and the production of the disks are the easy parts! If we had 3-4 people who could regularly contribute, then things would run a lot smoother and I'd feel a lot less guilty (we currently do not put out a disk each month!). I am not really alone; there are two other people helping me. But we are kept quite busy covering meetings and producing the disks. In addition, we are attempting to put together a new version of the disk catalog. Someone who would take that over would also be appreciated and would get a reward (in heaven).

In any case, I wanted to formally and publicly thank Frank Van Alstine for refereeing the EDOM/Mac II battle. A great service has been performed; it will need periodic updating as time marches on!!

THANKS, FRANK!

Apple II SIG
October 19
HELP for
Beginning and
intermediate users



/DOM.48][GIF Version 1.0 © 1988 by Jason Harper



5.25" disk ProDOS format Personal Domain Requested Fee \$0

Run on any Apple II computer using ProDOS. Portions of on-disk documentation reprinted by Tom Gates

WHAT IS IT?

][GIF allows you to convert and display GIFand RLE-format graphics files on Apple II series computers, and to save the converted pictures in standard Apple graphics formats for use with other programs.

WHAT IS NEEDED TO RUN IT?

[GIF will run on a][or][+ with at least 64K of memory, and the IIe, IIc, and IIgs (although there is a better program available for the IIgs: look for SHRConvert wherever you got this program). It should work on any Apple compatible machine, although I cannot guarantee this. It runs only under the ProDOS operating system, and can only work with GIF/RLE files stored on ProDOS disks.

WHAT GRAPHICS MODES DOES IT SUPPORT?

[GIF can use normal HiRes graphics on any machine that it will run on. In addition, it can use the better DoubleHiRes graphics on machines that support it: namely the IIc, IIgs, and any IIe with at least 128K of memory (except for the Revision A IIe, which can't use DoubleHiRes). In either graphics mode, you can select either Black & White or Color conversion, which will produce pictures appropriate for viewing on that type of monitor.

WHAT IS GIF?

GIF (Graphics Interchange Format) is a new standard developed by CompuServe to supplement RLE. It allows pictures of arbitrary dimensions and up to 256 colors (with techniques available to represent even more colors than that). GIF also uses a much more efficient data compression scheme than RLE: unfortunately, the complexity of de-compressing the data, plus the difficulty of coming up with a close approximation of arbitrary colors on a machine that can only display a few colors, makes the decoding of GIF files a lengthy process. All but the simplest files will take over a minute: the most complex may take 15

minutes. Of course, once the file is decoded you can save it in normal Apple format, and redisplay it in a matter of seconds.

HOW IS][GIF USED?

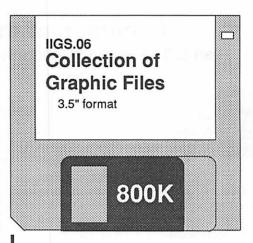
The file "IIGIF" is a ProDOS SYStem program, and can be run from any ProDOS-based program selector, or from ProDOS Basic by typing: -IIGIF from the] prompt. You can also make an auto-booting][GIF disk by copying the files IIGIF and PRODOS to it, then renaming IIGIF as "IIGIF.SYSTEM."

Program operations are performed by using the arrow keys to hi-light a selection, then pressing Return. In many places, you can also press Escape to return to the previous menu.

CONVERT GIF PICTURE starts the conversion process for a GIF file. You should have no trouble using the file selection routine, IF you are familiar with ProDOS terms such as "directory", "volume", and "prefix". If not, just play around with it: there's no way to damage a disk with the file selector. Upon selection of a valid GIF file, you will be asked if you want to use default scaling and positioning or not. The defaults result in a centered picture, scaled so that most of the picture will be onscreen: use it for your first look at a file. If you decide not to use the defaults, you'll be presented with a series of menus asking for conversion parameters. In each menu, the default selection will be marked with an aster-

isk. The actual conversion process will then begin: you will see the conversion on screen. Don't worry if there are long pauses, this is normal. When the conversion is finished, the computer will make a funny noise: press Return when you're done looking at the final picture.

"LOAD HIRES/DHR FILE" allows you to view a HiRes or Double-HiRes picture saved in standard Apple format, such as a previously converted GIF picture saved with "Save picture". DoubleHiRes pictures will be rejected on machines without DHR capability. If you're using a IIgs, you'll have a couple of extra options here.



Review by Tom Gates

By popular demand, another full disk of IIgs graphics files is available. I will also try to include some graphics files on most of the future IIgs disks as well, if the particular disk warrants. Seems many people are struggling artists like myself, struggling with whether or not to tell others who really did the artwork. So for them, I dedicate this disk.

This disk contains about two dozen files in PIC, PNT, GIF or RLE format. In the past I have converted GIF and RLE to the Apple PIC or PNT formats. However, with the introduc-

GOTO 13



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- Product Testina
- BBS Listings
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Logon:

Password:

Comm Parameters:

(612) 349-6200 TCCN (all caps)

GUEST (all caps)
7 Data Bits

1 Stop Bit Even Parity

300, 1200, and 2400 bps

Voice Phone:

332-2101



Evolution of the Apple II

(Part 2, The Second Generation: Ile, Ilc and ProDOS)

by Stephen Brown

n the first part of this article, I discussed the evolution of the Apple II in terms of its implementation, features, and important landmarks in its history. I covered the original Apple II, the ROM upgrade to the Apple II Plus, various peripherals which were critically important, and the advent of Apple DOS 3.3. This article continues where the last one left off, about the changes in the philosophy behind the Apple II series, and how this was expressed in the design of Apple II hardware and software.



pple had to make some major design changes and improvements if the II-line was to continue to be a viable product. There were several seri-

ous limitations that Apple had to address in hardware and software, that necessitated change from the bottom up.

By the early eighties, the "state of the art" had changed, compared to the late seventies. One notable change was the price of computer parts, in particular memory chips and storage devices. With the price of RAM a fraction of what it was, it was now possible to equip a computer with a reasonable amount of RAM quite cheaply. However, both the Apple II and II Plus were limited in their ability to access memory. They were only able to look at expansion memory in "banks" (pieces) no larger than 12K in size, by using the "bank switching" technique (mapping memory chunks into the same address space, one at a time). Though this worked, it was slow because the machine would have to decide which bank(s) of a memory card that data was in, switch in that bank, and then retrieve it in lots of pieces. (One popular and large memory expansion card that supported bank switching was the Saturn 128K Card. It even had 3 LEDs devoted for displaying which one of its 8 16K banks were currently in use.) A preferable approach would be to do bank switching in larger banks. Since the Apple II was an 8-bit machine generating a 16-bit address (2^16th, or 65536 possible unique addresses), the most sensible bank size would be 64K banks.

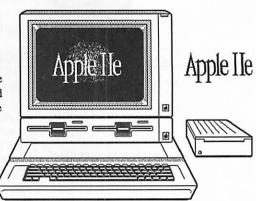
While the Apple II's hardware was elegant in the simplicity of its design, it had some serious shortcomings. The II and II Plus lacked an integrated 80 column display, and an upper/lower-case keyboard. In the days of the II and II Plus, if 80 columns of text were

desired, an "80-Column Card" had to be added. This device, which usually plugged into expansion slot #3, was a whole separate video section which replaced the one on the motherboard when the 80 column text mode was enabled. Unfortunately, there were many brands of 80-column cards (the Videx Videoterm being the most popular) and they were not all compatible with one another, nor was software

compatible with all cards. Compounding the problem was that the quality of the display usually left a lot to be desired, and that the 80 column display did not function in a fashion consistent with the 40 column display. Even with an 80-column card installed, upper/lower-case text could only be entered by some indirect method, because there was no real "shift" key. Methods such as the "shift key mod" (soldering a wire from the keyboard shift-key to the game port) or using a control character (often ESCAPE or Control-A) as the shift key, were frequently used in lieu of a real shift key.

Similarly, DOS 3.3 had not kept up with the changing times. It was not suited to large or varied types of storage devices, nor did it support commands typed with lower case letters. Initially, anything larger than the Disk II (140K) drives were of prohibitive expense. Disk II type drives were commonplace, and DOS 3.3's filing structure worked well. Today, 800K drives are within the reach of most Apple users' budgets, and larger drives are constantly becoming more affordable. Unfortunately, with larger storage devices, DOS 3.3 requires that the drive be artificially divided into "volumes", numbered 1 (not 0) to 255, each one no larger than 400K. Worse still, since DOS 3.3 was never designed to support anything other than a Disk II-like device, to make it work with any other type of device meant that it had to be "patched" (modified). A more sensible approach to disk filing was a tree-shaped filing system, in which volumes (analogous to a tree trunk) can have subdirectories (like branches) which contain organized files (like the leaves). Ideally, a volume should be permitted to be of any size, and all storage devices should be treated similarly.

But these were not the only problems with DOS 3.3. DOS was known too well, and it was being used in unorthodox ways. Over the years, programmers had examined the internal workings of DOS 3.3 (and the motherboard ROMs) so thoroughly that every possible part



that could be used, was used. Programmers had learned to make calls to "undocumented entry points", that is, to depend on routines (short programs) that were designed for the machine's internal use only. On the surface, this doesn't sound like a bad thing, but it means that no major changes or improvements could be made on future revisions without making at least some software incompatible. This was such a serious problem, that making any improvements would require virtually starting over from scratch. Since there was no such thing as enforceable programming standards, this meant that a new operating system might be subject to the same examination and overexploitation as DOS 3.3. What Apple needed was an operating system which was guaranteed to be amenable to change, except for a small section which was guaranteed NOT to change, and whose functions were used in a standard (location independent) way. Finally, Apple did not appreciate the presence of compatibles on the market, and they wanted to do their best to make future machines harder to copy, and future operating systems reasonably incompatible with Apple compatibles. Thus, new hardware would have to have at least one proprietary (custom), or semi-custom component, and the operating system would have to be able to distinguish between a compatible and a real Apple II.

In early 1983, Apple introduced the Apple IIe and IIc as successors to the II Plus. In January 1984, Apple introduced ProDOS, as the successor to DOS 3.3. These represented a major overhaul of the Apple II system, and Apple hoped that they would correct past mistakes.

In many ways, the original Apple IIe (Revision "A") and IIc both fulfilled many of the goals that Apple had aimed for. First, and foremost, they were largely hardware and software compatible with the II/II Plus, but provided the machine with more power and features, and the machines themselves were difficult to copy. Both included semi-custom



and custom gate array ICs, including a PAL (Programmable Array Logic) for timing, an MMU (Memory Management Unit) for memory-refreshing and bank switching logic, and an IOU (Input Output Unit) for video, sound, cassette and gameport I/O functions. The IIc had an additional GLU-PAL (General Logic Unit). The chip-counts on the IIe (31 ICs) and IIc (44 ICs) were drastically reduced compared to the II Plus' 89 chips (approx).

The Apple IIe was a desktop machine similar in appearance to the II Plus, while the IIc was portable and compact with a carrying handle. The former preserved seven of the II Plus' eight expansion slots, but the latter had no expansion slots at all. What would be slots on a IIe were filled on the IIc, so that nothing new would have to be (or could be) added to expand or customize the unit.

In the IIc, slots 1 and 2 contained a pair of serial ports (each similar, but not identical to the Apple Super Serial Card), slot 3 contained an 80-column card and 64K extra memory (similar to the Extended-80 Column Card, discussed later), slot 4 contained a mouse, slots 5 and 6 a disk controller card, based on the IWM (Integrated Woz Machine) disk controller IC, and a built-in disk-drive. Slot 7 was empty. The IIc had a stripped-down gameport, and outputs for both a monochrome standard monitor, a special RGB video monitor, or a LCD flat-panel display. The power supply was an external unit.

The IIe, like the II/II Plus, had seven general purpose 50-pin slots (numbered 1 to 7), but instead of having a special purpose 50-pin slot 0, it had a special purpose 60-pin "auxiliary slot" which was also designed for memory expansion. The auxiliary slot is often thought of as a second slot 3 and a third thumb, for reasons that will be explained later.

The IIe was equipped with only 64K of RAM and 16K of ROM, which included the AppleSoft BASIC interpreter (language) and the Machine Language Monitor. Though it was capable of doing the 12K and 4K bank switching that the II/II Plus could do, it also could do bank switching in 64K banks. The 64K on the motherboard was the first such bank, and was called "main memory". All low and high resolution graphic modes were preserved in the IIe, and the keyboard was a full upper/lower case keyboard, with black lettering on brown keycaps.

Eighty column display was done in a most unconventional way, which made it generally incompatible with any of the II Plus' 80-column display cards. The IIe couldn't actually display 80 columns as it was, even though it already possessed 90% of it's 80-column card on the motherboard. To make the 80

column display work, it was necessary to plug either an 80-Column Text Card, or an Extended 80-Column Card into the auxiliary slot. Both cards made 80 column text display possible, but the latter also supplied an extra 64K RAM, called the "auxiliary bank". This brought the amount of RAM to 128K, like the IIc. Since 80 column display and 128K were almost mandatory for most IIe software, the machine was normally sold with the Extended 80-Column Card already installed.

However, due to the fact that the "firm-ware" ROM for the 80-column card was traditionally mapped to (expected in) slot 3, using any 80-column card in the auxiliary slot disabled the (real) slot 3. As a consequence, only a very few expansion devices (i.e. those without ROM of their own which would conflict with the 80 column firmware) would work in a Ile's slot 3.

As time progressed, it seemed as though Apple was never terribly comfortable about using the auxiliary slot to add additional banks of 64K RAM. In fact, to this day, Apple has never introduced a card with more RAM on it than the Extended-80 Column Text Card. Fortunately for IIe owners, Applied Engineering and others did support the auxiliary slot for memory expansion beyond 64K. Applied Engineering has sold literally tens of thousands of "RamWorks" series cards, some of which are expandable to 16 megabytes.

After the first 50,000 to 100,000 Ile's had been released, Apple updated the motherboard to Revision "B", which supported two additional graphics modes, one called "Double Hi-Resolution" and another, more obscure one, "Double Lo-Resolution" graphics. Double HiRes mode was capable of displaying 560x192 pixels in monochrome or 140x192 in 16 colors (no restrictions). These double-resolution modes, present in the IIc, required an 80-Column Text Card (Double LoRes only) or Extended 80-Column Card (both Double modes) in a IIe, because they needed the extra screen memory from the memory on the 80-column card. Along with the subtly different motherboard in the Revision "B", the keyboard was changed so that it had white letters on brown keycaps.

About 400,000 IIe's after the first Revision "B", around March 1985, new IIe's were equipped with a new ROM set, and the machine was called the "Enhanced IIe" (this was offered as an upgrade for about \$100 for older IIe's). The upgrade provided the machine with a new microprocessor (a 65C02 versus a 6502), new system ROMs, and a new Character Generator ROM.

The 65C02's instruction set had some very handy instructions that the 6502 lacked, and

the new IC had a slightly lower power consumption. The new ROMs improved the handling of interrupts, the smoothness of scrolling in 80 columns, the thoroughness of the built-in self-diagnostic program, and the consistency of the so-called "80 column firmware" routines. The Mini-Assembler of the original Apple II Integer BASIC ROMs also reappeared, but the Enhanced IIe's Machine Language Monitor remained subtly different than the IIc's. One difference was that the IIc's Monitor disassembler included the 65C02's new opcodes (contrary to what I said in "The Apple Monitor", Maple Orchard Vol.8, No.2) but the Enhanced IIe's Monitor did not. Strangely, the new ROMs did not use any of the new instructions peculiar to the 65C02 which would have allowed Apple to optimize and shorten the contents. However, the most important reason behind the introduction of the new ROMs was to increase the overall software-compatibility with the IIc.

The new Character Generator contained a second set of text characters contained in the IIc, called "MouseText". The MouseText Character Generator IC, and the new ROMs to support it, could display graphic characters (e.g. an open apple, a solid apple, a pointer, an hourglass, etc.) mixed with normal alphanumerics. A good place to read up on the MouseText Character Generator is in Open Apple, Vol.1, No.3. The very latest Character ROM lacked the "running man" MouseText characters.

The ROMs in the IIc were upgraded once that I know of. The changes in the new 32K ROMs were mainly concerned with using a 3.5" disk drive (the Unidisk 3.5) on the IIc's disk port and adding the Mini-Assembler to the Machine Language Monitor. The new ROMs were accompanied with slightly modified circuitry, because it was found that a timing error with the serial ports caused loss of characters with high speed (1200 bps and up) modems. In its final days, the IIc's internal memory was upgraded to 1 megabyte (in 64K banks) with an expansion analogous to the Apple Memory Expansion ("Slinky") Card.

To go along with the new hardware, Apple discontinued DOS 3.3 in favor of ProDOS. The first version of ProDOS that I saw was Version 1.0.1 (about 1-JAN-1984). After numerous major and minor revisions (v.1.0.2, 1.1, etc.), ProDOS exists today as ProDOS/8 (for 8-bit) Version 1.4 (17-APR-87). It is very similar to DOS 3.3 in that on a floppy disk, it is 16-sectors-per-track and 140K per disk. However, this is where the similarity ends. ProDOS is an hierarchical filing system, designed to meet the demands placed on it by

GOTO 12



By Tom Alexander
APPLESOFT BASIC—LOOPS



oops really make the computer do what they are noted for: Doing large, dull, monotonous jobs in a shake. Granted, Applesoft BASIC isn't the fastest pro-

gramming language in town but it sure beats alphabetizing one hundred names by pencil and paper.

The LOOP is designed to do repetitive tasks. Computer people call repitition, IT-ERATION. It sounds more mysterious and high-tech. The Applesoft Tutorial will tell you there are two types of loops: IF-THEN loops and FOR-NEXT loops.

FOR-NEXT loops will be the topic of this discussion. You will note that FOR and NEXT are in capital letters. All Applesoft commands are typed in capital letters.

Let us say you want to write a spectacular program that prints your name five times down the left side of the screen. You could accomplish this feat by typing 100 PRINT "Your Name" five times, increasing the line number each time. It would work. It would also be monotonous. What if your teacher told you to print your name one hundred times? There's a better way. Use a loop.

The FOR-NEXT loop will do a task the number of times you specify by the ARGU-MENTS in the FOR statement. It is written as:

FOR X = 1 TO 5.

This sets the number of iterations (repititions) the task will be set to. In this case five times. The NEXT statement written at the bottom of the loop will cause the program to return to the PRINT statement at the top as long as the result of subracting the number of times the task has been performed from the iteration amount (five in this case) is more than zero. Once the subtraction results in zero the NEXT statement fails and the program proceeds to the next line number.

To put this in perspective, let's use the problem stated above and use a loop:

100 FOR X = 1 TO 5

110 PRINT"Your Name"

120 NEXT X

This ALGORITHM (method) will do two things: Print 'Your Name' five times and invoke a carriage return after printing the message enclosed in the double quotation marks causing the messages to print one below the former. This last point is important. Using a loop, you can print a number of characters across the screen on the same line. You have to add one thing to the above algorithm: A semi-colon. Ok. What good is this?

Suppose you wanted to print a line across the entire screen. I've seen this in magazines:

100 PRINT "-(40 dashes)-"

This is fine but you have to count every minus sign you type. This is boring. An easier way would be to let a loop do the counting for you. Here's what I mean:

100 FOR X = 1 TO 40

110 PRINT"-";

120 NEXT X

Notice the semi-colon after the last double quote in line 110. This prevents a carriage return after printing the '-' and you then have a line of forty dashes across the sceen from column zero to thirty nine.

You can also print a line or number of characters of any length any place on the screen. All you have to add is an HTAB statement before the loop to specify where you want the printing to begin. Let's say you want a line from column 15 to column 30. This would be fifteen minus signs:

100 HTAB (15):

For X = 1 TO 15:

PRINT "-"; : NEXT X

The above line will probably need a PRINT statement at the end. Why? Because no carriage return was generated after the last minus sign was printed.

Evolution, concluded from Pg 11

multiple (up to 9) large storage devices (up to 32 megabytes with files up to 16 megabytes), and implicitly supports file date-and-time stamping, with a clock. Data is stored on disk in 512 byte "blocks" instead of 256 byte "sectors". ProDOS automatically sets up a 119 block (63.5K) ramdisk (a "disk drive" in memory) called /RAM (logically slot 3, drive 2), if it finds an Extended-80 Column Card. ProDOS also has a very convenient method of exiting one application and starting another, which allows programs such as ProSEL and MouseDesk to work the way that they do.

ProDOS picks up where DOS 3.3 left off, and while it is harder to learn, it is much more versatile. Apple has proven that they mean business in discouraging sloppy programming by bringing out ProDOS. ProDOS is ever changing; programmers cannot dissect it as they did to DOS 3.3. The only part that is guaranteed not to change is ProDOS' "Global

Page" (256 bytes of variables and vectors). ProDOS is called into action by using a standard Machine Language Interface (MLI), for which there are 26 functions. This mechanism prevents programmers from doing anything "tricky", and hopes to ensure that any program that adheres to calling ProDOS through the MLI will work with all future versions of ProDOS.

ProDOS, unlike DOS 3.3, does not force programmers to take up memory space with the ProDOS Basic command interpreter when it's not needed. This is done by making the BASIC command interpreter (which gives ProDOS commands like "CATALOG" to BASIC) into a file, called BASIC.SYSTEM. BASIC.SYSTEM need not be run or even included if it's not going to be used.

As mentioned before, Apple didn't want their new operating system to work on compatibles, so they included a routine that looks for the "APPLE][" text string in the F8 motherboard ROM, which they presumed was only found in the genuine products. However, for every lock, there is a better locksmith, and soon compatible owners found the ways around this ROM check: either by removing it, or by satisfying its appetite.

Unfortunately, Apple's attitude towards compatibles (mainly II Plus compatibles) appeared to envelope real II Pluses as well. Software which Apple had marketed has been apparently carefully designed not to support II Pluses. Examples of this are AppleWorks (Apple's best selling product), AppleWriter II, version 2 (ProDOS AppleWriter) and Apple Access II.

There was no reason why these programs could not run on a 64K II Plus, except for Apple's unwillingness to include the necessary memory and display drivers. Now however, II Plus users can use AppleWorks because a commercially available "patch" program, PlusWorks, makes it possible to do what should have been done in the first place. AppleWriter II, version 2, can be made to "sort-of" work on a II Plus with only a small change. And with respect to Apple Access II, being unable to use it is no loss.

Apple's attitude has worsened since the IIe, by subordinating research and development on the Apple II series, possibly to protect their precious baby Macintosh series. For more information on this, read Open Apple "Reality and Apple's Vision" (Vol.3, No.10, pp.3.73) and "Claris and its Cash Cow" (Vol.3, No.12, pp.3.90) for some disturbing facts. I hope things have changed!

Even with everything Apple was doing to push the Macintosh, and ignore the Apple II, the sales of Apple II series machines were still



quite good. [Two] years ago, Apple released its first 16-bit Apple II, the Apple IIGS. Though the operating system for the IIGS is not yet available in its final form, the IIGS with its Desk Accessories, higher speed, Toolbox, and its amazing graphics and sound, is now the most exciting Apple II yet.

Recommended Reading:

Apple Computer, 1985. Apple IIe Technical Reference Manual. Addison-Wesley pub. Filer, Aaron, 1984. Apple Thesaurus. Chatsworth, California, Datamost pub. Sather, Jim, 1985. Understanding the Apple IIe. Chatsworth, California, Quality Software pub. Worth, Don, and Lechner, Pieter, 1984. Beneath Apple ProDOS. Chatsworth, California, Quality Software pub.

(To be continued?)

DOM ligs.06, concluded from pg 9

tion of DOM 48 for all Apple II's, I will now be leaving some, not all, files in GIF or RLE format. SHR Convert is available for the IIgs to convert these to PIC and PNT format. And the Freeware program on DOM 48 will allow Apple II owners to convert these to Hires or Double-Hires formats for use in their Apple II programs. I hope this will not cause problems.

Here's a list of some of the two dozen graphics files on this disk:

ALF - the Alien Life Form ARNOLD - from Predator BATMAN - comic book cover-like CAL.RASIN - need no introduction EAGLE KTCA.MOOSE - have you pledged? RIDER - grim reaper ROBOCOP TAJ.MAHAL

WEISHAAR - Uncle DOS, after a long night on the Apple II



Software News for Apple II September

by Tom Gates - Software Director

Apple System Software Update

We received the new Apple IIGS System Disk v3.2, which updates BASIC.SYSTEM, Pro-DOS 16 and System Utilities. (See page 6 for current list of Apple System Software.)

Remember, it is the club's policy to give you coupons good towards free eDOM's when you provide us with programs that can be used for eDOM's or help out in reviewing software and doing a write-up for the newsletter. There is plenty of software needing to be reviewed and a lot of software around that could be made available to the club with your help. And, your help is always appreciated.

Until next time...

GraphicWriter for the IIGS

A review by John Fellows

'm one of those people who bought a IIGS one and a half years ago, and has been waiting patiently for the software to arrive.

I'm patient, but it's been a lonely vigil. At long last, it may be over; at least there is hope. My thing is desktop publishing. Of course, this is a recent thing. If it had been my thing when I bought the machine, I would have bought a Macintosh. As it is, I have been begging and renting a Macintosh so I can compose my works with PageMaker. This, while I wait for the IIGS software to arrive.

PageMaker is the definition of user-friendly. I can say this in a review of Graphic-Writer because PageMaker is only available for the Mac, and the "other" system. Even so, after composing my pages, I had to go to a copier service with Macintosh work stations where — for a fee — I could print my camera-ready pages on a laser printer. The difference between dot-matrix and laser printers is the difference between crayon and Michelangelo. Without the laser printer, the finished product is, well—unfinished. It looks like it was done on a "home" computer.

Of course, I could do some of the work on my IIGS. Using Appleworks, I could write my stories. Using Applefile Exchange on the Mac, I could transfer the files to a Mac disk, then import the stories to the PageMaker page. Only the composing and layout is done on the Mac — and the printing.

But this review is not about PageMaker. It's about GraphicWriter. GraphicWriter, which can only be used on the IIGS, is close enough to PageMaker to be a substitute. PageMaker is miles ahead in fine tuning and extended features, but nevertheless, GraphicWriter is the first true desktop-publishing software to come down the pike for the IIGS. Other software has been seriously deficient in features for true desktop publishing.

The first thing the IIGS user will notice about this program is its speed. Mac users, of course, take this for granted, but previous software... designed for the earlier II's... has been tediously slow, or insultingly primitive. GraphicWriter has the Mac-style desktop in living color, along with the ease of use that goes with it. The manual is short and unsophisticated, but then, the software pretty much speaks for itself. It's friendly.

Graphic Writer has the basic functions necessary to make a good layout. You can import text and graphics, including Appleworks and Paintworks files. You can draw your own, and you can use the word-processing feature to type in your own copy and headlines. You can create up to four columns automatically, or creatively vary the number, size of type and graphic "regions".

"Regions" is the term Graphic Writer uses to explain its concept. You create regions on the page for the different elements (type or graphics) which overlay each other on the page. It takes some forethought, because a graphic region may overlay type if space is not left for it. But mistakes are correctable. Copy can hop over regions, it can be boxed, it can be manipulated in terms of type size and style, it can be cut, pasted and moved — in short, Graphic Writer has the capabilities you want in a desktop publishing program, once you learn the system.

For those of you who plan to produce your work with an ImageWriter, the copy is as clean as an ImageWriter can make it, and you can produce your work in color if your printer has the capability.

It has a complete easel for graphics work similar to most popular paint programs, with all the necessary tools.

But the bottom line is, no laser, no polish. If PageMaker comes out for the IIGS with files that can be transferred to Mac disks and printed on the rent-a-Mac/laser, all other IIGS desktop publishing software is dead meat. There is a hint of such a capability on the horizon — Pinpoint Publishing is reportedly readying a desktop publishing program which will have this "universal" feature.

For the serious desktop publisher who, like me, waits for the software to complement his machine, GraphicWriter (along with a laser printer) appears to be the best product to come down the pike, and because of its head start, will probably continue to be a leader as it is refined and extended. It has the capability to do serious desktop publishing. But for those of us who can't pop for a laser printer, and don't know anyone who has one (connected to a IIGS), serious desktop publishing has still not arrived. But there is hope. We're a patient bunch. We're still waiting.



AppleLink Personal Edition

Downloaded from AppleLink

n May 20, 1988 at the Boston AppleFest®, Apple Computer, Inc. and Quantum Computer Services, Inc. announced a new online com-

munication and information service specifically for Apple computer owners called AppleLink® Personal Edition.

Apple Link Personal Edition will allow Apple users to "talk" with each other and access both Apple-specific and general online information and resources. Designed to enhance computing for productivity, learning, creativity and fun, it will be useful to individuals with a broad range of computer needs and uses. Users can, for example, sample software for Apple computers, exchange electronic mail, check stock quotes, and participate in an online forum with guest speakers such as Apple co-founder Steve Wozniak.

AppleLink Personal Edition provides indepth Apple-related information and services, Apple-specific forums, and a range of general information and communication resources and capabilities. Designed to be widely accessible, it will be available 24 hours a day throughout the United States, affordably priced and easy to operate. In most cases, the service will be accessible with a local phone call. A one-step sign-on procedure, icons and pull-down menus provide simple and time-saving access and navigation through the system.

Charles M. Boesenberg, senior vice president and group executive, Apple USA, said, "With AppleLink Personal Edition, we want to provide Apple computer owners easier access to the information they need, whether it's from Apple, from third parties, or from each other. That way, all subscribers can get the best use from their computers."

James V. Kimsey, president of Quantum Computer Services, said, "Quantum specializes in interactive, system-specific online computer services. We're very excited about joining the Apple community, which is known for its enthusiasm and creativity, with both Apple® II and Macintosh® versions of AppleLink Personal Edition."

AppleLink Personal Edition adds to the spectrum of information and support services available to Apple computer owners. It joins authorized Apple dealers — primary providers of computer support services — as well as user groups, trade publications and other online services to provide an additional source of information and support to system subscribers.

The Apple Community and General Services

AppleLink Personal Edition is organized into two main sections: the Apple Community section and the General Services section. Apple Computer provides information and direction for the Apple Community section. Quantum Computer Services is responsible for the General Services section and manages and maintains the online system.

The Apple Community section includes Forums of particular interest to Apple computer owners; Industry Connection, with demonstration software, product information and technical support from third-party companies; Software Center, with public-domain software and shareware; Apple Headquarters, providing information about Apple products. press releases, and a connection to Apple Customer Relations; Reference Library, with information from Apple's technical and product databases, software reviews, special education software and Apple Programmers and Developers Association (APDA) listings; Apple University, which at introduction will include online courses on BASIC programming and AppleWorks, and; Calendar & Events, a guide to online events in the Apple Community section. Questions posed to Customer Relations on the service will usually be answered within 48 hours.

The General Services section of AppleLink Personal Edition includes People Connection, an area featuring live "chat" from around the country, game shows, and guest speakers in the auditorium; Financial District, with 15minute delayed stock quotes from the NYSE, AMEX and OTC, stock market summary and investor's debate board; Recreation Center, with interactive multi-player games as well as forums on sports, music and other topics; Club House for special interest forums such as photography and genealogy; News Room. with international news and weather: The Mall, with more than 200,000 brand-name items available at discount prices through Comp-u-store, American Airlines EAAsy Sabre service for air, car and hotel reservations, and classified ads; and Learning Center, providing online courses and the electronic Grolier's Academic American Encyclopedia.

Real-time communication and electronic mail functions work across both sections of the service, and a work offline function allows users to save online charges.

As AppleLink Personal Edition evolves, there will be more special interest forums,

system enhancements, and additional services.

A monthly magazine for system subscribers, called AppleLink Update(TM), will provide detailed listings of conferences and online events and the latest information about system features.

Hardware Requirements

The Apple II version of AppleLink Personal Edition works on Apple IIGS®, IIc, and IIe computer systems and on most commonly available modems. (Apple IIe systems need enhanced ROM, 128K memory, an 80-column card, and a Super Serial Card.)

When the Macintosh version is available later this year, AppleLink Personal Edition will also operate on Macintosh 512K, Plus, SE and II computers.

Availability and Price

The Apple II version of Apple Link Personal Edition became available at authorized Apple computer dealers this summer, and the Macintosh version will be available later in 1988.

The AppleLink Personal Edition package, available for a suggested retail price of \$35, will include the software, the user guide, the first year's subscription to the service and the monthly AppleLink Update magazine, and the first two hours of non prime time use. After the first year, there will be a \$35 annual subscription fee for the service and AppleLink Update. AppleLink Personal Edition hourly rates are \$6 per hour for non prime time use (6 p.m. to 7 a.m. weekdays and all day on weekends) and \$15 per hour for prime time use. The hourly charge is the same for baud rates of 300, 1200 and 2400, and there are no surcharges for any services available at introduction.

Quantum Computer Services, Inc. provides online services to personal computer owners and specializes in interactive communications, computer enhancement and entertainment services. Founded in 1985, Quantum is headquartered in Vienna, Virginia and is the creator of Q-Link, one of the nation's most widely used online computer services.

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New Products Introduced at Boston Macworld

he HyperCardTM application and the introduction of new hardware products were the focus of Apple Computer, Inc. at the August Macworld Expo

in Boston, Massachusetts, the largest Macworld® Expo held to date. Reflecting the continuing growing interest in the Apple® Macintosh® personal computer family and its solutions, this year's conference was expanded and held at three separate sites. More than 40,000 attendees and 400 exhibitors participated in events at the Bayside Exposition Center, the Wang Center and the World Trade Center.

"The Freedom to Associate" was the company's main theme as Apple reviewed HyperCard a year after its introduction. Although a new concept in computing, HyperCard is experiencing an accelerated adoption rate for a new technology. Macintosh users are actively exploring HyperCard, a personal software toolkit, resulting in its rapid integration into all segments of Apple markets and customer base. The innovative approach of HyperCard to information navigation, user programming and its use as an "interface toolkit" continue to be distinguishing elements in its success.

Jean-Louis Gassee, Apple senior vice president, research, development and product marketing, launched Apple's activities this year with a reflection on HyperCard: One Year Later and the introduction of the Apple Scanner, the Macintosh II 4/40, and a Macintosh II 4MB memory expansion kit.

New Products

Apple Scanner

Apple introduced the Apple Scanner, an optical image scanner for inputting high quality images and text into the Macintosh computer, and its two accompanying software applications, AppleScanTM and HyperScanTM. A scanner converts an image from a printed document into an electronic document that can be read by the computer, making it possible to include graphics in a document without having to actually draw them.

The Apple Scanner features a bit 8.5-inch x 14-inch flat bed and is capable of scanning text, line art, halftones, and gray scale images into any applications supporting Picture File Format (PICT), Tag Image File Format (TIFF) or MacPaint® file formats. The scanner uses a SCSI interface for high-speed data transfer at variable rates up to 300 dots per inch (DPI). The accompanying AppleScan application

offers users several options to select from in preparing and modifying scanned images for use in desktop publishing. Scanned images can be modified and integrated with the Imagewriter LQ and LaserWriter printers. Images can also be sent by a modem to another Macintosh or to a fax machine. HyperScan, written by HyperCard author Bill Atkinson, allows high-quality images to be easily scanned directly into HyperCard stacks. A powerful application that is delivered in the form of a HyperCard stack, HyperScan offers several user-selectable options and a powerful automatic adjustment feature for handling brightness and contrast.

At a suggested retail price of \$1,799, the package includes the Apple Scanner, AppleScan and HyperScan software, user's

guide and power cord.

Macintosh II 4/40 and 4MB Memory Expansion Kit

Apple also introduced a 4-megabyte configuration for the Macintosh personal computer family, the Macintosh II 4/40. Based on the Macintosh II, Apple's first openarchitecture computer, the basic system includes 4MB of RAM, one 800K floppy disk drive and a 40MB internal hard drive. The suggested retail price for the unit is \$7,269.

Apple is also shipping a 4MB memory expansion upgrade kit for Macintosh II users, featuring four one-megabyte SIMM strips, priced at \$2,399.



MacChuck ™ PC Remote Control Program

If you work with both a Macintosh™and an IBM® PC or exact compatible, MacChuck may solve all your co-processing and file transfer needs. MacChuck lets you use your existing Macintosh and PC hardware to:

- Operate DOS programs on your PC through a window on your Macintosh
- Use the Macintosh clipboard copy and paste commands with PC programs
- Copy text, non-text, and even "MacBinary" files between your Macintosh and your PC serial ports at extremely high speeds

MacChuck is a powerful and flexible tool for programmers, documentation groups, just about anyone working with both Macintoshes and PCs.

If you already have a cable connecting your PC to your Macintosh, just install MacChuck and go. If you don't, we have a universal 3 meter cable that can connect any Macintosh to either a PC or AT serial port.

MacChuck ™

PC Remote Control Program—

\$79.95

Demonstration Version

\$5.00

Universal Macintosh-to-PC Cable

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American Express, VISA, or MasterCard accepted. Minnesota residents, add 6% sales tax.

For more information or to order, call or write us at:

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Vano Associates, Inc.

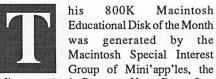
• P.O. Box 12730 • New Brighton, MN 55112 • (612) 788-9547 •

Does not work with PC graphics programs or with network programs. Requires DOS 3.0 or later and Apple System 3.2 or later. Macintosh is a trademark of Apple Computer, Inc. IBM is a registered trademark of International Business Machines Corporation.



Virus and Utilities: MacEDOM #806

by Joe Carroll



Minnesota Apple Computer Users Group, Inc. Additional copies of this disk can be obtained at the MacSIG meetings: \$5.00 for club members and \$10.00 for non-members. They can also be mail-ordered by writing to:

Mini'app'les Attention MaceDOM Sales PO Box 796 Hopkins, MN 55343

Please add \$1.00 for shipping.

The files contained on this eDOM #806 are briefly described below: some contain their own more detailed documentation. Some are also shareware; if you like and use them, please pay the shareware fee. WARNING: These have not been fully tested on all machines and system/finder versions. So, try them out first on something you can afford to lose!

First we have three more virus fighters:



The Guard Dog — (25 Kbytes; shareware, \$20; version 1.0) This is a cdev, a Control Panel Device. To use

it, merely put it into your system folder; it will show up when you activate the Control Panel DA. It can be turned on/off from the Control Panel and you can also select one or more options such as which keys need to be depressed in order to allow renaming, moving, or copying files/folders. This prevents a virus from attempting such without your OK. A password option is coming in version 2.0.



Virus RX — From Apple Computer. (40.5 Kbytes; free; Version 1.0A2) This is an application which

detects files damaged from KNOWN viruses. It provides a window for each volume (disk) reviewed, lists INITs, cdevs, and RDEVs (giving complete pathnames), and permits saving the results to disk. You can select which volumes to examine. Documentation is in Word format.



Interferon 3.0 — (41 Kbytes; free, but donation asked to "The Vision Fund") This is also an application. It

can search for or eradicate 10 different potential problems. Also reports on weird resources in applications. You can restrict the search to certain volumes. Documentation is in MW format.

Then four INITs (Just put these into your system folder and, upon bootup, they will be activated automatically.):



2 Menu Clock INITs — (2 Kbytes each, version 1.3) These install a digital clock in the upper right corner of the menu

bar. One shows seconds; the other does not.



MacPuke INIT — (33.5 Kbytes; free) This INIT goes right inside your system folder (System 3.2+). Every

time the mac ejects a disk, a pretty disgusting digitized sound is emitted. Be the first on the block to get this. Boy, they don't make stuff like this for the IBM. I wonder why...



key ahead — (2 Kbytes, version 0.1) If you've been discouraged by programs which flush the keyboard buffer

while they launch, **keyAhead** is for you. The file is an INIT which allows you to keep typing commands while the program launches. Free.

Then, three cdev's: Put these into your system folder and they will become accessible through the Control Panel DA.



ApFont 3.0.1 — ApFont is a cdev (17.5 Kbytes) which allows you to change the default font used by applications in an

"Untitled" window. If you are bored with Geneva, or just would like to extend the "user preference" concept of the Macintosh to your font choice, this is file for you. You may select any font in your system from a menu to be the default. Compatible with Suitcase, Font/DA Juggler. Version 3.0 includes a feature which

allows you also to change the default size (by popular demand). Shareware \$5.00.



SCSI Parker cdev 1.1 — When your Mac is started up, SCSI Parker installs code (7 Kbytes) into memory which will park

SCSI hard disks by sending a STOP command to the disk controllers when you select Shut Down from the Finder. Requires System 4.1 or newer and Control Panel 3.0 or newer. Shareware, \$5. (Ed: doesn't Shut Down do this??)



Screener — (8 Kbytes, version 2.0) MW documentation. This Mac II shareware cdev permits you to change the

screen size of your Mac II without regard to the actual size of your screen. This is an essential utility for getting many programs written for the old Mac to run on the Mac II. It is also useful if you only have a Mac II and want to test what programs would look like on the old screen.

One cursor and three icons: Use ResEdit to install these into Finder 6.1 (or later). The documentation (MW format) tells you how. Try it on a copy (!!!) and see if you like them.

"Both hands" clock cursor (882 bytes), File Folder icon (566 bytes), System Folder Icon (566 bytes).

Shredder — replaces the trash can (8 Kbytes; free or \$5; version 6.0) By using ResEdit, you can change the trash can to a shredder. It also replaces all references to "throwing away" to "shred". Three resources are copied from the Shredder file and pasted into Finder 6.1. Documentation is in MW format.

Then, ten desk accessories:



SysErrTableDA — (25 Kbytes;)



ResReviewDA — (9 Kbytes;) This DA gives access to all open resources: your APPL, System, Suitcase, etc. It



will display the ID, indicate if it is purgeable and if it is in the System. From the menu you can get detailed displays of all ALRTs, CURSs, PAT s, PAT#s, ICONs and ICN#s and if the Resource has a name you can get a display of The following: PICT, TEXT, DATA, FOND, FONT, FKEY, STR and STR#s. A handy tool for programmers. Quicker and Easier than ResEdit. (Ed: sometimes it takes a very long time - just wait and its attention will return.)



Bugs Bunny Clock — (6 Kbytes;) Whats up Doc?? Analog clock desk accessory.



DADraw — A DA (34.5 Kbytes; shareware \$20; version 2.5) that supports the most useful MacDraw tools (Lines [including

HairLine], circles, rectangles, rounded-corner rects, text, arrows, layering) on a virtually unlimited drawing area. Scroll bars expand to cover whole drawing. Also allows files to be saved to disk. Copy-Paste between clipboard is also supported. MacWrite documentation in Read Me! file.



Note Pad II DA—(15 Kbytes; shareware \$20; version 2.0) Put the Note Pad II File in your system folder and install the Note Pad II

DA with Font/DA Mover. Much better than the original Note Pad — this one permits different subjects in different files and has a schrollable sheet for each. However, to copy something out of it to another document, you have to close Note Pad first. Curious!



Sigma-Edit — (52 Kbytes; free or donation; version 1.12) A text editing DA; good for telecommunication and Three text files of

programming. Three text files of documentation (readable by guess who?). I had some apparent renumbering problems in bringing it up but it worked OK after that.



EPS->PICT — (6 Kbytes, version 1.0) will convert any EPSF (Encapsulated Postscript File) to a PICT (picture)

file, so that you can post it into any document which supports PICT files, which includes many of the current word-processing programs. Great way of importing EPSFs into your word processor. Best part is that this desk accessory is FREE!!

Three DAs from Raymond Lau, the author of Stuffit, a compression/decompression application for use in telecommunications. A MW user's manual is included.



Stuffit Help DA — (12 Kbytes;), UnStuffit DA — (22 Kbytes; version 1.00), Viewer DA — (5 Kbytes; version 1.00)

Finally, four stand-alone programs:



Card File—is a rolodextype card oriented application (55.5 Kbytes; shareware \$20; version 2.01), supporting a

variety of features. Import and Export spreadsheet and database files, print mailing labels and rolodex cards, etc. Supports print merging with MS Word and others. Multilevel sorting and fast searching and Undo. DEMO SHAREWARE, \$20 gets you the full version. Documentation (CF Demo Doc) in Microsoft Word format.



DOCter v2.3 — The DOCter is an application (32 Kbytes; shareware \$16) that will allow you to create stand alone

documents with graphics and full printing capability. The DOCter can accept text files and documents created by it for further editing. This is a great program for sending letters, creating disk based documentation, and being able to read a document without having to worry what application you need to access it. This version adds Show Page for printing and will now run on all Macs with 512k or greater.



Mac a loan — (53 Kbytes, version 1.1) This is the original Mac A Loan from Coconut Info and you will find it very

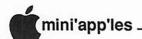
easy to use (the easiest) and SIMPLE. A handy dandy must for the home or business. Compatible with 6.0 and multifinder, includes Documentation and registration info.

ClockSynch—(19 Kbytes) Synchronizes all clocks on an AppleTalk network when one is set. (Ed: sounds dangerous to me!)

Guy Kawasaki demos 4th Dimension v2.0

Thurs. Oct 13





Seatbelt Fastened? Time for SpaceMaker 3D

Mac Users S.I.G., September Meeting by Tom Edwards



s the program ended at the September meeting of Mac Users, *Chuck Thiesfeld* leaned over and asked, "How the heck are you going to

WRITE about this presentation?" That was one very good question, one that I will be trying to answer in the effort to follow, for we had just glimpsed SpaceMaker, a 3D sketching program. I replied that the best way to write this up, would be to use pictures, maybe hundreds of them!

SpaceMaker is being written by Lee Anderson, a professor at the University of Minnesota, School of Architecture. The program allows you to "draw" in 3 dimensions... a neat trick for a 2D computer screen, but something that I think Lee has handled very well. The program is close to a first release condition, perhaps this November, and Lee has the beginnings for two major revisions in the near future. He packs a lot of stuff into a \$99 price, with a program that consumes about 3/4 of a Mac disk.

Lee demo'ed the program with the aid of the club's projection screen. As the program opens, it looks much like any other drawing or painting oriented program. A large tool pallet on the left (movable, of course) seems familiar, yet sports some rather curious icons. Drawing a shape on the screen doesn't appear hard nor suggest anything unusual. However,

Attention, Programmers!!

Have you ever been stumped on a bug for days, only to find out that the solution took you ten minutes to implement? Spent days getting information from Apple Tech, and your buddy tells you about a friend who knew the answer all along?

The solution...MacPRO!!

MacPRO is a unique association of serious Mac programmers, dedicated to providing answers to other members in the Twin Cities. Upon acceptance into MacPRO you become part of this information network. You will join other Macintosh experts in providing and recieving solutions to most programming problems. We will direct you to an authority on your programming question. You will then get the solution you need quickly, over the phone, without spending hours paging through endless technical notes.

Don't delay, call 427-4789 and ask Lee for your MacPRO membership application today!!

after a few clicks on the lines and "surfaces" you've drawn, to identify them for the computer, you then have a representation on the screen of a 3D object. Surfaces are automati-

cally shaded to give the illusion of dimension.

Suddenly, the amalgam of lines has taken on a new life, life in the 3D lane. Shaded polygons become walls, chimneys, buildings. They become objects that can be rotated. stretched. shrunk, moved, combined...

even pushed one through the other!

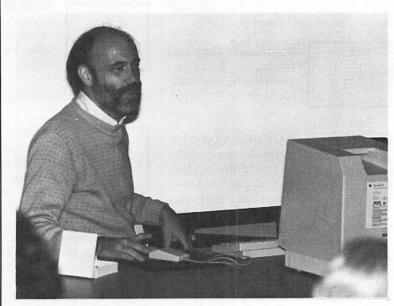
Create a favorite shape? Save it as a library item to be called back and used again and again. Want to dissect your drawing? Move the ASCII file into Excel (or whatever) to count, average, change, or manipulate to find area or how many "walls" face south for solar load projections.

Looking at your collage, maybe you need to see it from a different angle. A few clicks and a drag or two, and a new view unfolds before you. How would it look if the sun cast shadows? Click, click... shadows. How about those shadows if it were October 11th, at 1:54 PM? Yours for the clicking (and a keypress or so for the time and date). And on the Mac II (or your hopped up Mac of choice) with math coprocessor, these moves are done in "real time" for your viewing pleasure.

I could go on and on about features: Laser-Writer output, snap grids, colors, animation and more. The ease of use, and utility of use, was something to see. It impressed me as a program well designed for the architect and professional user. Yet there was a simplicity that also suggested long periods of fun, education and experimentation for a much younger set, too. I could just see kids moving a paint

file in as a "background", then drawing objects on it and moving them around like cars or furniture.

Ya, Chuck! This really needs more than



Pleased as punch, Lee Anderson whips through SpaceMaker, his 3D sketching program. You wouldn't expect Mac Users to get too excited, but the simplicity of merely rotating a view drew a round of applause.

words... something that I'm rarely at a loss for. But even pictures, in this flat, unimaginative paper form, would not impart the dynamic and flowing feel of the illustrations brought to life on the Mac screens. Do you agree?

Back to the future...

Naturally, this meeting was pushed off to a fine start by chairperson *David Stovall*. As I recall, last month there was a remarkable lack of quests for information at the opening Q/A session. This meeting was just the opposite: Dave had to call a halt in order to get the rest of the program in on time. After a call for volunteers (sure... a volunteer-run club can always use more!), here's some of the sticking points that were faced by the back-to-school bunch in September:

- VideoWorks users, where are you? Steve Bibus would like to know if there are folks out there who have some firsthand experience with aComputer Friends video board.
- Trouble saving a large Excel file on a floppy disk? The answer to this seemed to be that the "Save" operation writes the revised file to the disk, then deletes the original. This means that you need enough free room on the disk for another complete copy of the



file to do a "Save." Try a "Save as..." operation. This should write over the old file, abolishing the need for a lot of free space on the disk.

- File and disk repair? SUM (Symantec Utilities for the Mac) seems to be one of the latest and greatest. At the heart of this collection of of programs, is a reincarnation of the hacker's toolkit, MacZap. Other tools include MacTools (from Copy II Mac), Fedit and MacSnoop.
- Virus? Little has been seen around here for the moment. Best to practice safe computing and run the "sniffer" programs often. Dave says that he keeps the NotePad and ScrapBook files right on the desktop in "Icon" view. A change in the icon is one signal of the bite.
- Trouble with SuperSpool programs might come from the introduction of new CDEV's into your System folder. Try systematic removal to see if you can isolate a conflict. (If found, a name change might help. Alpha order can have something to do with it.)
- This one tickled my funnybone! Reflex Plus won't take "Mc" at the start of a field?!! Did I get that right? That's a disaster for an Irish lad working on a genealogy database!
- Accounting functions for business users?
 InSight (Layered Software) got good recommendations from the Users. Flip through some back issues of the newsletter.

 Jerry Solheim made a presentation at a meeting this spring.
- Anyone recommend a good minicomputer for the Minneapolis College of Art and Design? Sure! Most suggestions were for the Mac II as a great blend of power and economy. Software for those "biggies" can get real expensive... and you are locked in!
- Users looking to gain more DA's and fonts were recommended to try paring the actual System down to the barest of bones, then installing SuitCase or Font/DA Juggler+. This seems more stable than tricky menu patch programs or less proven DA handlers.
- Where, oh where, has FreeSoft gone? Scott "Red Ryder" Watson has moved to Pennsylvania. He maintains a Round Table on GEnie, if full details are needed.
- Wizardry and the Mac II don't get along well... matter of fact, they are rated as totally at odds. Frank Van Alstine just won't give up a good campaign and has found some limited running capability. But after a few sessions, La Bomba. It is then inoperative until running Virus Rx, after which it will work for a few more sessions,

then back into the bomb run! Hints?

 Yes, George, you can have your Mac SE and the quiet, too! All that's needed is a trip to your local dealer for an \$80± fan retrofit.
 Fans are available as aftermarket items, but caution: the operation is rather extensive surgery and Apple might cry "foul" if you need their assistance at a later date. Much futzier than fan installation in earlier Macs.

What's new from Apple?

Dave ran through a quick demo of the Apple Scanner, a \$1779 SCSI unit. It comes with two software programs, HyperScan (72 DPI) and AppleScan (300 DPI). The unit can manage 16 levels of gray scale, but no color or OCR (in this software). Look for a more detailed presentation at one of the future Mac meetings (Joy Kopp; this would be a good demo for the MCAD SIG).

Wheew! That's enough for tonight.

More bytes later...
TWE



Guy Kawasaki demos⁴4th Dimension v2.0

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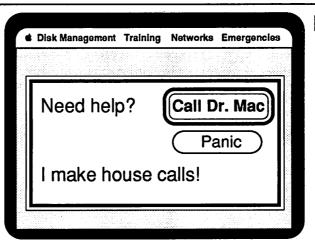
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Wire Job for the Mac

Mac Novice S.I.G., August meeting by Tom Edwards



connection.

ire. That's what they used to call it, when you'd connect two remote locations for communications. Wire.

The two points were actually connected by a piece of thin copper wire. Try the same thing today, with a couple of computers instead of Teletype "clickers", and you might think that you are back to the olden days... there's wire in those cables that run from the computer to the modem, and from the modem to the wall and the phone jack. But after that, who knows? Somewhere, after the wire disappears into the wall, wanders through the house, out to the phone pole and fades off into the distance, the wire might run to a microwave tower, where its signals are changed to a radio to be bounced off of a satellite in distant space before reversing the process to get to the other end of the

Just might be that the call you make to the guy next door substitutes 50,000 miles of empty space for about 50 feet of copper wire. This modern age!

To ASCII* or not to ASCII*...

Ian Abel spent his time giving the group more pertinent facts about the modern age and its means of computer communications than looking to the past. (Let's face it! It ain't easy hammering out this poppycock each month. Forgive me if I tend to weave a little trivia into this stuff every once in a while!) Ian, among more profitable computer and programming pursuits, runs a local BBS (Bulletin Board System) and is a wealth of information about the Mac and its nuances. He got a bit of the short end of the stick for his topic at this meeting (August 22 at the Highland Branch Library), 'cause of all of the neat Q and A's during the opening stages of the meeting... but Ian was also the provider of a great many of the A's during this part, too!

A modem can put you in touch with the world, albeit a rather specialized part. Here, you can browse databases, read chatty messages on serious and not-so-serious subjects, keep up with current events, manage financial information, ask questions of folks with the same interests as you, and perhaps even provide an answer or two to someone going through something that you experienced not so long ago, and answers are fresh in your mind. You can do this one-on-one, actually wiring two computers directly

together, be they Mac or mixed. A second step is to call the local BBS's... a fun way to get familiar with your communications avenues... usually without any service cost involved.

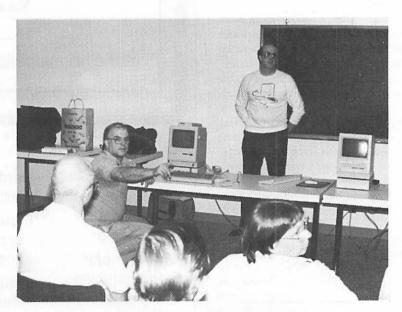
Adventuring further, the BIG TIME is to connect to a commercial service such as Compuserve, GEnie, MacNet or AppleLink. This can really put you in touch with the power people, but also bears a cost to you for the time that you spend on line. Fees to "sign up" usually run in the \$10-\$30 range. Costs "on line" can be \$5.00 per hour, or less, during non-prime-time access. Sometimes there are premiums if you tap into a pay-for section of the service. The BIG CHARGE comes when you call during peak business hours, when fees jump to \$30, \$50 and maybe more, per hour!

The how-to of all this involves software (a communications program), the hard-wire (a cable to get from here to there) and a modem (if you are planning on using the phone lines as part of the link between you and someone else). Our bell rang just as Ian was beginning to venture into the nuts and bolts of speed (baud), error checking protocols and compatibility (read "Hayes protocol"). To get all of the answers to this, you'll just have to come to the September meeting, when Ian does a return engagement to fill in the missing pieces.

So, how do you do that?

Why did Ian get a late start on the communications program at this meeting? It was all of those Q and A's that *Tom Lufkin*, chairperson for the group, had bouncing around the room. Mac Novice S.I.G.? These are Pro Questions, baby! To wit:

- Hard or floppy? What are advantages of the hard disk over the floppy? Speed and capacity, surely. But the hard disk also brings with it the specter of the dreaded "crash"... something that can happen to a floppy, too, but lacks the magnitude to be quite as frightening.
- Speaking of hard drives... if you have a CMS that seems squirrely on your Mac II (don't we all have a II?), use the Control Panel selection to zap your parameter RAM on Restart. If you are unsure of what all this means, call CMS or your dealer for some help. (Might try leaving a message on a BBS about it, too!)
- And how does one prevent a crash? Run "clean" systems, systems not encumbered with un-proven programs, Desk Accessories and tricky cutsies like sounds or home-brew fonts. The best insurance remains liberal sprinklings of good old -S... save your work often! (See? I just did it, and it didn't hurt one teensie, weensie bit.)
- A good word processor? Sorry, folks, this will take diligent study on your part. It's



Tom Lufkin (kneeling) tells Nan to "Watch out behind you!" She falls for it, giving him enough time to hide La Bomba from the Mac Novice group. Ian Abel (standing) practices "parade rest" for the next meeting of the Indiana National Guard.



like the choice in wine, cars or life-mates. What suits one may be poison to another. Read reviews, know what you want to be able to do, ask others about what they use, and test-drive a few that sound the best to you.

- One person at the meeting is using the meeting for all that its name implies. He has not yet bought a Mac. Nutin' wrong with that! 'Course I hope he selects a Mac, and that is his intention, but it pays to find out all that you can BEFORE you take the leap.
- One Mac Novice is looking to transfer MLS (realtor) sheets into his Mac. Scaming is the related technology, ranging from \$200 ThunderScan units to \$2000 OCR (optical character recognition) equipped flatbed scanners. Due to the graphics involved, two passes may be required, if both are to be captured. For this one, since OCR is not perfect, hand transfer, or perhaps direct transmission by modem, might be in order. (See how we can weave in the need for all these gadgets and expansion of your horizons?)
- Tables in Word? Call up your Ruler (... the one on the screen, nerd, not the one from the Land of Id!) and check the left side in the tab area. There's a vertical line tab mark that is an aid for tables. Also, try ending your table lines with the special character, Shift-Return. This places a J mark instead of the mark at the end of each line, allowing the table to be treated as a collection of lines, rather than individual paragraphs. Other ingredients are tabs (not spaces), and a mono-spaced font like (boredom) Monaco.
- Print out of HyperCard without going through the Dialog box? That's a request that was beyond the resources available at this meeting!
- Trying to master the art of using the mouse to draw cartoons? Practice, practice, practice. Also, fiddle (not piddle) with the Mouse settings in the control panel and try them all for "feel."
- Change the cursor to a left-hand arrow?
 Possible with some DA's or ResEdit patching, but the pro's suggest that this one be left alone. Failure to heed this warning holds the potential for some of those crashes that we were trying to avoid earlier.

A final question on RAM Disks tilted off into a ram-bling (gotchya!) discussion of memory and the evolution of the Mac systems in general. RAM disks were needed, when disks were floppy, slow and small, not to mention when programs also worked in 128K.

Power. We all are striving for just a little bit more. Like the line at the end of a favorite

Ring my chimes!

HyperCard S.I.G., August meeting by Tom Edwards



ounds were kind of the thing at the August HyperCard meeting. The back room at Hagen Office Equipment makes a terrific presentation

room for this questing group of a dozen or so Mac'ers. In addition to going over the "how to" of getting sounds into your stacks (use ResCopy), we also heard from someone who did a lot of that for a stack to promote his handcraft, windchimes.

Nathan Ranaga Farber wanted to use the capabilities of HyperCard to let people see, and hear, his Celestial Wind Carillons. It was a great idea. Aided by the MacNifty Sound Capture device, he has included the sight and sound of windchimes in a HyperCard stack. It totals up to a full disk when the individual notes of each chime, and the random sound when caught in a breeze, are tallied up for six chimes. If you look in the September issue of MacUser, Flash Card section, you'll see more about the stack.

Nathan is (was) in town to display his works at the Renaissance. He called the local Apple office to see what Mac meetings might be available while he was here. Apple steered him our way for the evening – thanks, Apple!. (He gave me a disk with his stack on it. If you'd like a copy, give me a call. I'll try to get it to Joe Carroll and let him consider it as an eDOM, also.)

Mike Carlson, chairperson for the HyperCard group, had the main feature for this meeting, the Apple CD-ROM unit. For \$1,199, you get a way to access 550 megabytes of information on a compact disk. Not only

that, but Apple has done double duty. For the Scotch in you, the CD-ROM also will pump out Van Halen from your favorite CD into your stereo.

So far, there appear to be about a dozen CD databases available. Apple's Showcase demo runs you through for a good feel of what all this can lead to. The HyperCard driver opens up access to humungus amounts of data at your fingertips. With a transfer rate of 150 kilobytes per second, it was a breeze keeping up with the video. The audio took noticeable pauses to gulp in each chunk... sounds take a lot of memory! This could be made less annoying with some attention to access, using transition points as spaces to grab the bytes. Nonetheless, the addition of high quality sound does add a great dimension to the review of data that might be pretty dry, otherwise.

As one further attraction, the CD-ROM can also access LaserDisk for smooth action video. No question that this is a field that will be fun to watch develop.

In Search Of...

For those of you wanting to check the BBS's for HyperCard material, look into Triumph (HC only), MacSkyline or Fifth Dimension. These are local boards that focus on the Mac. Stuff often shows here shortly after it's posted on the national services such as CIS and GEnie.

More bytes later...

TWE



documentary of mine, "Gizmo." It goes something like this... "...dedicated to the principal that man's grasp should always exceed his reach!"

More bytes later...
TWE

* ASCII: A Standard Code for Information Interchange, or something to that effect. Each keyboard character is given a number code that the computer comprehends. Almost all computers can understand a file using ASCII. Boy! I got to quit this. I'm giving the computer human abilities!







Designs on You.

DeskTop Publishing S.I.G., August meeting by Tom Edwards



ee. Now I know how sardines feel. The DeskTop Publishing group really packs 'em in. There must have been at least 25 folks in

attendance at the August meeting. The First Tech demo room was beyond capacity, and some had to spill over into the main store area. Lucky that there was a big doorway so they could still be in on the presentation.

And what was the attraction for everyone? Long-time PageMaker user and DeskTop vanguard, Nathan Everett. Nathan is now with Dotson Institute, a Personal Computer Training School. In this capacity, he will soon (November) be putting on full-week PageMaker training sessions for those that REALLY want to learn the ins and outs of this powerful program. He took a few moments to recall his first presentation to the Mac group on PageMaker 1.0 in early 1985... been a lot of ink on the roller since then.

We interrupt this program...

Before jumping into his nicely assembled and visually supported program on tips for the aspiring document and newsletter designer, Nathan let us in on a social note that will be history when this hits your mailbox. September 24, he and *Michele Palmer* will marry. Michele is an Aldus employee that has made several presentations to the

Mini'app'les club. Ahhh, destiny. This must be a match struck in type!

Back to the presentation. Nathan has designed a lot of DTP documents over the years. He feels that there is no "cookbook" recipe that works well for everyone, but told of the main ingredients that usually get him going on the right track. If you approach each project in an organized and methodical manner, you might find some of these hints to your advantage:

- Start with pencil and paper and rough out a
 basic idea of what you want to accomplish.
 This is one part of the process that is quick
 and easy in pencil, but gets rather set in the
 bits if you attack it directly on the computer.
- Keep a focus on who your document it intended to reach. Your design exists only to communicate a message to your audience, and if it is a very general audience that you are going for, remember, in Minnesota (probably other states, too!) 25% of the population may not have completed high school. Don't turn it into a self-aggrandizing effort towards only your own sense of great art.
- Think about the psychology of the look and feel of the finished piece. The weight of the paper, its finish, margins to grip without hiding the type, balance of elements on the page or spread, even the typeface and weight. Hold your lines to about 2 alphabets

in length; that's an easy amount to read without having the eye wander and lose place in getting back to the start of the next line.

 Use a "grid" to help organize and balance the elements on the page. This doesn't mean have only little blocks of things, but does call for modularity and multiples of the grid to form balance. Use the vertical ruler, set to picas, and with "Snap to Ruler" enabled your type should align across the page for a more organized appearance.

As examples of good and bad design practice, Nathan passed out some of his past efforts for review. These made easy reference to the design elements that he was describing.

Output can range from the lowly ImageWriter to high fashion Linotronics; each has a place in relation to the intent of the piece. Most work today calls for at least a LaserWriter, and Nathan had some tips for squeezing the most out of that device. Coated stock works best for keeping the sharpest copy. Several light passes with spray fixative will help to hold it all together (test first!) Use a medium density setting, and if the black areas show streaks, touch them up by hand instead of changing the setting. Do NOT send paper through to print on the back side; this is a recent and emphatic announcement from Apple and Canon!

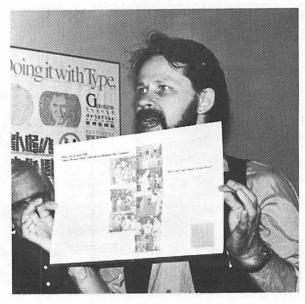
For reference, you might want to read Jan White's "Graphic Design in the Electronic Age." He wrote "The Grid Book" for RSG! And there is always "Publication Design" by Nathan Everett.

Help for those in search of a printer.

Chuck Bjorgen, Chairperson for the group, found a lot of interest at a previous meeting for tips on finding a printer and getting the job done right the first time. At his urging, Sharon Gorus took the time to put together a list of questions; things to ask of your printer and things to be ready to answer for your printer. She went through the items, elaborating on most, and passed out a sheet of notes. It includes a lot of practical sense items that will help you get the results that you want. If you'd like a copy, seek out Sharon or Chuck... I'm sure that they will be happy to accommodate.

More bytes later...
TWE

Nathan Everett shows one example of a "gridded" newsletter layout to the DeskTop Publishing S.I.G. at the August meeting. Chuck Bjorgen (background) tries desperately to get into the photo, but the photographer outfoxed him!





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Apple II S.I.G

October 19

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