



# mini' app'les

Apple Computer user group newsletter

Volume X No. 4 April 1987

Calendar of Meetings and Events

WHO	WHEN	WHERE	WHAT
Board Meeting	Wed. Apr. 1 7:00 pm	1st MN Bank 8320 42nd Ave. N., New Hope	Members welcome—meeting is tentative. Call first—Note 1
Mac User Combined Mac S.I.G.s	Thur. Apr. 2 6:30/7 pm	Hennepin County Library—Southdale Branch, 70th and Xerxes, Edina	Appleshare and possibly Adobe Illustrator and Mac II — Note 3
Dakota County Branch	Tues. Apr. 7 7:00 pm	1301 Wilderness Run Dr. Eagan	Open Topic, Note 5
Languages/ Technical S.I.G.	Wed. Apr. 8 7:30 pm	1st MN Bank 31 9th Ave. S., Hopkins	Note 14
The Smalltalk Group	Wed. Apr. 8 7:00 pm	250 S. Milton St. St. Paul	Programming in Smalltalk Note 4
Apple II S.I.G. (Regular Mini'app'les)	Wed. Apr. 15 7:30 pm	Derham Hall High School 540 S. Warwick, St. Paul	Datashow (Blumberg Comm.) and Springboard's Newsroom Pro — Note 2
U. of Minn. Mac Users' Group (UMMUG)	Thur. Apr. 16 7:30 pm	UM Physics Building, Rm 210 116 Church St. S.E., Minneapolis	<i>Charles Lukaszewski</i> 338-8581
Apple IIGS S.I.G. (New S.I.G. - First Meeting)	Wed. Apr. 22 7:30 pm	1st Minnesota Bank 31 9th Ave. S., Hopkins	Note 11
AppleWorks© S.I.G.	Thur. Apr. 23 7:00 pm	Derham Hall High School 540 S. Warwick, St. Paul	Using the AW spreadsheet, Part II Note 8
Northwest Branch	Tues. Apr. 28 7:00 pm.	Rockford Road Library 6401 42nd Av. N., Crystal	Note 9
Board Meeting	Wed. May 6	1st MN Bank, New Hope	Members welcome, Note 1
Mac User Combined Mac S.I.G.s	Thur. May 7 6:30/7:00 pm	Hennepin County Library—Southdale Branch, 70th and Xerxes, Edina	CAD Systems. Possibly Mac II Note 3 or Note 10
Dakota County Branch	Tues. May 12	1301 Wilderness Run Dr., Eagan	Open Topic, Note 5
Languages/Technical S.I.G.	Wed. May 13	1st MN Bank, Hopkins	Note 14
The Smalltalk Group	Wed. May 13	230 S. Milton, St. Paul	Note 4
Apple II S.I.G. Regular Mini'app'les	Wed. Apr. 15 7:30 pm	Location in May Newsletter	Note 2
UMMUG	Thur. May 21	UM Physics Building, Rm 210	<i>C. Lukaszewski</i> , 338-8581
Northwest Branch	Tues. May 26	Rockford Road Library	Note 9
Apple IIGS S.I.G.	Wed. May 27	1st Minnesota Bank, Hopkins	Note 11
AppleWorks© S.I.G.	Thur. May 28	Derham Hall High School, St. Paul	Note 8

Notes: (See page 3 for telephone numbers)

- |                   |          |                     |                   |                 |
|-------------------|----------|---------------------|-------------------|-----------------|
| 1. Ann Bell       | 544-4505 | 5. Bob Pfaff        | 9. Jere Kauffman  | 13. Mike Frazee |
| 2. Ed Spitzer     | 432-0103 | 7. John Gammell     | 10. Mike Carlson  | 14. Chase Allen |
| 3. David Stovall  | 474-8015 | 8. Dick Marchiafava | 11. Dick Peterson | 15. Joy Kopp    |
| 4. Martin McClure | 227-9348 |                     | 12. Tom Alexander | 890-3230        |

Coordinators - Please Call John Hansen (890-3769) by the 10th in order to have your meeting listed correctly!



### Board Members

President	<i>Ann Bell</i>	544-4505
	8325 39th Avenue N., New Hope, MN 55427	
Past President	<i>David Laden</i>	488-6774
	1215 W. Laurie Rd, Roseville, MN 55113	
Vice-President	<i>Ed Spüler</i>	432-0103
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	Box 17301 Minneapolis, MN, 55417	

Communication Director	Dan Buchler	890-5051
Software Director	Steve George	935-5775
Technical Director	John Hook	435-6281
SIG Director 1	Mitch Bronson	920-3870
SIG Director 2	Dick Marchiafava	572-9305
Branch Director	Dick Peterson	473-5846

### Coordinators

Adviser - Spreadsheets	Mike Carlson	866-3441
Beginners' Consultant	Earl Benser	884-2148
Membership Form Distr.	Jim Ruprecht	827-3205
Membership Co'tor	Janelle Tryggestad	822-6225
Shows & Conventions		<i>Open</i>
🍏 SIG - Apple IIGS	<i>Coming!</i>	
🍏 SIG - Business	Dick Marchiafava	572-9305
🍏 SIG - FORTH	Mark Abbott	854-8304
🍏 SIG - Investment	Eric Holterman	822-8528
🍏 SIG - Languages/Tech	Chase Allen	435-2645
🍏 SIG - Macintosh	Mike Carlson	866-3441
🍏 SIG - Mac Users	Dave Stovall	474-8015
🍏 SIG - Smalltalk	Martin McClure	227-9348
🍏 Tech. Adviser (hdw)	Roger Flint	771-2868

### Branch Coordinators

Dakota County	Bob Pfaff	452-2541
North West	Jere Kauffman	535-6745
N.E. Branch	Mike Fraase	430-2944
St. Cloud	John Gammell	1-253-9377
Liaison (†) - Genealogy	Jules Goldstein	690-4447
Liaison (†) - Medical	Stewart Haight	644-1838
Liaison (†) - CP/M	Jim Rosenow	(414)261-2536

† To provide contact with non-Mini'app'les SIGS

### Software Director's Staff

Software Director and Apple // DOM Editor	Steve George	935-5775
Assistants:		
CP/M	<i>Open</i>	
Eamon	Dave Nordvall	724-9174
IAC	Richard Peterson	
MacDOM Editor/Prod	Mark Richards	925-3625
Assistant MacDOM Ed.	Curtis Juliber	487-2850

Circulation this issue: 1400

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### Questions

Please direct questions to appropriate board member or officer. Technical questions should be directed to the Technical Director.

### Membership

Applications for membership should be directed to the Membership

Co-ordinator: Janelle Tryggestad 822-6225  
3121 East Calhoun Parkway  
Minneapolis  
Minnesota, 55408

**Note  
change  
of address**

\$12 buys membership for one year. New members pay a \$5 administration fee. Members receive a subscription to newsletter and all club benefits.

### DOMs

		@ Meetings	Mail Order
Members:	DOMs	\$5.00	\$6.00
	MacDOMs	\$8.00	\$9.00
Non-Members:	DOMs	\$7.50	\$8.50
	MacDOMs	\$10.00	\$11.00

Send orders to Mini'app'les at PO Box 796, Hopkins, MN, 55343, attention **DOM Sales** or **MacDOM Sales**.

Members may have 5 1/4" DOMs copied to their own media. See classified Ads for details.

### Dealers

Mini'app'les does not endorse any specific dealers but promotes dis-tribution of information which may help club members to identify the best buys and service. Consequently, the club does participate in bulk purchases of media, software, hardware and publications on behalf of its 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 Wednesday** 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.

### Advertising

Direct Advertising inquiries to our co-ordinator **Eric Holterman** at:  
3608 Blaisdell AveGenie:  
Minneapolis, MN 55409

EFHolterman  
TCCN: Box 431  
612-822-8528

### Newsletter Publication Staff

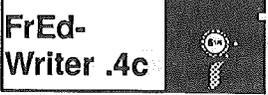
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**Apple II Meeting**  
**Datashow**  
 and  
**SpringBoard's Newsroom**  
**Apr 15**  
**Derham Hall**

**Apr 2, 1987**  
**combined Mac SIG**  
**Curtis Juliber will demo AppleShare**  
 If available, Adobe's Illustrator  
 If available—Macintosh II  
**Hennepin County Library**  
**York Ave, Southdale**

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## Announcements

### BBS Phone Error

The Mini'app'les BBS phone number was incorrectly listed last month.

The correct number is:  
831-6235

We apologize for any inconvenience this may have caused.

### Annual Election of Officers

by Dan Buchler

That time of year has rolled around again and we encourage all members to participate in the democratic process of electing your club's board of directors. This year, ballots will be collected at both the MacSIG meeting on April 2 and at the Regular Mini'app'les meeting on April 15. If you can't make either meeting, you are encouraged to mail in a ballot form which is printed elsewhere in this newsletter. Ballots will be counted during the April 15 Regular Mini'app'les meeting.

One objective of this year's nominating committee, was to better balance the representation of the Mac users. As of now, the roster (see the ballot) contains 4 Mac users (Buchler, Jadron, Lind and Stovall). Please keep this in mind if you vote for write-in candidates. At any rate, be a good citizen and vote!

### Apple II Software Reviewers Wanted!

by Ed Spittler, V.P.

During the past month or so, several software manufacturers have sent me their programs as an alternative to making presentations to our group. For various reasons, some of the companies I contact are not able to be here in person and so rely on software reviewers to demonstrate those programs at our meetings or to review them in user groups newsletters.

Right now, for example, I have a word processor with spell checking and thesaurus features, two personal/small business accounting packages and a

project planner program. If you are interested in software programs such as these, please give me a call. This is an opportunity to review programs you might be thinking about buying. And, if they meet your needs, you could be their proud new owner.

### Apple II Main Meeting Highlights

by Ed Spittler, V.P.

February's main meeting featured Stan Goldberg, President of Foundation Corp. He demonstrated FOUNDATION 1.0, an integrated software program similar to, but more powerful than AppleWorks. Stan drove in from Chicago to be with us and then returned to Chicago that same evening because he had to give another presentation the following morning.

Foundation 1.0 is similar to AppleWorks in that it is an integrated program that includes word processing, data base and spreadsheet functions. That's where the similarity ends.

When compared to AppleWorks, the most significant feature of Foundation 1.0 appears to be its database. It is relational in function and allows you to link several databases and a spreadsheet to bring information together for printing invoices and other business functions. As a result, you aren't limited by the size of a database or it's configuration. Even without that feature, however, you can utilize complex formulas not available in AppleWork's database. If that isn't enough, you can have up to 255 fields instead of the 30 found in AppleWorks. That's a lot of power for someone who finds AppleWorks limiting.

In addition, Stan's program has a notepad, full function scientific calculator and an appointment calendar, all of which can be accessed at any time.

Thanks Stan, for an excellent demonstration of an alternative to AppleWorks.

At the February meeting, we also tried a new display system called DataShow, from Kodak. This unit is a lower cost alternative to the Limelight projector used in the past. It was designed for the IBM but an interface allows it to be used with a Iie. It doesn't work on Macs though. Using an

overhead projector, it will display the same information as your monitor. I didn't have a chance to play with it before the meeting and so wasn't able to deal with the adjustments effectively. Nevertheless, it appears to be a promising alternative and we plan to use it again at some of our future meetings.

Attendance at our February meeting wasn't as high as expected. One wonders why. If you have any thoughts as to what can be done to increase attendance, please let me know.

Thanks again, Sister Sharon, for the use of Derham Hall.

### April 15th. Apple II Main Meeting

For April, we have two presentations.

First, Frank Reynes of Blumberg Communications will be demonstrating DataShow so that we can get a better idea of it's potential. If you saw it last month or are interested in display systems, don't miss his presentation because DataShow is less expensive than Limelight projectors.

Second, Steve Cronin from Springboard Software, will be demonstrating Newsroom Pro for the Apple. Want to publish a newsletter and can't afford a Mac? This could be just the alternative you are looking for. According to one of their ads, more than 250,000 people are using Newsroom. Steve tells me that Newsroom Pro is a heck of a lot better. It has more speed, more graphics, wysiwyg and you can change the size and style of type.

This promises to be an informative, enjoyable meeting so mark April 15 down as a night to see some new things. See you there.

### MacSIG News

by Dan Buchler

Starting in April the MacUser and MacSIG are now one SIG meeting once per month, on the 1st or 2nd Thursday of each month.

The next meeting will be early in the month on April 2nd at the Southdale branch of the Hennepin County Library.

Topic:

1. Curtis Juliber, of Apple Computer, will give a live demo of AppleShare,

**Announcements, cont.**

- the new Apple file server software.
2. If available, Curtis will bring a Mac II along. (Your editor estimates probability of this happening as less than 50%)
  3. If available, Brad Tyson will demonstrate Adobe Illustrator, the new professional drawing program that creates real PostScript output.

For May, Dave Stovall has arranged a wonderful night of Computer Aided Design (CAD) including:

Dimensions  
MGM Station  
E-Z Draft  
and other 3-D programs.

**NorthWest Branch News**

by Joyce & Ken Larsen

For our February meeting Mr. Howard Carson brought in his Apple IIc and demonstrated 8 of the latest Mini'app'les DOMS, including Squirt, a Personal Domain ProDOS program selector, and Dom #43 with Road Trip (the map worked fine). Steve George was kind enough to bring along copies for any one who wanted to purchase them. Howard then demonstrated several copyrighted programs he had entered from "Nibble" magazine, including Garden Planner from the March issue.

Coming up for the April 28th meeting:

A demo of Paintworks Plus by Activision on a Apple IIGs

**AppleWorks Sig Meeting Calendar**

by Dick Marchiafava

**Scheduled Meeting Subjects**

**April 23:** Using the AppleWorks Spreadsheet, Part 2. Presented by: John Hook. Addressing @IF functions and LOOKUP TABLES.

Possible future subjects, Pinpoint and Graphing

Meetings will be held monthly on the 4th Thursday of the month except when there is a conflict with a major holiday. In the event of a holiday, the meeting will be the 3rd Thursday, the day after the main meeting.

The meeting location is at Derham Hall High School, 540 S. Warwick in St. Paul. This is one block south of Randolph, three blocks east of Snelling. Meetings will begin at 7 PM. Call me at 572-9305 if you need information about these meetings. Dick

**Want a good deal?**

by Ed Spittler

The Mini'app'les PO Box bulges with junk mail, but some items emerge from the junk. Take a look at some of these:

**WordPerfect** is introducing a version for the IIGs with a 115,000 word spelling dictionary! That's a lot of words. Between February 15 and June 30, you can get the new IIGs version or the IIe/IIc version for only \$75.00. You can't order it directly though. A dealer will have to qualify. We'll pass this along and keep you posted as to who the dealer(s) will be.

Hey **PageMakers!** Want to upgrade? **Ready,Set,Go!3** is up and running and out-performing its earlier version. Send your PageMaker manual cover and \$99.00 to:

LetraSet  
USA PageMaker Trade-In offer  
40 Eisenhower Dr.  
Paramus, NJ 07653

Want a a \$249 printer for only \$84.00? Micro Electronics (800-642-3532) has a Brother M1009.

Microtech Consulting Co. wants to give away their AST SprintDisks for the Apple II, II+, IIe and Laser 128's. For \$119.00, you can get a Basic 256K. For \$199.00, expand to 1 MEG! And they haven't forgotten IIGs. For \$99.00, get a Basic 256K and for \$179.00, expand to 1 MEG. Call 800-992-7446.

Ehman Engineering has an 800K Macintosh Disk Drive for \$215.00 and a 20 meg SCSI for \$815.00. That and more. Call 800-257-1666.

As a user group, we can purchase an annual license to distribute 100 copies of the *Viewer* part of *Glue* for \$10/user. Anyone interested in following up on this? Ref MACazine vol 4 No 3, p 76.

**FullPaint and clip art sampler for \$50.00**—The regular price of FullPaint is \$99.95. When you order from Ann Arbor Softworks through April 15, 1987, ten or more people from Mini'app'les may purchase FullPaint for \$50.00. Included with FullPaint will be a coupon redeemable for a disk chock-full of great clip art from WetPaint, the new clip art package from Dubl-Click Software. The sampler disk also comes with Pattern Mover, a utility to freely move patterns between FullPaint documents. This is a \$39.95 value so you get \$140 of software for \$50. All orders must be pre-paid (please include

GOTO 6

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**Announcements, concluded**

shipping) and must include a copy of your current newsletter to qualify.

To order and to find out the correct shipping charges, call Ann Arbor Softworks at (805) 375-1467 between 9AM and 5PM PST or AppleLink us at D0294. (Your Editor can do the AppleLink). Ann Arbor will not extend the date beyond April 15, 1987 for this promotion.

Don't forget to mention the name of your user group to qualify for some of these discounts. The club makes no endorsement or rejection of any of these deals. We simply pass the information on. As with any mail-order, you take the usual risks!

**Classified Ads - Membership Benefit**

*by Eric Holterman*

One of the benefits of membership in Mini'app'les is placing classified ads in our monthly newsletter. Each member may place one non-commercial ad each month at no charge for computer related items. While most ads are for buying or selling used hardware or software, requests for information or help with problems are welcome. If we are short of space, we will limit ads to 10 lines. Ads are repeated only by request after they have been run, not with the original ad submission.

Classifieds may be submitted three ways. The most popular is by phone (voice) to Eric Holterman at (612) 822-8528. Have your ad prepared before calling and if you get the answering machine, you can read it in, slowly and clearly. You have up to four minutes so there is no need to rush. The second way is by mail to Eric Holterman, 3608 Blaisdell Ave., Mpls, MN 55409-1213. The third way is by Email on the club BBS, Mini'Info'Exch. Using the Email feature, send the ad to Box 21 (Eric Holterman). You will need to be a validated user, so sign on a few days early if you are not yet validated. The BBS phone number is (612) 831-6235.

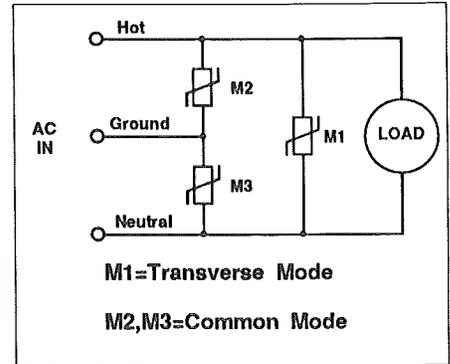
The deadline for submissions is the second Friday of the month preceding the month of publication. Ads may be edited for length or to fit our usual format. Take a look at them in the newsletter to see what we are looking for.

Commercial ads are also accepted for a charge of 20 cents a word for club members or 40 cents a word for non-members. Advance payment is required. Contact Eric Holterman for more information.

**Libraries!**

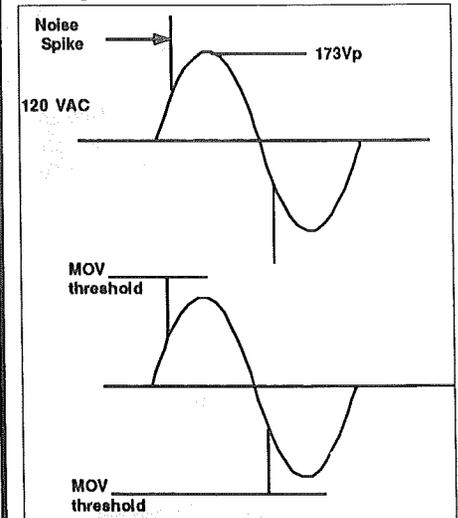
*by Eric Holterman*

Did you know that many PUBLIC LIBRARIES have computer software available for use on the premises or to be checked out? Call your library for details.



**Figure 1**

To protect from surges as completely as possible, the surge protector should have 3 MOV devices connected in both "Transverse Mode" and "Common Mode". See Figure 2.



**Figure 2**

**Power Protection Devices**

**Surge and Noise Protection**

*by Dick Marchiava*

*Drawings by Chuck Thiesfeld*



At a recent Mac meeting the subject of devices to protect computer systems from damaging conditions on power lines, was raised. Although I have had a little experience with such devices, I did not remember all the terminology and descriptions of the various circuits used. Since that meeting, I received an article which blew the dust from my memory and filled in the details.

**Surge Protectors**

The basis of most surge protection devices is a component called a Metal Oxide Varister (MOV). The MOV is a

resistor whose value will change when a specified design voltage is exceeded. The MOV can switch resistance state very quickly and can handle a relatively large current flow, for a brief time. The power surge that MOV components are designed to limit are voltage spikes of relatively high value and brief duration. Such voltage spikes can pass through many power filtering systems. The MOV switches to a low resistance conductive state if a voltage spike is high enough to trigger it, and acts to "clamp" or "clip" the spike by conducting excess voltage and current to ground. A typical MOV will be rated to operate a 150 volts. See Figure 1.

Many inexpensive surge protectors will have only a single MOV in the Transverse mode. Power Line Noise Filters Radio-frequency or electro-magnetic noise will ride on the tops of AC power cycles like grass. This type of interference will not be suppressed by MOV surge suppressors because of the relatively low amplitude of the interference, but must be dealt with by filtering. Power filters are a combination of capacitor/resistor circuits and/or inductors (or chokes). These components, used in combination, act to suppress noise on the power line. See figures 3 and 4.

**GOTO 10**

# Software Library Additions

by Steve George, Software Director

## Talk is Cheap Personal Domain ProDOS-based



**T**IC is a ProDOS-based terminal program for the //e and //c with an Apple Super Serial card or equivalent in slot 2 and an optional printer attached to slot 1. TIC also supports the //gs with either an Apple Super Serial card plugged into slot 2 or using the built-in //gs serial port.

This program supports a standard TTY terminal mode along with several file transfer protocols: xmodem, xmodem crc, ymodem, ymodem crc, and Ascii Express (tm USII) protocol for ProDOS file transfers. ASCII text uploads are also supported using x-on/x-off protocol with user selectable prompt, character, and line delays.

A copy buffer can be used to record an online session or to download a file where protocol modes are not available. The copy buffer may be saved to disk either automatically when the buffer fills or manually.

TIC supports powerful Command files. These Command files, if properly named, are automatically executed when you press the Closed Apple key together with a letter key or they may be specified manually using the OA-X command.

At startup time, if a file named "TIC.STARTUP" is found in the Root directory then TIC will execute it as a Command file automatically. If you are using a program selector such as the Extended Command Processor (ECP) then you may specify an alternate startup Command file at run-time by specifying the alternate file name after the TIC file name: .tic <file>

In order to invoke Macro Command files, you must have a text file named TIC.MACROS in TIC's Root directory. Each line of this file should begin with the letter of a valid Macro key; i.e. if you start a line in TIC.MACROS with "A" then you should have a file named "TIC.KEY.A" in the same Root directory with TIC. The remainder of the line

should start immediately after the letter identifier and should be the name of the service associated with the particular Macro key.

### Command List:

```

BUFFER ON
BUFFER OFF
BUFFER CLEAR
BUFFER SAVE
BUFFER WRITE <file>
DISPLAY <string>
DO <label>
GOTO <label>
HANGUP
IF FAILED <statement>
PAUSE <seconds>
PRINT INIT <string>
PRINT OFF
PRINT ON
PRINT SCREEN
QUIT
RECEIVE <file>
RETURN
SEND <file> PRODOS
SEND <file> TEXT
SEND <file> XMODEM
SEND <file> YMODEM
SET APPEND ON
SET APPEND OFF
SET AUTOSAVE <file>
SET BAUD 300...19200
SET CDELAY<0-9> SET LDELAY<0-9>
SET DUP. FULL SET DUP. HALF
SET ECHO ON SET ECHO OFF
SET PORT SSC SET PORT IIGS
SET PREFIX <path>
SET PROMPT <character>
SET TIMER <seconds>
STOP
VIEW <file>
WAITFOR KEYBOARD
WAITFOR STRING <string>
WAITFOR TIME '00:00'
XMIT <string>
  
```

Contained on disk is a sample TIC Macro Command file that will dial and logon to Compuserve. Once it logs you on it will record all new threads to the recording files for further processing by MMM. (Substitute your local access number, user id, and password # in the appropriate places.)

TIC--Talk Is Cheap ©. 1987 by Donald Elton, Carolina System Software  
Requested fee: \$25

## IAC #65.5 Best of IAC 1-20 DOS 3.3 based



**T**wo months ago we received IAC 64 & 65 (issued Feb & Mar '87) and this month we received issues 65 & 66. Having had recent experience of how such a mix-up can occur, I sympathize with Joslyn West of the IAC (International Apple Core). Having no idea as to how (if) they'll renumber things, at least tentatively this disk will become IAC #65.5. Here is Joslyn's note which accompanied the disk:

General notes : unless otherwise noted, only one disk drive is required, and a set of paddles or a joystick is required for games. In case of freeze-up or unrequited desire to quit, a control-reset will usually be required. Although a printer is not required, a print-out of a listing is vastly easier to examine than a scrolling screen.

**HELLO:** This is Adler's HELLO, the best of a rare breed: it seems not to remain in memory and contaminate subsequent programs. Furthermore, it easily handles more than two screens worth of programs. It lacks a routine to load INTBASIC into the 16k language card RAM and it lacks a Rename function. To escape back to the BASIC prompt, choose NEXT DISK.

**LOAD INTBASIC-APPLE:** This program is written by Apple Computer and loads INTBASIC into the 16k language card RAM and protects it.

**INTBASIC :** This program is written by Apple Computer and is loaded into the 16k language card RAM by LOAD INTBASIC-APPLE.

**DISK SPACE:** Gives space on disk; often renamed SOD (space on disk).

**NEW TEXT FILE READER:** A slow but reliable text file reader and printer.

GOTO 8

**IAC #65.5, cont.**

**NEW FLY KILLER:** A paddle/joystick game that works! The calculated "% efficiency" doesn't seem to match my perceptions of reality.

**CARRYING-BALLOON:** A slow but very nice paddle/joystick game.

**JOYSTICK/PADDLE TESTER:**  
Seems to work well.

**ALGEBRA 1:** Demos and graphs linear equations; seems to work well.

**SINEWAVE DEMO:** Hi-res graph of simultaneous circle and linear sine.

**STATE CAPITOLS:** Learn state capitols from a fairly nice map.

**BENCHMARK FINDS PRIMES:**  
Calculates prime numbers; use to calculate speed of computer.

**HI-RES SOLAR SYSTEM SIMULATOR:** Simple but clean graphics of moving planets in orbits.

**TWO 3-D SHAPES:** Interesting graphics.

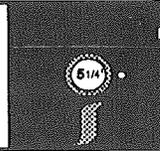
**HI-RES 255 COLORS DEMO:** Slow but interesting on a green screen; probably much better on a color monitor.

**HIRES TV PATTERN GENERATOR:** Clean, simple test patterns.



**Vote for  
your  
Board of  
Directors  
See  
page 11**

**FrEdWriter (c)  
Vr. 4  
Double-sided  
ProDOS based**



**H**ere is one of the most fully-featured word processing packages for the Apple // series in the Public Domain. It started out as FreeWriter (by Paul Lutus--of AppleWriter fame) and ended up as "FreeWriter for Educators", or FrEdWriter, or to those who really love it: FrEd. There are so many features that room does not permit a full discussion, here. The documentation provided on disk, as shown below, is very detailed and complete.

Please see Mini'app'les member Lynda Bryan's review of this fine product elsewhere in this newsletter for a user's perspective.

**FrEdWriter Documentation  
Table of Contents**

**DOC.A**

- 4 Quickstart - Startup
- 5 Quickstart - Command chart  
APPLE //e and ][+ conversions
- 6 Overview
- 6 Hardware Requirements
- 6-7 About this Program and  
Documentation
- 7 What this Documentation will help  
you with
- 7 Lessons with FrEd - prepared  
lessons, sharing, training
- 8 Introduction to Word Processing
- 9 Getting Started
- 9 Loading FrEdWriter
- 9 The Main Program Menu
- 10 Selecting Options
- 10 Read this First
- 10 Start FrEdWriter
- 10 40 or 80 Column Display
- 11 Set Date and Time
- 11 Format a New Disk
- 12 Copy a Disk
- 13}
- 14} View, Delete, or Copy Document  
(Rename, UN/Lock)
- 14 Credits

**DOC.B**

- 1 File Management Overview
- 2 Loading a File
- 2 Clearing the Memory
- 2 Cataloging a disk
- 2 Changing disk drives

- 3 Saving a File
- 3 Rules for File Names
- 4 Merging 2 files
- 4 Loading a portion of a file
- 5 Copying a file or part of a file in  
memory
- 6 Extra information on copying
- 6 Viewing a file, without loading it  
into memory
- 7}
- 8} Summary of File Management  
Procedures for FrEd

**DOC.C**

- 1 Editing
- 1 Tutor <T>
- 2 Cursor Movement
- 2 Inserting text
- 3 Deleting text (charactes & lines)
- 3 Define Paragraphs
- 4 Join Paragraphs
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- 4 Indent Paragraphs
- 4 Changing Upper/Lower Case <C>
- 4 Centering a line <X>
- 5 Moving text around (Block Move)
- 6 Find <F>
- 7}
- 8} Find and Replace <F>
- 9 Delimiters and Special Search  
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- 10} Quitting FrEdWriter/Return to menu
- 11}
- 12 Editing Summary

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- 1 Printing and Formatting Documents  
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- 2 Print Menu
- 2 Changing <P>rint values
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- 3 Form Feed
- 3 Line Feed
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- 3 Printing only some of the pages
- 3 Printing Prompts
- 3 Print Destination
- 4 Top Line
- 4 Other Print Options (changed in  
edit mode)
- 4 Changing Line Length
- 5 Underline, Boldface, Italics,  
interacting with printer
- 5 Tabbing
- 5 Forcing a "Hard Page Break"
- 6 Prompted Writing
- 6 Constructing a Prompt Box
- 7 Notes on Prompt Box
- 8 Printing & Formatting Summary

Here is a complete list of FrEdWriter Commands and where referenced in the documentation.

Apple II, II Plus, //e and //c

**REFERENCE**

<T> = Show this TUTOR  
 DOC.C-1  
 <P> = PRINT this document  
 DOC.D  
 <S> = SAVE from memory to disk  
 DOC.B-3  
 <L> = LOAD from disk to memory  
 DOC.B-2  
 <F> = FIND and replace words  
 DOC.C-6  
 <W> = Change page WIDTH  
 DOC.D-4  
 <C> = Use with arrows to CHANGE CASE  
 DOC.C-4  
 <R> = REVEAL/Hide Paragraph Markers  
 DOC.C-3  
 <B> = Jump to text BEGINNING  
 DOC.C-2  
 <E> = Jump to text END  
 DOC.C-2  
 <N> = NEW Page (erase memory)  
 DOC.B-2  
 <X> = Center a line  
 DOC.C-4  
 <Q> = QUIT FrEdWriter (Return to Menu)  
 DOC.C-10  
 <V> = Accept Control Keys as Letters  
 DOC.D-5  
 ESC = Change the page top line  
 DOC.C-1

Minimum system requirements: II or II+ with 64k and lower case chip, //e or //c; disk drive; printer.

# Apple // SIG

## Datashow and Springboard Software Newsroom Pro

### Derham Hall April 15 (After you mail your taxes!)

# Meet FrEdWriter

A Fine Word Processor That's Not Just For Kids

Reviewed by Linda Bryan

**F**rEdWriter, v.4 copyright 1968, is a ProDOS Public Domain word processor of remarkably good quality. Its original author is Paul Lutus, who developed FreeWriter and AppleWriter, and it is much like AppleWriter in its commands, its look, and its 'feel'. Because FrEdWriter lacked a print feature and needed a little work before young writers could use it, a number of teachers, including June Dodge, Al Rogers, and Bruce Fleury, have amended the program, improving it for all of us.

FrEd has a built-in forty-two page manual, in four parts. These parts are four text files, which can be individually loaded and printed. The manual is so elaborate that it has a title page and a complete table of contents! Because the manual is so greedy for space, teachers may create a manual-less version for students, which therefore will provide students enough room to save text files on the program disk itself.

One of FrEdWriter's most endearing features for the classroom teacher is that it can be used on old machinery. Although it works best on an Apple IIe with an eighty-column card, the program will work in a forty-column mode, and a single disk drive is adequate, especially if the documentation files have been stripped from the program to free up storage space for text files. The program will also work on a 64K Apple II or II+ (Revision 7 and later motherboards) with a lower case character chip. The screen even tells users how to order these chips from a supplier, and explains how to order chips for foreign language writers as well. Alas, I cannot convince FrEdWriter to boot on a Franklin ACE 1000.

Unlike many ProDOS word processors, FrEdWriter is one-sided, so the entire Pro-DOS program loads itself without need of being flipped over. Another convenience--FrEdWriter dates files. [Software Ed's note: Just to avoid confusion here, the disk we are releasing is double-sided. FrEd is complete on side 1 and additional lessons and sample programs are on side 2.]

As a composition teacher, I believe that classroom computer writing programs should be as easy to use as

possible, yet as transferrable in format as possible. FrEdWriter's command structure appeals to me because it is similar to that of other common Apple word processors. FrEdWriter uses familiar, mnemonic commands. Since these commands merely use the Control key instead of the Apple keys, writers familiar with the similar commands of AppleWorks, MECCWriter, MultiScribe, and AppleWriter already know much about FrEdWriter. ("Save" is Control-S, "Load" is Control-L, "Go-to-the-Beginning" is Control-B, and the onscreen tutor is Control-T.)

FrEdWriter uses the Arrow keys for movement of text up to 250 characters. Larger block moves are clumsy--they require a "copy" using delimiter marks embedded in the text by the writer, followed by a manual delete of the original material. Most writers would probably couple Arrow key moves with more Arrow key moves before they'd consider engaging the delimiter option. Nevertheless, it's there for those who want it. Lines of text can be efficiently deleted by coupling the Delete key with the Open-Apple key.

FrEdWriter has a "find" and a "find and replace" set of commands, allowing writers to edit specific words or to automatically replace characters throughout the text. Writers must remember to send the cursor to the beginning of the text before they engage this feature, however.

My greatest praise for the program goes for the onscreen marking of Returns. These little non-blinking squares appear wherever a Return has been inserted. For children, as well as for many adults, the mystery of incompatibility between printout and onscreen text layout is frustrating. If the writer can see the Returns or their omission, this mystery is less baffling. (The Returns can be toggled off if the writer desires.) Also, the writer can calculate page breaks by using the print command, then requesting the program print to screen.

The program claims to support many printer options. I have not tested all the possibilities, but I am pleased to say

**GOTO 10**

## Apple II Software Updates

### Apple II Instant Pascal Version 1.5

Apple II Instant Pascal is available in Version 1.5. This version replaces Version 1.0 and can be used with the Apple IIGS, Apple IIe, and Apple IIc.

Version 1.5 enhancements include a new utility program IP.CUSTOM that enables users to configure Instant Pascal to use a variety of non-Apple printers (including Epson and Okidata). By using Instant Pascal on a 3.5-inch disk drive or installed on a RAM card or a hard disk, users can increase its performance. The IP.CUSTOM utility is used to install Instant Pascal on a hard disk or RAM card with at least 312K of contiguous memory. However, since you must have at least 356 contiguous blocks available to install Instant Pascal, some RAM cards, such as RAMworks from Applied Engineering, are not supported. Copy protection has been removed. The Instant Pascal 1.5 Update is offered on a double-sided 3.5-inch disk and 5.25-inch disks. Your Dealer is being supplied with the update. Customers who have earlier versions of Instant Pascal can upgrade their current disks to Version 1.5 by copying the new software onto their existing disks, or onto a new 3.5-inch 800K disk. Customers can also receive a copy of Instant Pascal, Version 1.5, by mailing their original invoice or a Version 1.0 startup disk to:

Instant Pascal Upgrade  
450 E. Trimble Road  
San Jose, CA 95131

Customers must include their name and address and specify whether a 5.25-inch and/or a 3.5-inch disk is required.

### Surge Protectors Concluded

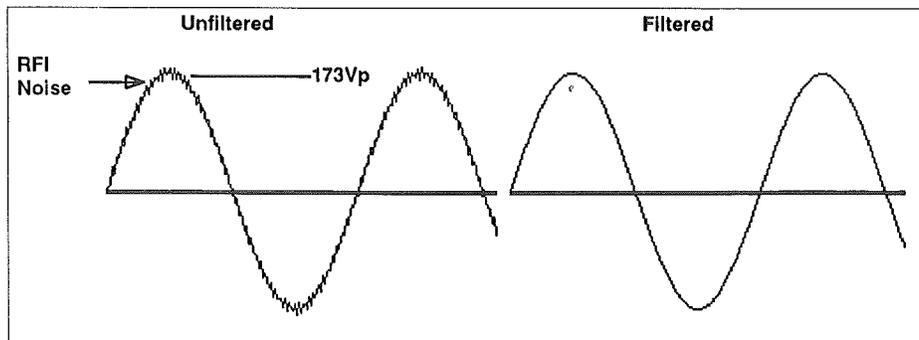


Figure 4

This upgrade is offered free of charge and will be available until August 28, 1987.

### SuperPILOT Special Edition Upgrade

A Special Edition of SuperPILOT, Apple's personal computer authoring language, is available in May, 1987, from the Apple Programmer's and Developer's Association (APDA). The SuperPILOT Special Edition is updated to Pascal 1.3, 128K version. SuperPILOT has been rewritten to allow users to attach their own device drivers, and takes advantage of the additional RAM in a 128K Apple II system. SuperPILOT Special Edition includes many technical changes for Pascal 1.3, and is supported on the Apple IIGS.

SuperPILOT Special Edition is exclusively available through APDA, ADPA's \$20 per year membership is also available to technically sophisticated customers who need advanced tools and information in order to create Apple-compatible products. SuperPILOT Special Edition is available only for current SuperPILOT with Log customers who want enhanced SuperPILOT capabilities. It does not include user manuals. To place an order, or to become an ADPA member, contact:

ADPA  
290 SW 43rd Street  
Renton, WA 98055  
(206) 251-6548

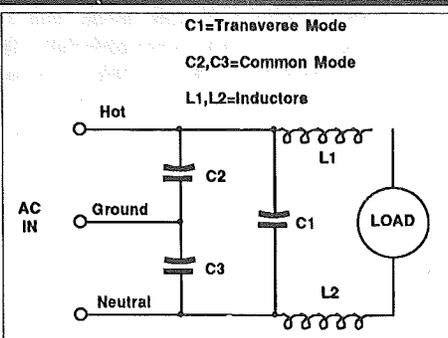


Figure 3

### FrEdWriter Review Concluded

that the program has a large default menu for printing, including page numbering and page headers, and further tinkering should show me the rest of the wonders. The manual claims FrEdWriter can handle italics, underlining, and boldface if the printer is capable. I think I can get superscripts for footnotes, but I haven't quite managed it yet. Although I can center lines with FrEdWriter, I can't justify text.

Line length is controlled by a typed command, not by the printer options command, so the writer can change line length while entering text. (Text scrolls left to right if necessary.) A summonable ruler at the top of the screen helps the writer plan the line length. However, writers using a forty-column display engage their large-type before FrEdWriter even appears on screen, so the forty-column mode will not allow printed line lengths of more than 35 characters.

Apparently, FrEdWriter has become popular with composition teachers. Seminars in the program's use, or even hired experts who can give inservice training to schools, are apparently also available. I originally received the program at a local seminar taught by Thea Holtan, who has used FrEdWriter to foster student writing of reports in early elementary school as well as in the upper grades.

A bonus of the program is the "prompted writing" feature, in which a teacher may create a text file set of "prompt box" rectangles containing commands to the student writer. The student types in responses, which will appear without the prompt boxes when the file is eventually printed. Collections of prompted writing templates are being circulated by the teachers who create them.

Good power protection devices will have both kind surge suppression and noise filtering circuits. Remember, these kinds of protection devices cannot protect from direct or very close lightning strikes! There is simply too much energy in a lightning strike to be controlled by anything less than a system engineered for the site.

# Ballot

## for Election of Mini'app'les Board of Directors 1987-1988

### Instructions:

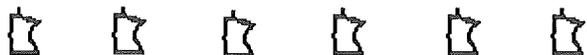
- 1) Vote for one and only one candidate per office. Please use an X.
- 2) If you wish, use the blank space to write in another candidate. Be sure to fill in the  with an X.
- 3) When you have completed your ballot, fold the bottom edge up to the line indicated and flatten the crease. Fold the top edge down and flatten the crease.
- 4) The Mini'app'les address should now be facing you. Fill in your membership number. No ballots will be valid without it. Fill in your name and address. Staple or tape where indicated.
- 5a) Place a 22-cent stamp where indicated and mail. Mail early because only ballots received before NOON on April 14, 1987 will be counted.  
OR
- 5b) Bring your ballot to the MacSIG or Apple II SIG meetings between 7:00 and 8:00 pm on April 2 or April 15 respectively.

### Nominees as of publication date (3/14/87)

is for write-in nominees

<i>President</i>	<input type="checkbox"/>	<b>Ann Bell</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>Vice President</i>	<input type="checkbox"/>	<b>Chuck Lind</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>Secretary</i>	<input type="checkbox"/>	<b>Guy Rice</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>Treasurer</i>	<input type="checkbox"/>	<b>J. Edward Wheeler</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>

<i>Communication Director</i>	<input type="checkbox"/>	<b>Dan Buchler</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>Software Director</i>	<input type="checkbox"/>	<b>Tom Gates</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>Technical Director</i>	<input type="checkbox"/>	<b>John Hook</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>SIG Director (Technical)</i>	<input type="checkbox"/>	<b>Dick Marchiafava</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>SIG Director (Applications)</i>	<input type="checkbox"/>	<b>Dave Stovall</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>
<i>Branch Director</i>	<input type="checkbox"/>	<b>John Jadron</b>	<input type="text"/>
	<input type="checkbox"/>		<input type="text"/>



Exercise your right as a citizen of  
Mini'app'les and Vote!  
For more information see  
announcements in this newsletter

**Membership Number:**

**Name:**

**Address:**

Place  
22 Cents  
Stamp  
Here

**Mini'app'les  
P.O. Box 796  
Hopkins  
MN 55343**

-----  
Outside Fold

2nd Fold on this line

-----  
Outside Fold

1st Fold on this line

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Staple Here

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Staple Here

## MacSIG's Three Ring Circus

by Tom Edwards

**W**ow! Watch the newsletters for some fine Macintosh programs coming up in the near future. As we get older, we just keep getting better. *Dave Stovall*, standing in for *Mike Carlson* as MC to the MacSIG, filled us in on combining the two Mac groups, MacSIG and Mac Users, beginning in April. The thought is that the combination can draw top-notch program cards better than individual groups. Watch for the happenings!

Tonight (February 19), the feature at this MacSIG was to be a carnival of events; a demo of a new, locally authored, program and some "mini-sessions" of ways to use your Mac.

The Q/A's caught some comments about the "latest" System and Finder from Apple. Yes, once again there is another revision to these old standbys, and you will have to decide whether or not to change all of those painstakingly customized boot disks to make use of Apple's new releases. However, these releases (System 3.3 and Finder 5.4, and with some reports, even higher numbers) are touted as being only for those buying into the AppleShare network system. Apple claims that there is no benefit to those not using AppleShare. However, guru Dave is sure that some nagging problems with the clipboard and the disk storage system have disappeared since he switched (Get it? Switched! Groan, groan.) Of course, it could be that Dave just likes to see that new Trashcan bulge until he empties it.

*Dick Marchiafava* handed out some information about surge suppressors. Their theory of operation and potential value to the average user had come up in an earlier Q/A session. Seems to be a good idea, but remember; you usually get what you pay for, and don't use it as a substitute for good operating practices (read "backups").

Leading off for the program this evening, Dave introduced *Scott Armatage* who demo'ed his creation, "Partner." This is a unique program for sharing information between two Macs (possibly more, if networked) in a "master/slave" relationship. Things done on the master screen are echoed immediately on the slave. If you have seen Hayes' Smart-Com program for Mac, you get the idea of the visual effect. Scott's program

works much faster because all that needs to be sent and received is a fairly small amount of information about the mouse, its position and button status. It does require that the two stations have EXACTLY ALIKE configurations; that means disks that are the same, booted and ready.

"Partner" is a Desk Accessory under the Apple Menu. The computers are linked via the serial ports. Control is passed from computer to computer by moving the mouse... you can't take control until the other computerist stops "mousing around" for a moment and lets you break in. A screen marker signals which computer has control.

Scott originally wrote "Partner" as a game utility... the thought was that he and a friend could play chess together on their linked machines. He soon found that games were the least likely to benefit from the program. As with all software, there's always something better on the horizon. Scott is being encouraged to add file exchange capabilities between the two computers. Quite a challenge!

### Programs on Parade

Following Scott's presentation, we had small demo areas set up for a variety of things. *Turo Dexter* ran through the main points of PageMaker and how to use and benefit from a page makeup program. Turo is very familiar with PageMaker. He ran a LaserWriter service where you could bring in your disks and laser print originals for your printing. A lot of practical experience came by way of "cleaning up" some of those files so that they looked good in the final print.

At another station, *Ian Able*, sysop of the Skyline BBS, discussed Red Ryder Host (a program for BBS's), InterMail (electronic mail for networked Mac's) and PhoneNet (networking Macs through your existing phone lines). Ian says that InterMail works well with SmartAlarms, adding some auto-timing to the delivery of mail. You can also pick up your mail via modem connection, too.

At a third station, Scott showed some of the further ins and outs of the "Partner" program. Dave also had a TurboTouch track ball mouse set up for demo. A lot of folks talk in glowing

terms about the ease of mouse control with this type of gadget.

There were about 5 or 6 new Mac'ers at this meeting. With the interesting programs and developments at this meeting, and things scheduled for future meetings, it looks like the Mac is still on the move. Anyone ready for a Mac //?

More bytes later... TWE



### Peek-A-Boo! Continued

program in publishing a newsletter that *Arts and Farces*, his love and company, churns out each month. He has found that the prep time has been reduced from 40 hours laboring through PageMaker (I know the feeling, and so does your newsletter staff!) to 10 hours, even with an increase in the amount of text included. Related programs enable the (disk) distribution of "read only" material. Mike is distributing the instructions for *Scott Armatage's* "Partner" program in this manner (see MacSIG article).

One of the most tantalizing applications for "Guide" is to manage the volume of data available on a CD ROM. Just imagine being able to click your way through an encyclopedia of information, twisting and turning your own customized route through the gobs of information, to follow your own thread of enlightenment. It must not be too far away, for one of the demo's seen by *Paul Howe*, Mac User, was on the repair manual for a jumbo jet. Click on the area of the plane that you need to investigate, progressively winding your way into deeper and deeper detail. Finally zero in on the part in question and boom!... video repair or maintenance instructions play across your screen.

Mike says that future developments with Guide may include a tie-in to Video-Works. Now won't that be something?

Guide retails for \$134.95. It can be found at about \$80 in some of the mail order or discount supply catalogs.

It was an exciting night for the Mac enthusiasts; for everyone we hope. And just think... there's more to be seen yet, as Apple delivers on its promise of more and better computers and computer related equipment to fuel the fires of our technolust fever.

More bytes later... TWE



## Peek-A-BOO!

Mac Users glimpse the future  
by Tom Edwards

**A**mid a hubbub of hushed voices, the MacSIG patiently awaited the "Apple Surprise" that was promised so clandestinely just a few short weeks ago. We all knew that Apple had announced new Macintosh products on the 2nd of March and this was now the 5th! By a quarter to the magic hour of seven, there were already about 70 pairs of eyes riveted to the front screen at the Southdale Hennepin County Library. The Apple logo was projected onto the screen and there, on the table, sat a MacPlus... or was it?

By seven o'clock, the crowd had grown to almost 120. Not surprisingly, there were a lot of familiar MacSIG faces, but there were also a lot of faces more familiar to the Apple // side of the club. All held a similar interest and curiosity... what had Apple wrought as the next piece of hardware to challenge the senses of the computer world?

Dave Stovall quickly moved through the announcements of several interesting programs coming up for those MacIntersted's in the near future. Mike Carlson, chairperson for the MacSIG, put out the challenge for someone to form a new group, devoted to the newer Mac owners, as the two existing groups prepare to merge in the next month or two. Ann Bell, club president, reminded all of the upcoming elections and the board's hope that the Mac would gain more representatives on the board.

Our Double Whammy program for this evening opened with the return of another familiar face... Curtis Juliber. He has been busy since joining Apple Computer several months ago, and was the go-between for this early "Apple Surprise" that had swelled the ranks tonight. Curtis' first surprise for the evening was to introduce Lonnie Arima sales manager recently transferred to the frozen North(?) from the Cupertino headquarters. He let us know that Apple still has more in store for Mac enthusiasts before the year is out.

Curtis then jumped right into a slide show with his own personal comments about the new products from Apple. Highlight of this new lineup is the Mac II, a real "next generation" machine. To hold us over until the Mac II switches status from "announced" to "available" (sorry, but the real thing was unavailable

tonight), we'll have to get along with the second-billed machine, the Mac SE.

Though the SE (System Expansion) looks like its kissin' cousin the Mac Plus, it is a thoroughly reworked machine to accommodate the new features. It is available with dual 800K drives, or one, plus an internal 20MB hard drive. There is also a "slot" available for adding a feature of your choice to the basic capabilities of the SE. (Now all together, you Apple // folks. Tell the Mac folks what "slots" are all about!) The SE also sports an Apple DeskTop Bus, something that the IIGS bunch has known about for more than six months. But ist most notable feature is the addition of the "Steve Jobs Memorial Fan."

Of course all of this new technology has its price... \$2899 with dual 800K drives, or \$3699 with one 800K drive and the 20MB hard drive. Other Mac's in the lineup (Mac 512 Enhanced and Mac Plus) remain priced as they have been since the introduction of the Plus. Due to some internal changes, mostly software, the SE burns along a bit faster than the Plus, reportedly about 20% on the average. (See pricing details elsewhere in this newsletter—Ed.)

Now if it's speed that you want, and you can hold your breath until... maybe June?... here's the BIG NEWS. The Mac II beats with a new heart, that of the 68020 processor from Motorola. With honest 32 bit internals, a clock speed 2+ times faster than the Plus and SE, a 68881 math co-processor, 6 slots and more goodies to whet your whistle at every turn, THIS is the computer of the future. Color? Got it! Resolution? Got it! Stereo? Got it! Hard Drive? Got it! And the list goes on...

This is a computer that you "customize" by ordering from a list of options and choices. The 12" monochrome monitor supports 16 gray shades. The color Trinitron monitor can display 256 colors from a palette of 16 million colors. Multitasking is available when running under Unix. Addressable memory with so many zeros that I have to take off my shoes to get the count right. Your choice (supported by your wallet or purse, of course) of 20, 40, or 80MB internal hard drives. Even the keyboard is "optional." Take your pick from two, unless you want to try to control it all

by thought waves!

And, one of the greatest pieces of news is that the Mac II has an 80 watt power supply, reportedly enough to handle all of these possible configurations. (Of course that's also the story that Apple gives to us lowly Mac pioneers! You know, frying eggs on the top of yur Mac is one of dose "undocumented features" dat comes wit each matchine.)

As Curtis so aptly put it, this is not the computer for the "casual home computer user." Although the main unit has a starting price of \$3769, reports suggest that you will have \$6000 to \$8000 tied up before you get the thrill of hitting the switch for the first time. One good thing is that a fair amount of software is expected to run on the Mac II. But who wants to look at black and white when there's 16 million colors to choose from?

Thanks, Curtis, for the extra effort to get your Mini'app'les' friends a first look at the first 26 new products from Apple this year... computers, disk drives, cards to run MS DOS (yuk!) and software like AppleShare. Now if you'd just rush out to Cupertino... I've got this empty semi that I want to back up to the loading dock... open the door, please!

### Second Feature

Mike Fraaze runs a computer operation in Stillwater. Mike's a developer, promoter, and more. Tonight he was taking us for a trip through a program called "Guide", one of the first working tools of the "HyperText" concept. Guide is designed to let the user open progressively more detailed information tied to text or graphics on the screen. As you move the mouse about the screen, it signals when you cross over zones that have "hidden" information related to the object, word or phrase on the visible screen. If you are interested, just "click" and you open up new information.

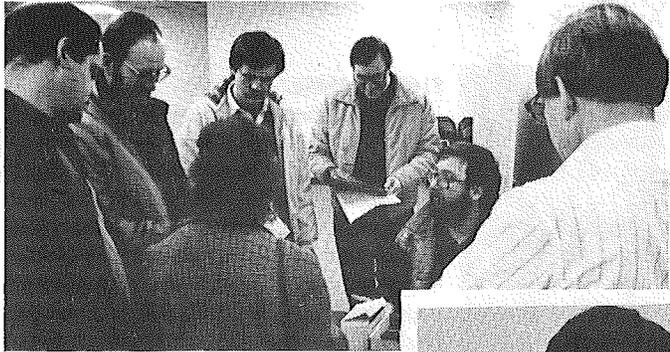
Further levels can be buried in each new tidbit, allowing you to keep opening new areas like a house of mirrors... behind every image are more and more possible new images. Whew!

Mike has made practical use of this



# Life at the MacSIG and MacUser Meetings in February and March

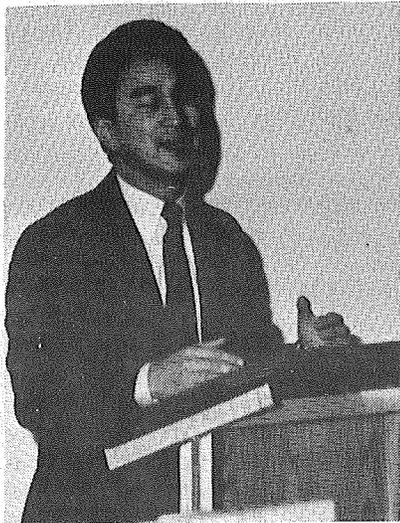
Photography by Tom Edwards



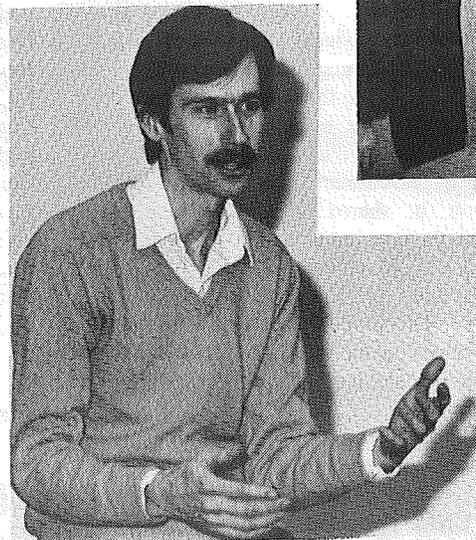
Many members were eager to purchase MacDOMs from Mark Richards



Ian Able, SysOp for Skyline BBS, extolling the virtues of Red Ryder Host



Lonnie Arima, Minnesota Apple Sales Manager, explains how wonderful the Minnesota winters are!



Scott Armitage, author of Partners, tells about the "twin" operation



Curtis Juliber, now of Apple Inc., contemplates the question about why there is no upgrade path to the Macintosh SE



Everyone wants to get a closer look at the Macintosh SE



Turo Dexter recovers from another PageMaker crash!

## Second Generation of Macintosh Family Unveiled

Downloaded from AppleLink

*Edited by Bob Woods*

**A**ppleWorld, Los Angeles, California. March 2, 1987. Apple Computer, Inc. today introduced the second generation of the Macintosh personal computer family. The high-performance, open-architecture, Macintosh II features six internal slots for adding multiple functions -- including an optional color display, network connections and MS-DOS compatibility. This top-of-the-line model is intended for advanced applications in business, desktop publishing, and engineering environments. The Macintosh II runs most Macintosh software up to four times faster than the Mac Plus.

The Macintosh SE (System Expansion), with an additional slot for added functions, is expected to become Apple's mainstream system for business and higher education applications. Apple introduced 15 localized versions, in 10 languages, of the new Macintosh computers. Available in English, French, German, Spanish, Flemish, Norwegian, Japanese, Dutch, Swedish and Italian, the systems incorporate a universal power supply for international usage. Apple introduced a host of products, including storage devices, memory upgrade kits, keyboards, two monitors, and products that incorporate MS-DOS files with Macintosh files.

AST Research announced coprocessor cards that provide IBM PC-XT and IBM PC-AT capabilities for the Macintosh SE and Macintosh II. Apple and Dayna Communications separately announced MS-DOS disk drive and file transfer software options for the new Macintosh systems. Three types of products are available: products that let computers share data via networks; products that exchange MS-DOS data files with Macintosh files; and products that let Macintosh computers run MS-DOS applications software.

Dayna Communications announced a MS-DOS disk drive that works with any SCSI Macintosh, the DaynaFile connects to the SCSI port and works without a separate interface card.

The Centram System TOPS lets a PC-compatible or Macintosh computer become a non-dedicated file server on an AppleTalk network. The 3Com EtherSeries Enhanced software and 3Server3

provides disk sharing for Macintosh computers on AppleTalk or Ethernet. The Dataviz MacLink Plus provides translation of documents between many PC and Macintosh applications.

Apple introduced new electronic mail software, Desktop Express, that lets users with modems send graphic documents. Desktop Express brings ease of use and the visual quality of Apple desktop publishing to electronic mail. Because it uses the Macintosh interface, Desktop Express makes it easier to share data compared to existing command-oriented electronic mail products. Information is shared via MCI Mail, and offers three communication options, Macintosh to Macintosh, Hard Copy Delivery, and text messages to MCI mail users. The product includes a Macintosh pull-down menu interface for the News-Retrieval service and works with the Macintosh 512K, 512K Enhanced, Macintosh Plus, Macintosh SE, and supports color graphics on the Macintosh II.

Apple also announced a version of the UNIX operating system for the Macintosh II. A/UX is a full implementation of the AT&T UNIX, System V, Release 2 Version 2 operating system with added features incorporated from Berkeley 4.2 BSD for advanced communications capabilities. A Macintosh II running A/UX offers the traditional user interface of the UNIX operating system, plus developers have full access to the Macintosh toolbox, so A/UX applications can have the look and feel of Macintosh programs. New applications can operate in both environments. A/UX offers, through add-in cards, connections to Ethernet, AppleTalk and networks using UNIX. An optional Motorola 68851 paged memory management unit (PMMU) is required for A/UX and will be available from Apple. The Apple EtherTalk Interface Card provides a connection to Ethernet networks for the Macintosh II. Macintosh technology maintains a very high level of software consistency and tight integration across all applications, resulting in low requirements for user support and training.

The Macintosh family -- including the Macintosh 512K Enhanced, the Macintosh Plus, the Macintosh SE and the Macintosh II -- ranges in price from

\$1699 to \$5498.

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**April 2  
Hennepin County  
Library**

**Combined  
MacSIG/MacUser  
Curtis Juliber will  
demo AppleShare**

**If there's one in  
town,  will bring  
a Mac II  
(Don't bank on it!)**

**If its released,  
you will see  
Adobe Illustrator**

**May 7  
CAD/CAM  
Bonanza!**

## New Macintosh Systems Introduced

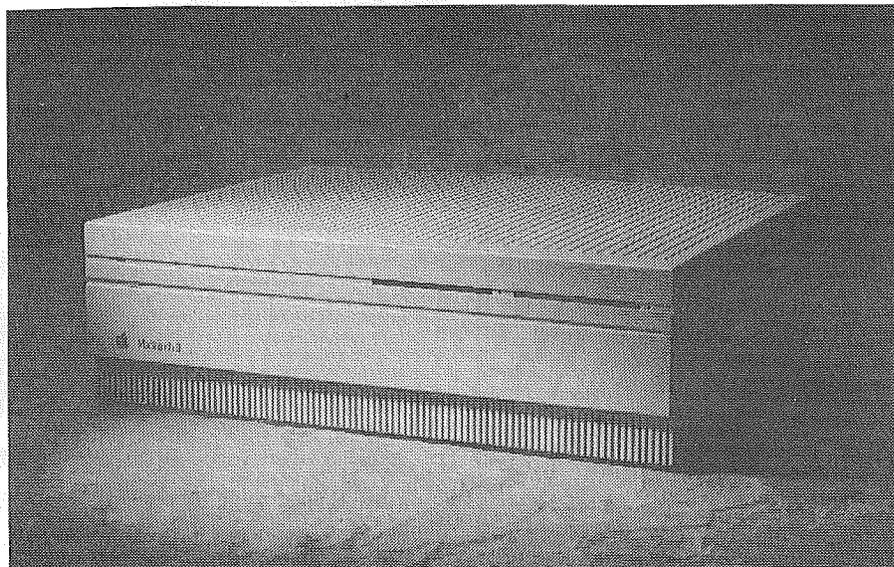
Downloaded from AppleLink

Edited by Bob Woods

**T**he big news on Applelink this month is the introduction of two new Macintosh computers and peripherals.

### Macintosh SE

The Macintosh SE adds expansion and flexibility to the power of the Macintosh Plus, making it Apple's mainstream business computer. Processing speed is improved 15 to 20 percent over previous models allowing faster spreadsheet and document processing. SCSI performance is up to two times faster allowing faster launches and quits, data base searches, and document retrieval. It comes standard with either two 800K internal drives or one 800K internal drive and one internal 20MB SCSI hard disk. The Macintosh SE incorporates the features of the Mac Plus including the same compact design, a 68000 microprocessor, one megabyte of memory (expandable to four megabytes), and a connection for SCSI peripherals. New features include the Macintosh SE-Bus Expansion Slot Accessory Access which allows external products to be directly connected to an internal card. Users can add accelerator cards, external monitor adapters, MS-DOS co-processor cards, a 5.25-inch MS-DOS disk drive controller card, or networking and com-



**Macintosh II Personal Computer**

munication cards. The Macintosh SE has 7 built-in ports including one SCSI port, one drive port, two RS422 serial ports, one sound port and two Apple Desktop Bus ports. The Macintosh SE contains 256K ROM, which supports the internal and external SCSI connectors, the internal drives, the one expansion slot, the Apple HD 20SC, HFS, QuickDraw, AppleTalk and the Apple desktop bus. A keyboard is not included with either configuration of the Macintosh SE.

Plus. The Mac II has a 68881 floating point co-processor that enables it to carry out mathematical calculations 40 to 200 times faster than the 68020 microprocessor. It's 6 Nu-Bus expansion slots accept expansion cards in any of the slots, avoiding the need for dip switches. Any card can take control of the system from the main logic board, allowing users to work within other operating environments. The Macintosh II features one built-in internal 800K floppy drive, and an enhanced internal SCSI connector allowing users to increase their storage capacity by installing an internal SCSI hard disk. Six built-in ports include one SCSI port (internal and external), two RS 422 serial ports, one stereo sound port, two Apple Desktop Bus ports, one megabyte of RAM, which is expandable up to eight megabytes. Standard in the Macintosh II is 256K ROM, which contains support for color. The Apple digital sound chip provides four-voice stereo sound. The Keyboard and Monitor are not included.

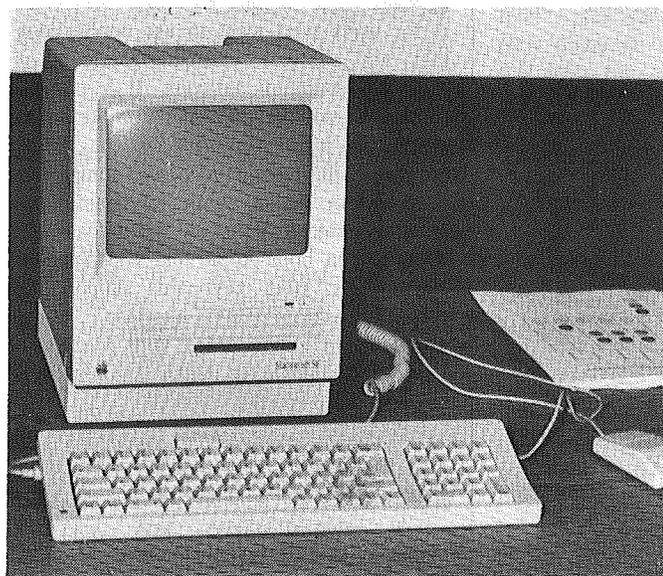
### Macintosh II

The Macintosh II is a high performance, open architecture Macintosh for advanced productivity, high end desktop publishing, scientific and engineering applications. It includes a 68020 microprocessor with a 32-bit data bus that operates at 16 Mhz. The Macintosh II opens and closes files and applications, access data and execute graphics or calculations up to four times faster than the Macintosh

### AppleColor High-Resolution RGB Monitor

The AppleColor High-Resolution RGB Monitor is a high resolution color display for the Macintosh. Its features include 640 x 480 pixel resolution and

GOTO 18



**Macintosh GS Personal Computer**

**New Macintosh Systems contd.**

analog input format. The 13-inch Trinitron CRT displays information in color or black and white (with a resolution of 69 DPI). With the Macintosh II Video Card, the AppleColor High-Resolution RGB Monitor can display 16 colors or gray scales simultaneously from a palette of 16 million, or 256 colors or gray scales simultaneously with the Macintosh II Video Card Expansion Kit.

**Apple High-Resolution Monochrome Monitor**

The Apple High-Resolution Monochrome Monitor offers a high quality display with a 12-inch black and white screen, with a higher refresh rate and gray scale capabilities. Its features include 640 x 480 pixel resolution using an analog input format. When driven by a Macintosh II Video Card, the Apple High-Resolution Monochrome Monitor displays shades of grey. The black and white screen displays the full width of an 8-1/2 by 11-inch page. It utilizes glare protection and a screen refresh rate of 66.7 Hz, to reduce eyestrain, and has an international power supply. Included with the Apple High-Resolution Monochrome Monitor is a video cable and a power cable.

**Macintosh II Video Card and Video Card Expansion Kit**

The Macintosh II Video Card is a NuBus card supporting both the Apple High-Resolution Monochrome Monitor and



**Apple Extended Keyboard**

the AppleColor High-Resolution RGB Monitor. The Video Card provides users with a wide range of colors and gray scales, and will display up to 16 colors or gray scales simultaneously from a palette of 16 million colors. The Macintosh II Video Card Expansion Kit allows users to expand the Macintosh II Video Card from 4 bits to 8 bits. The expansion increases the number of colors they can display--up to 256 colors or gray scales simultaneously from a palette of 16 million.

**Apple Universal Monitor Stand**

The Apple Universal Monitor Stand

works with the Apple High Resolution Monochrome Monitor, AppleColor High Resolution RGB Monitor, AppleColor RGB Monitor, Apple Monochrome Monitor, AppleColor Composite Monitor. It tilts and swivels, is ergonomically designed, and is in a platinum finish.

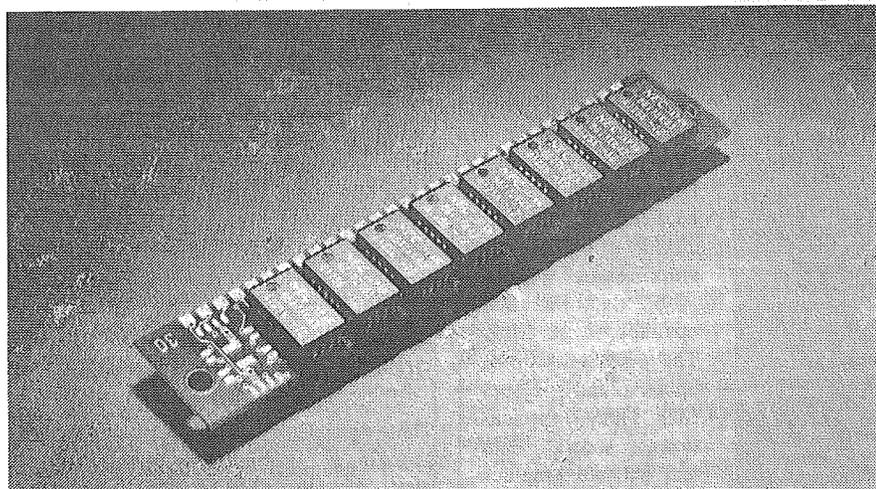
**Apple Keyboard and Apple Extended Keyboard**

Two keyboards--the Apple Keyboard and Apple Extended Keyboard--work with the Macintosh SE and Macintosh II.

The Apple Keyboard is a standard keyboard that combines a numeric keypad, cursor keys, and Macintosh-style keycaps. The Apple Extended Keyboard is for users who want to use applications that run alternate operating systems or terminal emulation software. It features a T-style cursor keypad, function keys, as well as a larger footprint design. Together with third-party MS-DOS-compatible co-processor cards, both keyboards enable Macintosh II and Macintosh SE users to run both Apple and IBM-specific applications. Both keyboards support the Apple Desktop Bus interface. These products are not included with Macintosh II and Macintosh SE CPUs and must be purchased separately.

**Apple 1MB and 2MB Memory Expansion Kits**

With the Apple 1MB and 2MB Memory Expansion Kits, users can expand their Macintosh's memory and maintain larger files. SIMMS, or Single In-line Memory



**Apple Memory Expansion Kit**

Modules, are plug-in RAM expansion strips that are configured with up to eight RAM chips in either 256 kilobyte or one megabyte configurations. Up to eight of these modules can be snapped into the Macintosh II computer's motherboard, allowing memory expansion options of 2MB, 5MB, and 8MB. Up to four modules can be installed in the Macintosh Plus and Macintosh SE, bringing the configuration up to 2.5MB or 4 MB. The 1 MB Memory Expansion Kit consists of two 1Mbit SIMM strips, allowing Macintosh SE or Macintosh Plus users to expand the RAM from its standard one megabyte of memory to 2.5 or 4MB of RAM. This allows a Macintosh II user, who must upgrade with two kits at a time, to expand from 1MB to 5MB or 8MB of RAM.

### Macintosh 20SC, 40SC, and 80SC Internal Hard Disks

The Macintosh Internal 20SC Hard Disk provides 20 megabytes of storage for the Macintosh SE and Macintosh II using the SCSI interface. The Macintosh Internal 20SC Hard Disk comes standard with the Macintosh SE Hard Disk 20 CPU and may be purchased separately to install in the Macintosh SE or Macintosh II. The Macintosh 40SC and Macintosh 80SC Internal Hard Disks feature 5.25 hard disk assemblies and access time of 30 milliseconds. The Macintosh Internal 40SC Hard Disk and Macintosh Internal 80SC Hard Disk provide 40 and 80 megabytes, respectively, of internal formatted storage. All of the new Hard Drives connect to the Apple Tape Backup 40SC, and are expandable with up to six additional SCSI devices. All Internal Hard Disks must be dealer installed.

### Apple Hard Disk 40SC and 80SC

The Apple Hard Disk 40SC and Apple Hard Disk 80SC are external hard disks that can be used with the Macintosh Plus, Macintosh SE, Macintosh II, Apple II Plus, Apple IIe, and Apple IIGS. The Apple Hard Disk 40SC provides users with 40 megabytes of memory, while the Apple Hard Disk 80SC provides 80 megabytes of memory. With an access time of 30 milliseconds and the SCSI interface, both drives provide faster transmission of information. Users can connect up to three additional devices when using any CPU from the Apple II

family or up to six additional devices when using a CPU from the Macintosh family. When used with the AppleShare file server, these hard disks allow users to build a powerful AppleShare network server with up to 40 or 80 megabytes of accessible information. These Hard Disks require the SCSI System Cable and SCSI Cable Terminator, and can be easily installed by the user.

### Apple Tape Backup 40SC

The Apple Tape Backup 40SC offers unlimited storage capacity when backing up large quantities of data. It features 40 megabytes of backup storage with each tape cartridge. Its SCSI interface allows users to operate it with all the Macintosh hard disk based systems, and a SCSI expansion port provides room for additional growth by allowing them to connect other SCSI systems. It can be stacked with all of the external Apple Hard Disk SC drives. A tape backup program is included which offers Volume and File backup/restore options. Users also receive one QIC-100 pre-formatted quarter-inch tape cartridge enabling them to backup or restore their entire 20MB or 40MB hard disk in one easy operation or select individual files as needed.

### Apple PC 5.25 Drive and Drive Cards

The Apple PC 5.25 Drive, in combination with the Macintosh II PC Drive Card or the Macintosh SE-Bus PC Drive Card, enable users to exchange data between their Apple and MS-DOS formatted 5.25-inch disks or with MS-DOS machines that use the standard DB37 connector. Together with the Macintosh II PC Drive Card or Macintosh SE-Bus PC Drive Card, a user can directly connect the Apple PC 5.25 Drive with a Macintosh II or Macintosh SE, respectively. Internally mounted, these cards provide the interface that allows the Macintosh II and Macintosh SE to read and write files in MS-DOS format. Third-party co-processor cards will work with the Apple PC 5.25 Drive to run PC application software. InterFile provides the software link to the data in the 5.25 drive. InterFile transfers data to a different application's format. For example, with the proper translator, InterFile can translate a Multimate document to MacWrite document.  and other companies will provide InterFile's application-to-application translators. 

## Red Ryder Update

by Stu Gitlow

Mt Sinai Med. School

Downloaded from AppleLink

**F**or any of you who telecommunicate, the article about Red Ryder 10.0 in the 4/87 MacWorld is of importance.

Unfortunately, according to Scott Watson today, that article is almost completely incorrect. The authors spoke to Scott about three months ago and, according to him, never called him back before running the article. Since that time, version 10.0 has undergone some major changes and is very dissimilar to the version discussed in MacWorld. In fact, the article describes an early beta version (10.0Bd) which has since been circulating on a few BBS's (it shouldn't be there...if it's on yours, remove it). The article's authors also confuse RR Host and RR in two paragraphs along the way, got the price of the version wrong, and gave the wrong phone number in the "Where to Buy" section. In any event, plan on not seeing the FINAL version of 10.0 for at least another month, and then only on GENie for registered users, at least in the beginning.

Regarding Red Ryder Host and the 9600HST from US Robotics: the modem and host program will work together, but not at 9600. USR was lax in sending Scott the modem last month so it will be some time before he is able to adapt RRH to work properly at 9600bps. Hardware adjustments (cables) may be necessary in addition to the software adjustments. The 9600HST WILL work properly with RR9.4, however, at full speed, and given the already growing number of BBS's out there supporting the higher speed, the new capabilities will be most enjoyable. Don't forget about USR's special offer to sysops if you run your MUG's BBS: for more info, call them by modem at 312-982-5092 (3/12/24/96).

**Editors input: From Vol 4, #3 MACazine, page 10:** Apparently Scott Watson is working on a novel "The Man Who Named His Son Version 2.0." Scott only works on his novel when he gets too drunk to program. It's about the funniest thing the MACazine editors have ever read. 

## Buy Now, Pay Forever

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*Edited by Bob Woods*



ere are the suggested prices for the new Apple Macintosh products.

### MACINTOSH II

Open-architecture, high-performance, 68020-based personal computer for advanced applications in business, higher education and engineering environments.

#### Basic configuration:

•Macintosh II with 1 MB memory, 800 KB floppy disk drive and Apple Keyboard: \$3898

#### Hard disk configuration:

•Macintosh II with 1 MB memory, 800 KB floppy disk drive, 40 MB internal SCSI hard disk drive and Apple Keyboard: \$5498

### MACINTOSH SE

#### Basic configuration:

•Macintosh SE with 1 MB memory, two 800 KB floppy disk drives and Apple Keyboard: \$2898

#### Hard disk configuration:

•Macintosh SE with 1MB memory, one 800 KB floppy drive, 20 MB internal SCSI hard disk drive and Apple Keyboard: \$3698

### MACINTOSH PLUS

Entry-level personal computer for business professionals, students and faculty: \$2199

### MACINTOSH 512K

#### Enhanced

Entry-level personal computer for business professionals, students, and faculty: \$1699

### STORAGE DEVICES

For Macintosh Plus, Macintosh SE and Macintosh II models:

•External Hard Disk 20SC: \$1299  
 •External Hard Disk 40SC: \$1999  
 •External Hard Disk 80SC: \$3199  
 •Tape Backup 40SC: \$1499  
 •40 MB Tape Cartridges 5-pack: \$199  
 •3.5-inch Internal Drive: \$299  
 •3.5-inch Drive: \$399

#### For Macintosh II only:

•Internal 20SC Hard Disk: \$999  
 •Internal 40SC Hard disk: \$1599  
 •Internal 80SC Hard Disk: \$2699

### DESKTOP EXPRESS

•Electronic mail software from Dow Jones & Company, Inc. that permits sending graphic and text documents quickly using MCI mail: \$149

### OPTIONS

#### For the Macintosh II:

•High-resolution, 12-inch Monochrome Monitor: \$399  
 •High-resolution, 13-inch Color Monitor: \$999  
 •Universal Monitor Stand: \$89  
 •68851 PMMU Upgrade: \$499  
 •1MB RAM Upgrade Kit: \$349  
 •Macintosh II Video Card: \$499  
 •Macintosh II Video Card Expansion Kit: \$149  
 •EtherTalk Card: \$899

#### For Macintosh Plus,

Macintosh SE and Macintosh II: \$999

#### •2 MB RAM Upgrade Kit:

•Apple Keyboard: \$129  
 •Apple Extended Keyboard: \$229

### MS-DOS PRODUCTS

•Apple PC 5.25-inch Drive: \$399  
 •Macintosh II PC Drive Card: \$129  
 •Macintosh SE PC Drive Card: \$129

### TYPICAL MACINTOSH II SYSTEMS

#### Basic Monochrome System

•Macintosh II, 1 MB memory, monochrome monitor, video card, Apple Keyboard: \$4796

#### HD40 Monochrome System

•Macintosh II, 1 MB memory, HD 40, monochrome monitor, video card, Apple Keyboard: \$6396

#### HD40 Color System

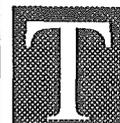
•Macintosh II, 1 MB memory, HD 40, color monitor, video card, Apple Keyboard: \$6996

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## Macintosh in Major Markets

Downloaded from AppleLink  
*Edited by Bob Woods*



he Macintosh product family's characteristic ease-of-learning, graphics orientation and power have contributed to the widespread acceptance of the Macintosh personal computer family across all sizes of business and in higher education.

Statistics show that the Macintosh is becoming a mainstream personal computer. During 1986, monthly sales of the Macintosh doubled, bringing the total sold since 1984 to over one million units. And, according to the market research firm Infocorp, for most of 1986 (the last 10 months of the year), the Macintosh Plus was the top-selling personal computer sold by specialty retail stores. Furthermore, there are more than 2,500 third-party application packages now available for Macintosh systems.

### Macintosh in Business

Personal computer sales are growing fastest in the business market. It is also the arena where sales are awarded not on price alone, but on value and performance. Today, nearly two-thirds of all new Macintosh computers are sold to the business marketplace. Many companies are embracing the Macintosh because its intuitive interface greatly reduces training costs. One study showed it reduced costs by a factor of eight over MS-DOS-based machines. Many U.S. newspapers use the Macintosh to help produce their editorial art. Applications range from locator maps and graphs to sophisticated explanatory diagrams, full-color weather maps, and special typographic effects. Gannett Company, Inc., publisher of USA Today, uses 150 Macintosh computers throughout its newspaper chain.

### Macintosh in Higher Education

Since the introduction of the Macintosh in 1984, Apple has enjoyed growing success in the higher education market.

A significant factor in its success can be attributed to Apple's commitment to offer a comprehensive program that encourages schools to become active partners in

**GOTO 25**

# Spelling Checkers for the Macintosh<sup>®</sup>

by John L. Hansen

Editorial—John Hansen has put together the most complete and thorough review of Mac spelling checkers I have seen anywhere. Because of its thoroughness, it is also rather long. So we bring it to you in 3 installments.

## Installment 1

### Introduction

**S**everal months ago (or was it longer, Dan?), I volunteered to do a review of MacSpell+ Version 1.07. As I worked on

that article, spelling checkers proliferated and my article grew and grew. It may be too big and the Editor is getting impatient. The programs examined are:

- MacLightning<sup>™</sup> Version 2.0
- MacSpell+<sup>™</sup> Version 1.67
- MacProof<sup>™</sup> Version 2.0
- Spellswell<sup>™</sup> Version 1.3a
- Thunder<sup>™</sup> Version 1.01
- WriteNow<sup>™</sup> spelling checker
- Microsoft<sup>‡</sup> Word<sup>™</sup> Version 3.0 spelling checker
- WorksPlus<sup>™</sup> Spell.

The review consists of brief comments on the programs to help you decide if you want to read the whole article, followed by a more detailed discussion of each of them, and a few miscellaneous comments. Because of the variety of features built into spelling checkers and the different methods they use to perform the same functions, it is often hard to know whether comparative times mean much. I have used MacLightning, MacSpell+, and Thunder quite extensively. I have tried to use each of the others often enough to develop some proficiency with them, and in addition to the tests below, have tried in a variety of ways to find any features that might cause problems.

### Brief Comments

- MacLightning, MacSpell+, and Thunder are installed as desk accessories (DAs) and must be used with a word processor. Spellswell and MacProof open documents prepared with a word processor. WriteNow and Word 3.0 word processors include spelling checkers and dictionaries. WorksPlus Spell integrates with Microsoft<sup>‡</sup> Works<sup>™</sup>, adding numerous functions to the "Search" menu.

Microsoft<sup>‡</sup> Works<sup>™</sup>, adding numerous functions to the "Search" menu.

- MacLightning, Thunder, and WorksPlus Spell can be used interactively—checking spelling as a document is prepared. All eight programs can check spelling on a completed document (batch checking).
- MacLightning's dictionary contains 80,000+ complete (publisher's emphasis) words, can check some words based on how they sound ("phone" as a correction for "fone"), and, in the interactive mode only, will do limited grammar checks.
- MacSpell+ has a 75,000-word dictionary, will show correct hyphenation points and insert them, and has a built-in, but very limited, thesaurus.
- MacProof has a 95,000-word dictionary, but does not offer suggestions of correct spellings. Misspelled words cannot be corrected in the program. Perhaps it shouldn't be in this comparison, but more about that later.
- Spellswell provides a 60,000-word dictionary and checks spelling, incorrect hyphenation, and homonyms. Version 1.3a with shortcut features was one of the fastest correcting programs in two tests.
- Thunder has the smallest dictionary (50,000 words), but performed very well in two tests., but did not do well at all in the third one. Words can be added to the main dictionary and supplementary dictionaries. It can grade documents for readability and has a typing expander that allows entry as many as 255 characters with a few keystrokes. MacUser<sup>™</sup> rates it the best speller available. Unfortunately, a clipboard problem makes it unusable for batch checking with Microsoft Word<sup>™</sup> if the document contains any formatting.
- The WriteNow word processor also includes a 50,000-word spelling checker. Words can be added to or deleted from the dictionary and "personalized" dictionaries can be created. It is obviously designed for use with WriteNow, but I used a feature called Translator to convert my Word-created test documents to documents readable by WriteNow.

- Word 3.0 has a built-in Spelling Corrector that includes an 80,000-word dictionary. Words cannot be added to or deleted from the main dictionary, but user dictionaries containing additional or specialized words can be created. Only batch checking can be done, but checking the spelling of even a single word can be done quickly. Although separate from the spelling checker, the program provides an automatic hyphenation utility.
- WorksPlus Spell is added to Microsoft Works. The dictionary contains 70,000 words and additional words can be added to it or to a document's personal dictionary. It can be used interactively or for batch checking. It has a glossary feature, automatic hyphenation and, according to the publisher, knows spelling exceptions, verb tenses, plurals, adjectives, and adverbs. This program was excellent. The only significant fault I could find was that it does not work with Word 1.05.

### Test Procedures

Three documents were used to test the programs. I copied two articles from magazines using Microsoft Word Version 1.05. The first contained 942 words and 34 added spelling errors and the second 1468 words and 25 spelling errors. The two articles were selected to provide different types of vocabulary. The second one contained several correctly-spelled words that were shown as misspelled and that occurred more than once. One was repeated 12 times. These unintentionally served to show how the programs handled this situation.

To provide a third check of dictionary vocabulary, I prepared a list of 100 words, using a random number table to select the pages and words from the 1983 paperback version of "The American Heritage Dictionary," based on the new Second College Edition and containing 60,000 words. Very unusual words were not selected.

The order in which the checkers are listed below is not a rating order. Times are shown as follows: 8:32.76 = 8 minutes and 32.76 seconds.

GOTO 22

Spelling Checkers Continued

MacLightning Version 2.0

Target Software, Inc.  
14206 S. W. 136th Street  
Miami, FL 33186  
List Price: \$99.95

MacLightning is a 53K desk accessory with a 307K dictionary. It can be licensed for network or file server use. Legal and Medical Dictionaries that run with MacLightning are available. Compatibility with 90% of Mac software is claimed. Synonyms can be checked with an optional 45,000-word thesaurus that works with MacLightning and is available for \$49.95.

Minimum configurations are a 512K Mac with external drive or a Mac with an 800K internal drive. To load MacLightning on a 400K disk with Micro-soft Word requires elimination of all removable fonts except those absolutely needed (I had only Boston-NY 9, 10, 11, 18, and 20) and all desk accessories except MacLightning, Key Caps, and the Alarm Clock. An 800K disk is much more satisfactory.

The MacLightning dictionary is Merriam Webster's Ninth New Collegiate Dictionary. Words can be added to the dictionary and appear in italics. None of the Merriam Webster words can be deleted, but added words can be removed. Words can be added or deleted easily and rapidly. Any word in the active portion of the dictionary can be copied and then pasted into a document. A search with a partial word can be used to find a desired area in the dictionary.

If enough memory is available, the entire dictionary is loaded into RAM (Mac Plus) and accessed very rapidly. If not, a RAM cache of the 3,000 most commonly used English language words is built. Any word used more than five times in a single session is added to the RAM cache and maintained in it the next time MacLightning is loaded. However, even when the dictionary is read from a disk, lookup is surprisingly rapid. A pull-down menu offers a choice of interactive checking, checking a selection, analysis (number of words checked, number misspelled, average word length, and longest word), the misspelled list, and library (the dictionary).

MacLightning can be used interactively to check spelling while you type or to batch check a completed document.

Used interactively, MacLightning beeps after each misspelled word or after any word not in the dictionary. Special words (I'm a chemist) must be added to the dictionary to avoid beep overload. Fortunately, this is very easy. However, due to some idiosyncrasies, there may still be a lot of beeps. For example:

1. The dictionary contains U.S.A., but not U.S. U.S. cannot be added to the dictionary because it contains an illegal character.
2. "Jim" is O.K. (O.K. is not), but "Jim's" or "won't" are not—the curly apostrophes (') in possessives and contractions are rejected, but the standard apostrophe in "won't" is accepted.
3. I use the letters "RD" as part of a code. When I tried to add "RD-" to the dictionary, I was told it was already there as "Rd.," an abbreviation for "Road." Unfortunately, my "RD-" cannot be entered because the dash is an illegal character.
4. I often use numbered paragraphs like these four. MacLightning beeps after each period and again after the tab. Again, I can't enter "1." because it contains an illegal character (the period, or is it the number?).

MacLightning, when used for batch checking, finds misspelled words very rapidly. Checking the spelling of my two documents took 27.44 seconds (942 words) and 41.60 seconds (1468 words). The "misspelled" words are shown in the Misspelled Window in the order found (Figure 1, Left Panel). A click on the

center icon of that panel alphabetizes the words and eliminates any duplicates (Figure 1, Right Panel). Any correctly-spelled words can be added very rapidly to the dictionary by clicking on the "Add-to-Dictionary" icon (the right icon). The cursor automatically jumps to the next word when a word is added to the dictionary. This procedure can be used to add a list of specialized words typed with a word processor quickly to the dictionary.

If a document contains misspelled words, batch correction is slow and tedious. The operations are:

1. Click on "A-1-Z" icon to alphabetize the misspelled words and eliminate duplicate listings (in the 942-word example, the misspelled words dropped from 64 to 43 because "U.S." was listed 22 times).
2. Double click on the first word. A dictionary page appears on screen with the misspelled word at the top of the box (Figure 2). If the first four letters are correct, the correct dictionary page is usually selected and the correct word may be highlighted. Click on that word, if it is correct, or find the correct word and click or correct the spelling on the top line.
3. Click on the paste bottle to call the "Find/Change" procedure of the word processor. The correction is made by clicking Find, waiting for the word to be found and highlighted, and then

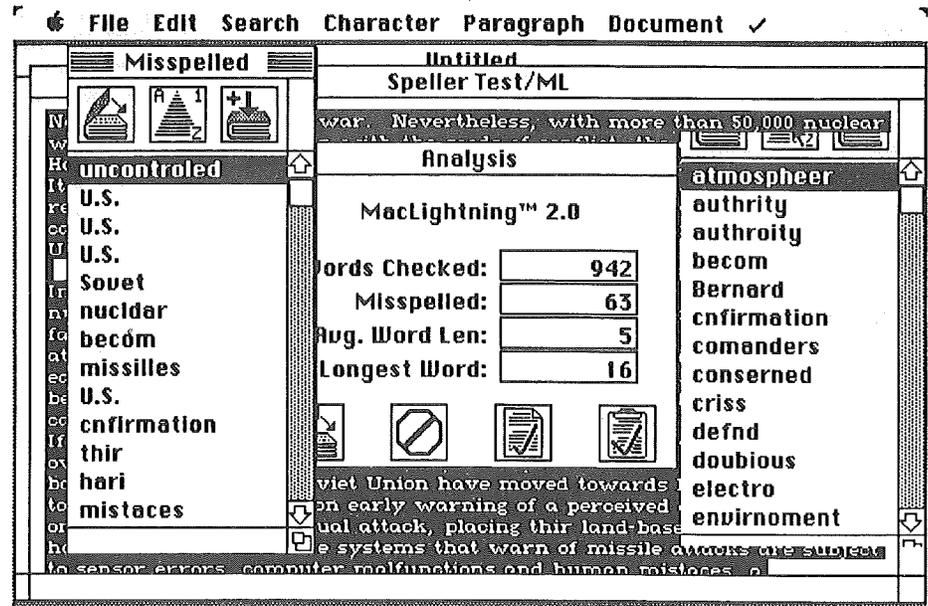


Figure 1. MacLightning Window checking selection.

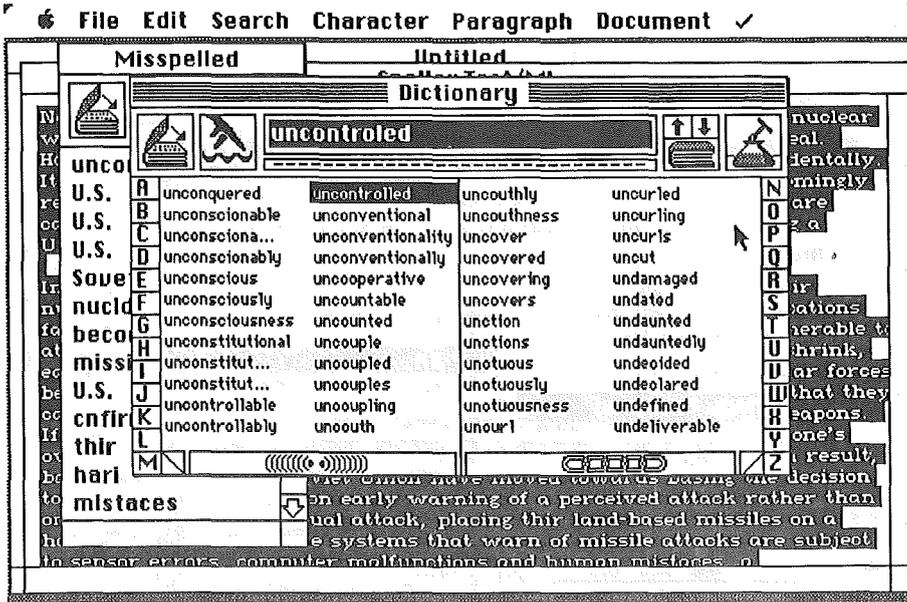


Figure 2. MacLightning Dictionary Window

clicking Change. This is the first time that you see the misspelled word in context. Occasionally, because you are not shown the word in context at the dictionary window, you may be forced to guess the misspelled word. If the guess

is wrong, it can be corrected in Find/Change window.

4. Go to the next word on the misspelled list using Command-5. Figure 3 shows the screen visible at this point.

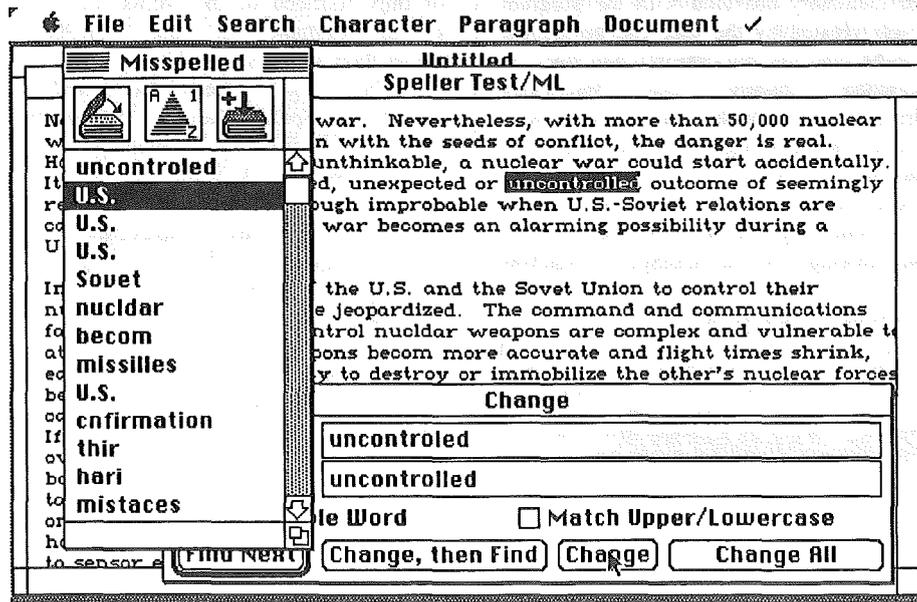


Figure 3. MacLightning batch correction using Word "Find/Change."

A document in which the same word is misspelled the same way several times presents a problem. Alphabetizing the misspelled words eliminates any duplicate mistakes. Clicking on the single listing and using Find/Change will correct only the first of the duplicate errors. You must decide whether to scan the list for duplicate errors before alphabetizing (difficult in a long

document) or to make corrections from the list without alphabetizing. In either case, only misspelled words need to be checked. All correct words in the list can be bypassed or added to the dictionary, provided they don't involve any of the problems mentioned above.

The procedure for interactive checking is much simpler if you can stand the numerous beeps you will

probably encounter because of the problems mentioned above:

1. At the beep, type Command 1, which takes you to the dictionary page.
2. Correct the word as described above.
3. Type Command 2. You are returned to your document, the word is corrected, and you continue typing.

If the last word of a sentence is misspelled, the period is included with the word and is deleted when the correct word is clicked in the dictionary. You must add the period before typing Command 2 interactively or clicking the paste jar when batch checking.

Question marks and exclamations are not shown with the misspelled word.

For my first test document, MacLightning reported 64 errors in 942 words in 27.44 seconds. The number of indicated errors dropped to 43 when alphabetized. It took me 11:16 to correct the mistakes. In the dictionary, the correct spelling was highlighted 18 times. The correct page was selected for five times, but the wrong word was chosen (for example, for "missiles," "missilery" was selected instead of "missiles"). Eleven words were in the dictionary, but too far away for convenient scrolling. Three correctly spelled words and six proper nouns were not in the dictionary.

Time to correct the second document was 8:34. The correct spellings of seven misspelled words were indicated and the correct page, but wrong word three times. Nine words were in the dictionary, but on a different page and six words were not in the dictionary. Nine correctly-spelled words and three contractions (doesn't twice and shouldn't) were shown as misspelled.

Eighty-seven of the 100 randomly-selected words were present in the MacLightning dictionary. The correct spellings of words were highlighted or on the exhibited dictionary page for 55.9% of the inserted misspellings.

I selected, at random, 37 words from one test document and checked the optional MacLightning Thesaurus for synonyms and found extensive listings for all 37 words. For example, thirteen adjectives (three different definitions) and fifteen verbs (three definitions) were shown as synonyms for "equal."

Spelling Checkers Continued

Comments: MacLightning, in my opinion, should only be used interactively. Interactively, the beeps from items mentioned above that cannot be added to the dictionary are distracting. The algorithm used to guess spelling for incorrect words is much less efficient than Thunder, WriteNow, or WorksPlus Spell.

MacSpell+ Version 1.67

Creighton Development, Inc.  
4931 Birch  
Newport Beach, CA  
List Price: \$99.95

By chance, after I had completed tests on Version 1.07, I learned from a friend that Version 1.67 was available for \$15.00 and ordered a copy. I received an update announcement from Creighton several weeks after I received the update. The major changes appear to be a "bell," ability to handle Word documents 18.5 inches wide, ability to "ignore" up to 500 words, and HFS compatibility. MacSpell+ is a 40K desk accessory with a 354K dictionary. Specialized dictionaries can be created. Words can be added to the dictionary, but could not be removed until recently when Creighton announced a word-removal program for \$5.00. Minimum configuration is a 512K Mac. The DA is installed in the system using Font/DA Mover. Version 1.67 works with

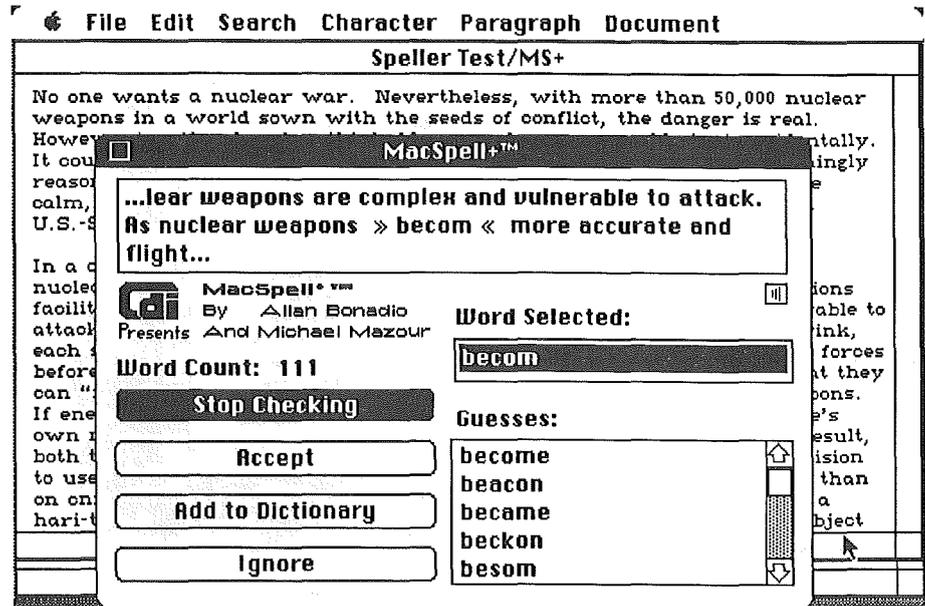


Figure 5. MacSpell+ Misspelled Word and Guesses

MacWrite 2.2, MacWrite 4.5, and Word 1.05 and possibly with other word processors though all functions may not work.

MacSpell+ is designed for batch checking and is called up using the DA. The dictionary provided with the program or one created by the user can be loaded. If the word processor window is shortened slightly, the MacSpell+ window can be positioned behind it with a small exposed edge that can be used to call MacSpell+ to check hyphenation or to use the thesaurus. These are accessed by highlighting the word to be checked and clicking on the MacSpell+ window.

A selected word can be hyphenated by clicking the desired hyphen.

Using the same 37 words that I used with the MacLightning Thesaurus, I checked MacSpell's thesaurus for synonyms. Synonyms were displayed for only fourteen of the words. Figure 4 is an example of the MacSpell+ hyphenation and synonym display.

When Spell Check Document is clicked, MacSpell+ searches through the document, checking spelling and counting words. A word that is not in the dictionary is displayed with three lines of text and sometimes with spelling guesses, as shown in Figure 5. Clicking on the correct spelling, "become," automatically substitutes it for the misspelled word in the document. If no guess is shown, the word can be corrected in the "Word Selected" box and substituted in your document by pressing Accept. If the word is spelled correctly, it can be added to a supplemental section of the dictionary by clicking Add to Dictionary. Words added to the dictionary cannot be checked for hyphenation or synonyms. Words, such as proper names, not wanted in the dictionary will be ignored in the rest of the document if you click Ignore.

In my initial check with Version 1.07, MacSpell+ counted 1202 words compared to MacLightning's 942. In addition to proper nouns, it found 40 misspelled words. Thirty-four of these were the same ones found by MacLightning. Correct guesses were

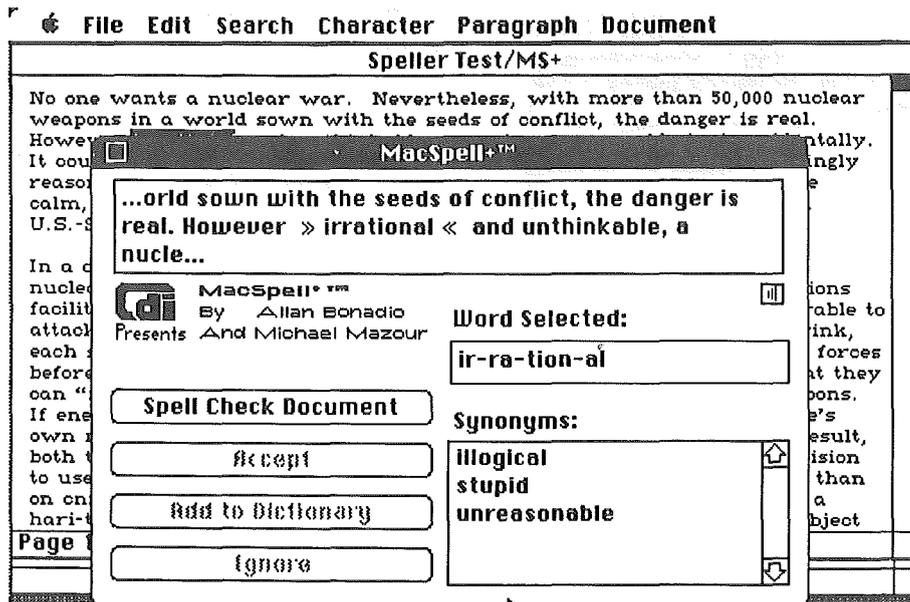


Figure 4. MacSpell+ Hyphenation and Thesaurus

offered for 24, incorrect guesses for two, and no guesses for eight. The following words were not in the dictionary: *seeds, uncontrolled, dangerously, nation, intercontinental, and emplaced*. "Uncontrolled" was selected as misspelled. After correction, MacSpell+ indicated the correct spelling was incorrect. It took me 8:31 to correct my mistakes and those of MacSpell+. Unlike MacLightning, MacSpell+ does accept the curly apostrophe.

Using Version 1.67, the number of words dropped to 996 and, again, all 34 mistakes were found. Correct guesses increased to 25 and incorrect guesses decreased to one. *Nation* was no longer listed as misspelled, but *us* was (alternates were *usa* and *use*). When I corrected "intergrated," the program went into a loop, showing "integrated" as a misspelled word and as the guess of the correct spelling until I finally typed **Ignore**. Unlike Version 1.07, the curly apostrophe apparently is not recognized because "doesn" and "shouldn" were listed as misspelled. My correction time was 17 seconds longer with Version 1.67.

I corrected the second document, using Version 1.67, in 9:38. Correct guesses were offered for 15 words, wrong guesses for one word, and no guesses for nine words. *Creationists, creationism, precellular, nonliving, unscientific, hellfire, and deadlines* were not in the dictionary.

The MacSpell+ dictionary contained 87 of the 100 randomly-selected words and offered correct guesses for 67.8% of the inserted misspellings in the two test documents.

I have found seven misspelled words in the MacSpell+ dictionary, including "prepartion," which was offered as a guess for the misspelled (?) word "preparation."

**Comments:** I used MacSpell+ until I decided I liked interactive checking better. This is a very easy spelling checker to use. It is considerably slower than several of the others and the number of correct guesses was well below the other checkers except for MacLightning and Spellswell. The hyphenation feature is useful. The thesaurus is too incomplete to be useful.

I did not find any significant improvement in correction times with Version 1.67.

**"Spelling Checkers" will be continued in May**

## Macintoshes in Major Markets Continued

developing Mac usage into the campus curriculum and administrative activities. The academic program offers curriculum solutions, courseware development and distribution, training, service, and support that focuses on lowering the cost of campus computing through special pricing and financing. In addition, Apple supports conferences and publications such as "Wheels for the Mind," a detailed account of computer projects and software development -- a quarterly publication that has emerged as an important resource for computing on campuses. The exchange of information continues via AppleLink, which is an on-line system that links educators directly to Apple, colleagues, developers and dealers. Many of these programs sprang from Apple's relationship with the Apple University Consortium (AUC). Formed in 1984, the AUC -- with member schools such as Brown University, Carnegie Mellon, Harvard, MIT, Princeton, University of California at Berkeley, University of Michigan and Yale -- is a partnership of universities and colleges that explore uses for the Macintosh, develop courseware, share information and act as an advisory council to Apple.

The AUC's efforts in software development were the cornerstone of the establishment of the Academic Courseware Exchange (ACE). Administered by Kinko's Graphics, ACE enables universities to share courseware by distributing it in the volumes that they need and at prices they can afford. In addition, many AUC schools have adopted the Macintosh as the computer of choice on campus. Among those schools are Drexel University, Dartmouth College, Drake University, and Franklin and Marshall College. All of these schools strongly recommend that their students purchase Macintosh computers or provide access to students through public access labs. The U.S. Coast Guard Academy announced that beginning in July, new cadets will be required to purchase a Macintosh personal computer.

Apple expects that a full range of higher education personal computing needs can be met by the Macintosh family. The entry-level 512K Enhanced and Macintosh Plus meet the needs of students and faculty to have a large

software base and good performance at an affordable price; the expandable Macintosh SE offers flexibility for students, faculty and administrators, and the open, powerful Macintosh II provides the power needed for advanced programming, software development, simulations, research, high-speed communications, engineering and computer science.

## Macintosh in Government

The government is the country's largest employer, the largest publisher and the organization with the greatest opportunity to reduce training costs. In the second part of 1986, Apple made a commitment to serve the government market. Linking the Macintosh to MS-DOS computers, mainframes and minicomputers enhances the power of the Macintosh. Because UNIX and MS-DOS are standards in the government environment, the company has set a directive to provide the Macintosh compatibility with the IBM and DEC worlds. Apple will tailor products for government bids and create solutions that are specific to government needs. For example, a version of Macintosh configured for security uses is on the National Security Agency's Preferred Product List. With growing involvement from value-added resellers and with expanded choices of operating systems, more Macintoshes will be used by government organizations.

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Bloomington, MN 55431

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(address general questions about DOMs to the Sftw Director, Steve George).

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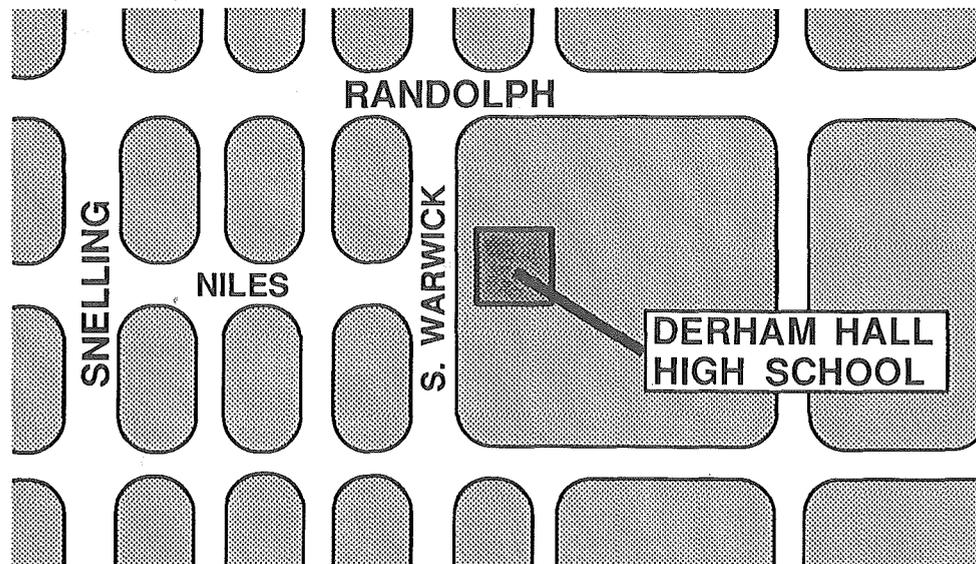
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## Mini'app'les Apple II SIG Meeting



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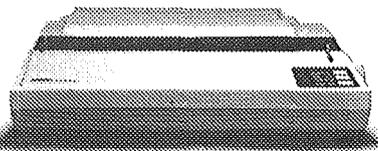
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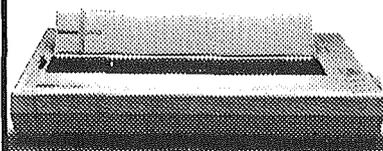
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