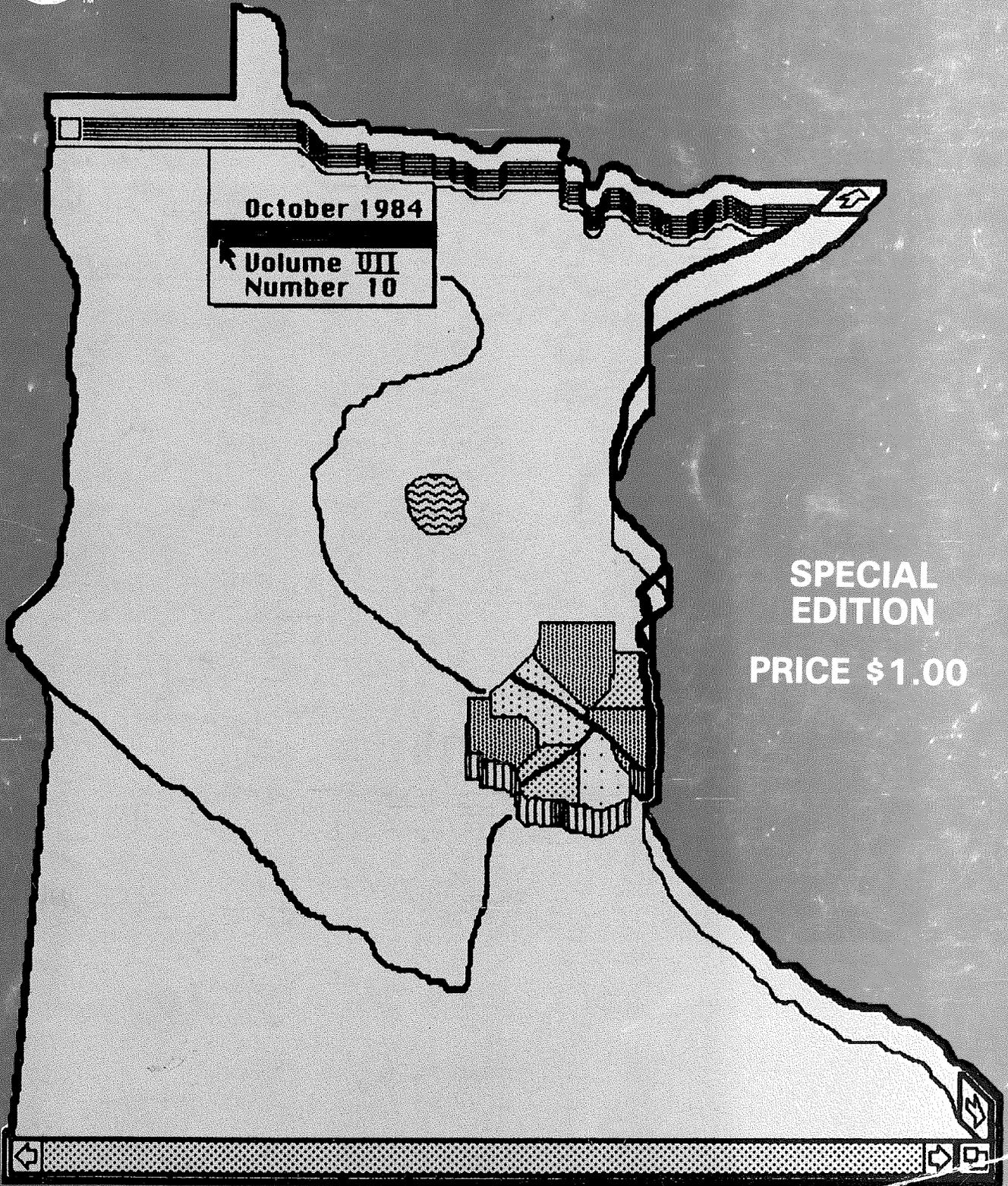


mini'app'les

apple computer user group newsletter



October 1984

Volume VII
Number 10

SPECIAL
EDITION

PRICE \$1.00

Minnesota Apple Computer Users' Group Incorporated

GRAND OPENING COUPON SPECIAL. PRESENT THIS COUPON TO RECEIVE THESE PRICES.

VERBATIM DATALIFE DISKETTES



18158 SS/DD/SOFT Reg. \$27.50 \$19.95
 18188 DS/DD/SOFT Reg. \$39.95 \$29.95

ELEPHANT MEMORY SYSTEMS



REGULARLY \$16.50

Additional Boxes
with Coupon \$14.95

EMS #2 SS/DD/SOFT Reg. \$20.00 \$16.99
 EMS #5 DS/DD/SOFT Reg. \$32.00 \$24.95

PRINTWHEELS

Qume Brand—Plastic \$ 8.95 \$ 7.95
 Diablo Brand—Plastic (630) \$ 8.95 \$ 7.95
 Brother/Comrex \$23.95 \$21.95



**64K MEMORY
UP GRADE FOR IBM-PC
\$59.95**

9 1/2 x 11 TRACTOR PAPER

3300 Sheets White 15 lb. \$24.50
 2550 Sheets White 20 lb. \$22.45
 2500 Sheets White 20 lb. Micro Perf. \$26.95
 14 7/8 x 11 White or 1/2 GB 15 lb. \$41.00
 14 7/8 x 11 White or 1/2 GB 20 lb. \$37.50

2, 3, or 4 ply NCR or Carbon available.

WE NOW CARRY TRACTOR ENVELOPES, TRACTOR INDEX CARDS AND 250 SHEET PACKS OF CLASSIC LAID AND MICRO PERF PAPER.

RIBBONS

**20% OFF
On All Dot Matrix Ribbons**

Epson MX, RX, FX-80 \$ 4.56
 C. Itoh Prowriter/NEC 8510 \$ 4.56
 Okidata Microline 80, 82, 83, 92, 93 \$ 1.80
 Brother/Comrex CR-II One Time Film dz \$48.00
 Diablo Brand HyType II Multistrike \$ 4.95
 Diablo Brand HyType II Fabric \$ 4.95
 Qume Brand Multistrike IV \$ 7.60
 Qume Brand Fabric IV \$ 7.60

Some Dot Matrix ribbons available in Red, Blue, Green, Brown and Purple.

DISKETTE STORAGE

**10% OFF
On All Storage Cases**

Flip 'N' File Original (holds 50) \$15.96
 Flip 'N' File 25 (lockable) \$22.45
 Flip 'N' File 50 (lockable) \$26.95
 Flip 'N' File 15 (library type storage) \$ 7.15
 Flip 'N' File 10 \$ 3.55
 Library Case (assorted colors) \$ 2.25

TRACTOR LABELS

5000 AVERY 3 1/2 x 1 1/16 \$16.25
 2000 Labels with 9 1/2 Carrier 2 across \$10.95
 3000 Labels with 9 1/2 Carrier 3 across \$11.95

We also carry 1000 packs of selected labels

WE STOCK OTHER SIZE LABELS.

Hours: 9:00 AM—7:00 PM M-F
 9:00 AM—4:00 PM Sat.

Minimum shipping charge \$2.00, call for rate. Add \$1.65 for C.O.D. All prices reflect Coupon Sale Prices with cash discount. MasterCard and Visa add 5%. Coupon must be presented at time of purchase to obtain coupon prices. See other side for restrictions. Purchase orders cannot be accepted with sale pricing.

-2-

**BE SURE
TO
REGISTER!**

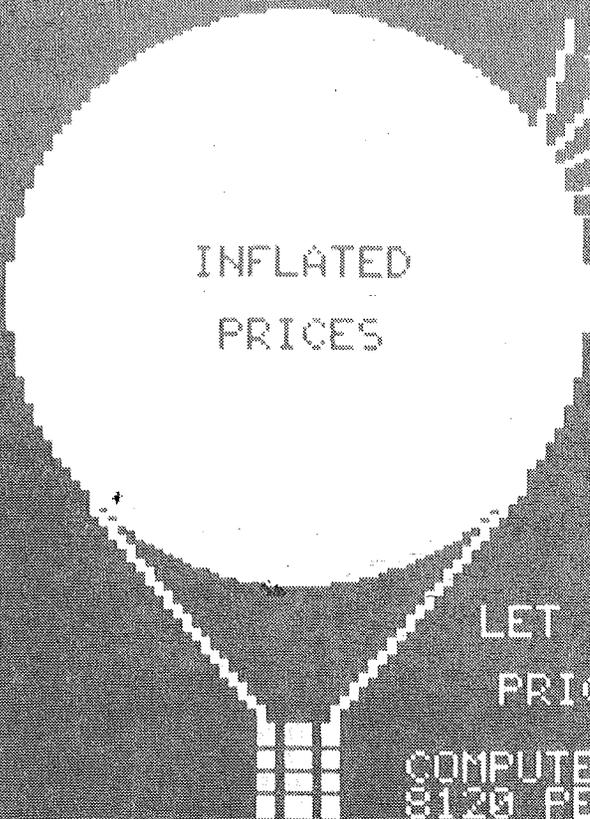
Register to win an EPSON Printer.

Ask about the EPSON PLAN consumer financing program. Same low prices, compare and save. We will not be undersold.

CITY DESK COMPUTER WAREHOUSE 164 NORTH BLAKE ROAD • HOPKINS • (612) 933-1771
 P.O. BOX 16152 MINNEAPOLIS, MN. 55416

**NEW
LOCATION**

One coupon per customer. One coupon per address. Limitations and restrictions apply. Quantities are limited to stock on hand. Not valid with other discounts. Valid only at 164 North Blake Road location. Valid only with address label and postmark with P.B. Meter #1586293. Expires 30 days after P.B. Postmark. In no case is this coupon valid after 11/30/84. Prices subject to change without notice.



INFLATED
PRICES

WHY PAY MORE
FOR COMPUTER
PRODUCTS

LET THE AIR OUT OF HIGH
PRICES AND CALL US NOW

COMPUTER BUYING SERVICE
8120 PENN AVE SO. #114
BLOOMINGTON 884-5009

DOES TRYING TO FIND THE BEST PRICES ON COMPUTER PRODUCTS SEEM LIKE TRYING TO NAIL JELLO TO A TREE?

MODEMS

HAYES

Smartmodem 300	\$209
Smartmodem 1200	489
Smartmodem 1200Bd	425
Micromodem II E	240
Smartcom II Software (for IBM PC)	90

NOVATION

J. Cat 300Bd direct	99
103 SmartCat 300Bd Smart	159
103/212 Smart 300/1200 Bd	379
AppleCat II 300 baud for Apple	225
212 Applecat 300/1200Bd for Apple	390

ZOOM

Networker modem	109
Networker-Netmaster combo	135

MONITORS

AMDEK

300 12" green	\$135
300A 12" amber	145
V310A 12" amber (for IBM)	160
Color I+ 13" composite	299
Color II 13" RGB	425

ZENITH

ZVM-122 12" amber	115
ZVM-123 12" green	115

PRINCETON GRAPHICS

MAX-12	\$189
HX-12	489

DISK DRIVES

Mitsuba 1/2 hgt. Dual w/drive controller	\$375
Asuka Direct Drive (1/2 hgt. Apple Comp.)	199
Drive Control Card (for above)	45
Teac DS/DD (IBM Comp.)	185

We carry over 15 different computers (IBM, Sanyo, Epson, Columbia, Televideo, Zenith, Corona, Eagle, More), over 20 makes of printers, disk drives, modems, 10 makes of monitors, 12 top selling diskettes, & more than 200 software vendors with 3000+ titles. We have what you want, call for prices.

LOOK FOR OUR AD IN THE OCTOBER COMPUTER USER FOR SPECIAL SHOW PRICES

PRINTERS

SEPTEMBER SPECIAL

**Panasonic
KX-P1092 \$459**

180 CPS Letter Quality mode
Friction and Tractor feed

Panasonic KX-P1091
(120 CPS) 339

Panasonic KX-P1090 275

Gemini 10X 269

Epson RX-80 299

Epson RX-80 FT 349

Epson FX-80 499

Juki 6100 (18 cps IN
Daisy Wheel) STOCK

DISKETTES

10 - 5 1/4" Floppy Diskettes
(packed with a storage box)

	SS/DD	DS/DD
Sentinel	\$21.00	\$24.00
Wabash	22.50	27.50

CALL FOR QUANTITY PRICING ON
10 OR MORE BOXES

SOFTWARE

	Apple*	IBM*
pfs series	\$ 85.00	\$ 95.00
Friday (Ashton- Tate)		199.00
Wordstar (Micropro)	329.00	329.00
Accounting Partner (Star)		299.00
Bank Street Writer	49.95	59.95
Flight Simulator II	39.95	
Flight Simulator		34.95
Dollars & Sense	69.95	119.00
The Home Accountant	54.95	
The Home Accountant Plus		110.00
dBase II	409.00	409.00
Turbo Pascal	45.00	45.00
Sargon III	37.95	37.95
MultiPlan	139.00	139.00
MasterType	29.95	37.95

*Apple & IBM are trademarks of
each respective manufacturer

ACCESSORIES

Paragraph I Graphics Card	\$89	13x16 printer stand for 80 column printers	\$30
Cardco G	79	16x22 printer stand (heavy duty) for wide carriage printers	40
Par. Cable for IBM	30		
36x36 Parallel	30		
25x25 RS-232	25		



**COMPUTER
BUYING
SERVICE**

8120 PENN AVE. SO., SUITE 114
BLOOMINGTON, MN 55431
(612) 884-5009

Mini'app'les

The Minnesota Apple Computer Users' Group, Inc.

P.O. Box 796
Hopkins, MN 55343

Board Members

President	David E. Laden 1215 W. Laurie Rd, Roseville, MN 55113	488-6774
Past President	Chase Allen 15718 Hayes Trail, Apple Valley, MN 55124	431-7278
Vice-President	Mark Abbott 1905 East 86th St, Bloomington, MN 55420	854-8304
Treasurer	John L. Hansen 38 Birnamwood Drive, Burnsville, MN 55337	890-3769
Secretary	Ken Slingsby, Route II, Box 182, Welch, MN 55089	507/263-3715
Communication Dir	Dan Buchler	890-5051
Software Director	Pete Gilles	475-3916
Technical Dir.	Hugh Kurtzman	544-7303
SIG Director 1	John Schoeppner	455-8613
SIG Director 2	Dick Marchiafava	572-9305
Branch Director	Ron Androff	452-5230

Coordinators

Beginners' Consultant	S.K. Johnson	869-3447
Shows and conventions	Steve George	935-5775
Membership Co'tor	Ann Bell	544-4505
Spcl Int. - Apple ///	Joe Horne	941-3411
Spcl Int. - Business	Dick Marchiafava	572-9305
Spcl Int. - Education	Jane Chatterjee	888-9447
Spcl Int. - FORTH	Mark Abbott	854-8304
Spcl Int. - Handicaps	Steve Lyle	894-2991
Spcl Int. - Invest'nt	Eric Holterman	822-8528
Spcl Int. - Macintosh	Mike Carlson	866-3441
Spcl Int. - Pascal	John Schoeppner	455-8613
Spcl Int. - Visicalc	Mike Carlson	866-3441
Tech. Adviser (hdw)	Roger Flint	771-2868

Branch Coordinators:

Dakota County	Bob Pfaff	452-2541
Minnetonka	Dick Peterson	473-5846
New Hope	Jere Kauffman	535-6745
St. Cloud	Frank Ringsmuth	253-6032
St. Paul/Mahtomedi	{ Fred Woodward { Jim Schenz	426-4060 429-4931

Liaison (*) - CP/M	(open)	
Liaison (*) - Geneology	Bill Decoursey	574-9062
Liaison (*) - Medical	Stewart Haight	644-1838

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

Software Director's Staff

DOM Sales - Meetings	Terry Schoeppner	455-8613
	Dave Nordvall	724-9174
	Gene Kasper	941-5490
DOM Sales - Mail	Hugh Kurtzman	544-7303
DOM Editors/Producers	Peter Gilles	475-3916
	Steve George	935-5775
	Hugh Kurtzman	544-7303
MAC DOM Editor/Prod.	Steve Baker	935-1192

Communication/Newsletter Publication Staff

Director & NL Editor	Daniel B. Buchler	890-5051
	13516 Grand Avenue S. Burnsville, MN 55337	
Assistant NL Editor	Jo Hornung	922-7665
Contributing Editors	Arsen Darnay	933-0399
	Steve George	935-5775
Composition/Layout	Joan Kistner	
Advertising	Eric Holterman	822-8528
Mailing Coordinator	Hugh Kurtzman	

INFORMATION

This is the Newsletter of Mini'app'les, the Minnesota Apple Computer Users' Group, Inc., a Minnesota non-profit club. Articles may be reproduced in other User Groups' publications except where specifically copyrighted by author.

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: Ann Bell 544-4505
8325 39th Avenue N.
New Hope,
Minnesota, 55427

\$12 buys membership for one year. New members and persons renewing after letting membership expire, pay a \$5 administration fee. Members receive a subscription to this newsletter and all club benefits.

DOMs and MSDs

DOMs (Disk of the Month) are available at meetings for \$5/disk or any DOM may be ordered by mail for \$6.00/disk. MSDs are \$15/disk at meetings or \$17.50/disk by mail. Send orders to Mini'app'les at above address attention DOM Sales.

Members may have DOMs copied to their own media. Contact Chuck Thiesfeld - details within this newsletter.

Dealers

Mini'app'les does not endorse any specific dealers but does promote distribution 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 directly to the Newsletter Editor. Hard copy binary or text files are preferred, but any form will be gratefully accepted. 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.

Advertising

Direct Advertising inquiries to our co-ordinator Eric Holterman at:
PO Box 8266
Minneapolis, MN 55408 612-822-8528

E-Mail: Source, BBR490;
CompuServe, 71445,400

Circulation this issue: 2200

VOLUME VII No 10
OCTOBER 1984
CALENDAR
CALENDAR
CALENDAR

WHICH	WHEN	WHERE	WHAT
St. Paul Branch Note 3	Tue Oct 2 7pm-10pm	Mahtomedl Fire House Hallam & Stillwater.	
Pascal & Apple /// Note 1	Wed Oct 3 7:30pm	Minnesota Federal 9th Ave S Hopkins	Pascal & Apple /// Special Interest Group Meeting.
Dakota County Branch Note 7	Tue Oct 9 7pm-10pm	St. John Neumann Church 4030 Pilot Knob Rd, Eagan	
St Cloud Branch Note 15	Thur Oct 11 7:30pm	Waite Park City Hall 5th Ave & 3rd St N.	
Genealogy Club Note 11	Sun Oct 14 2:00pm	Minnesota Historical Society Library St Paul MN	
REGULAR MINI'APP'LES Note 5 Map Inside	WEDNESDAY October 17th Prgm-7:30pm SIGs-8:30pmt	Edina Community Center 5701 Normandale 7 blocks S. of 50th St.	Word Processing Night Panel will compare various WPs Bring your questions!
Education SIG	Wed Oct 17	After Regular Mtg.	Demo of Microzine - Note 12.
Business SIG	Wed Oct 17	After Regular Mtg.	Inter comp. data transfer - Note 10
Investment SIG Note 4	Thur Oct 18 7-9:30pm	Henn Cty Lib at Southdale 7001 York Ave S.	Demo VALUE SCREEN & STOCK PAK II
Macintosh SIG Note 9	Mon Oct 22 Gab 6:30/Mtg 7:00	Edina Community Library 50th & Hwy 100	Note different location!
New Hope Branch Note 16	Tue Oct 23 7:00pm	Rockford Rd Library County Rd 9, New Hope	Mocking board Demo by Dick Peterson
Mnnetonka Branch Note 8	Wed Oct 24 7:30pm	Glen Lake Community Ctr 14300 Excelsior Blvd room E	Spreadsheets by John Hansen
Twin City Comp.Show	Oct 25-28	Minneapolis Auditorium	See ad and announcements - Note 14
St. Paul Branch	Tue Nov 6	Mahtomedl Fire House	Note 3
Pascal & Apple ///	Wed Nov 7	Minnesota Federal	Note 1
St Cloud Branch	Thur Nov 8	Waite Park City Hall	Note 15
Dakota County	Tue Nov 13	St. John Neumann Church	Note 7
Board Meeting	Wed Nov 14	Call Dave Laden	General club business.
Investment SIG	Thur Nov 15	Henn Cty Lib at Southdale	Seng on Grain Exch. & Commodities
REGULAR MINI'APP'LES Note 5 Map next month	WEDNESDAY November 21st Prgm-7:30pm SIGs-8:30pmt	UNIVERSITY MINNESOTA ST. PAUL Room B45 Bldg 412 Near State Fair Ground	To be announced
Education SIG	Wed Nov 21	After Regular Mtg.	Note 12
Business SIG	Wed Nov 21	After Regular Mtg.	Note 10
Macintosh SIG	Mon Nov 26	Henn Cty Lib at Southdale	Note 9 - Return to reg. mtg. place.
New Hope Branch	Tue Nov 27	Rockford Rd Library	Favorite Game Night
Mnnetonka Branch	Wed Nov 28	Glen Lake Community Ctr	Hatfield on Exec. Sec. V - Note 8

Notes: (See page 4 for telephone numbers)

- | | | | | |
|--------------------|----------------|----------------------|---------------------|------------------------|
| 1. John Schoeppner | 5. Mark Abbott | 8. Dick Peterson | 11. Bill DeCoursey | 14. Steve George |
| 2. Dave Laden | 6. Dan Buchler | 9. Mike Carlson | 12. Jane Chatterjee | 15. Frank M. Ringsmuth |
| 3. Fred Woodward | 7. Bob Pfaff | 10. Dick Marchiavava | 13. Stewart Haight | 16. Jere Kauffman |
| 4. Eric Holterman | | | | |

DISKCOVER

Twin City Computer Show

SPECIALS*

**50% OFF
SELECTED SOFTWARE**

LOWEST PRICES ON

 **Nashua™**

- Printer Paper
- Printer Ribbons

- Mail Labels
- Joysticks
- Paddles

- Flip & Files
- Flip Paks
- Library Boxes

— AND MUCH MORE —

Come check us out at booth 111

*Show specials available at the store during the show.

DISKCOVER SOFTWARE, INC.
3619 West 50th Street, Edina, Minnesota 55410
(2 Blocks East of 50th and France)

(612) 929-0551

SOFTWARE™



IN THIS ISSUE

Announcements8
 AppleWorks A review -- by John L. Hansen ...31
 Binary Capture - - - - by Steve George46
 Classified50
 Copy Programs Compared by John L. Hansen ...38
 Daisy Wheeling Fish Story
 by Arsen Darnay28
 D.A.M. MacSoftware - - by Steven E. Baker ..23
 DOM #31 - - - - - by Peter Gilles14
 DOM #32 Diversi-COPY by Steve George15
 Executive Secretary V A review
 by Gene Hatfield40
 In the Dog House with Beagle Bros
 by Steve George49
 Keytec - - - - - by Steve George47
 MacDOM #1 - - - - - by Steven E. Baker ..17
 MacDOM #2 - - - - - by Steven E. Baker ..19
 MacPlace - - - - - by Dan Buchler21
 MacSIG Notes - - - - by Tom Edwards ...20
 Magic Window & Videx Videoterm
 by Dick Marchiafava..48
 Mailbag - - - - - by Arsen Darnay30
 Map of Meeting Place18
 A New ScreenWriter A review
 by Ken Slingsby.....37
 News from Afar - - - by Dan Buchler24
 Rana 8086/2 Preliminary Details
 by Dan Buchler42
 Talk about Support Sierra On-Line
 by Eric Holterman ...25
 Wizard Interface - - by Julian St. Martin 45

ADVERTISERS

CESCO.....44
 City Desk Computer Warehouse.....2
 Computer Buying Service.....3
 Computer Resources (Opus).....16
 Dayton's Repair Service.....13
 Diskcover Software.....6
 Fresh Logic Computer Service....22
 Hagen Office Equipment.....10
 House of Forms.....51
 KSTP.....19
 Micro Mail.....24
 Mini'app'les Software.....15
 Personal Business Systems.....17
 POST Software.....7
 Prodata Computer Products.....18
 Quannon Computers.....39
 Reston Publishing.....23
 Software Plus.....48
 Telesoft Marketing.....9
 tms.....11
 Twin Cities Computer Show.....29
 You Can Count On It.....26,27
 Yukon Computer Products.....BC

The Mac art on this month's cover is the work of Steve Bibus with the aid of MacPaint. Thank you Steve.

YEAR-ROUND PERSONAL FINANCIAL MANAGEMENT

MONEY MATTER\$

- PERSONAL INCOME, EXPENSE, AND TAX ADJUSTMENTS (ACTUAL & PROJECTED) ■
- PERSONAL NET WORTH BALANCE SHEET (ACTUAL & PROJECTED) ■
- INVESTMENT PORTFOLIO TRACKING & REPRICING ■
- ESTATE AND RETIREMENT PLANNING ■
- PERSONAL FINANCIAL UTILITIES ■
- MINNESOTA TAX WORKSHEET ■
- FEDERAL TAX WORKSHEET ■

Requires APPLE II+, IIe with 48K, 1 or 2 disk drives, 132 column printer or compatible system. Complete with two system diskettes and a user manual.

\$50.00

TEN DAY MONEY-BACK GUARANTEE

SEND YOUR ORDER TO: POST Software Inc., 1779 E. Arlington Ave., St. Paul, MN 55119 • (612) 772-2515

- SHIP MY ORDER C.O.D. VIA U.P.S.
- ENCLOSED IS MY CHECK PLUS 6% SALES TAX AND \$2 SHIPPING.

CHECK ENCLOSED FOR \$ _____

NAME _____

ADDRESS _____

TELEPHONE _____

ANNOUNCEMENTS

Special Edition

What's special? You may well ask. You may have noticed that last month's edition was rather skinny. The reason was simply that we wanted to make this, the October edition, a little bigger and a little better than usual so that we could have a newsletter at the Computer Show worthy of our club. It's a sales ploy and I'll be the first to admit it. But we hope you like it, anyway.

Newsletter contributions have been down this summer — I'm not sure why. There are some regular contributors for whom we are always grateful. But we also need fresh stuff — beginner's articles, by beginners. You new members are the most perceptive as to problems with the hardware and software as it affects the novice. Let us have some input!

October Regular Meeting

The next regular meeting of Mini'app'les will be held on Wednesday, October 17, at the Edina Community Center. That's where we met in August and we had all sorts of complaints about finding it. It was also real hot and the place doesn't have air-conditioning (a common problem with Minnesota schools). Look at the map near the back cover of this newsletter. Find Hiway 100 and exit at Vernon which is also the 50th street exit for Edina. Immediately to the East of Hiway 100, on 50th Street, there is a traffic light and a police station. Proceed south on that street that goes by the police station and follow it (the frontage road) until you come to a brick building which is marked "Lutheran High School" at one end and "Edina Community Center" at the other. That's where you want to be!

The topic for the October meeting is word processing. The format for the meeting will be somewhat similar to that used in the September meeting (which had not taken place as of this writing). We hope to have several local experts on the podium to discuss the benefits of their particular word processors (WP). A tentative list of WPs to be discussed is as follows:

- Applewriter][
- Executive Secretary
- Format
- Screenwriter][
- Magic Window][
- Word Handler
- WordStar (Need a volunteer)
- Pie Writer

If you have a WP about which you feel strongly, contact Mark Abbott!

MacSIG on the MOVE by Tom Edwards

The August 20 meeting of the MacSIG group was again held at the Southdale Branch of the Hennepin County Library. This location has been working out well as a facility. There is plenty of room, and the video aids arranged by Steve Bibus make it easy for just about anyone to have "the best seat in the house". The request to place a meeting in the northern/eastern environs has yet to spark any firm offers of place and time.

Unfortunately, we are unable to reserve the Southdale Library for the October meeting. Therefore, the October 22 (Monday) meeting will be held at the

Edina Community Library
50th and Hwy 100

1 Block East of 100 on 50th, right behind the police station. The November 26 and December 17 meetings (note dates) will again be at the Southdale Library location at the same 6:30 gab and 7:00 meeting time. Thanks to Steve Bibus for all the meeting arrangements.

Following MacSIG tradition, host Mike Carlson started the August meeting with self-introductions. As usual, the interest level of the group is greatly varied, both in subject and in depth of knowledge. The additional striking feature of the group continues to be growth; there were about 70 in attendance, to again post a doubling of the count. It will be interesting to see what the passing of the vacation season will do for attendance. It's hard to believe that the growth rate could be much better.

There were several questions from the floor on technique and Mac capabilities. They are reported on separately by your recordist, Tom Edwards, in this newsletter under the heading **MacSIG notes**. Also included is a description of the demonstration given by Chuck Thiesfeld. Chuck showed how an Apple Graphics Tablet could be interfaced to the Mac through an Apple][.

By the time you read this, the September MacSIG will be history. At that meeting (September 24), we will have had one of the Mac software developers, Geoff Wattle, showing us more of the inner MacSanctum.

GOTO 9

Tell our Advertisers

you saw it here.



Announcements Continued from page 8

MacDom

I'm looking for any contributions in the following areas:

- MS Basic programs
- Stand alone Mac programs
- MacPaint Masterpieces
- Multiplan Templates
- Tips and Techniques articles
- Clipboard art
- Software and Hardware reviews and experiences
- Anything else you might like to share

Please mail or give your contribution(s) to:

Steven E. Baker
 % Advantek, Inc.
 7750 West 78th Street
 Minneapolis, MN 55435
 Home 935-1192

KSTP Computer Talk

Tune in to KSTP (1500 AM) every Saturday at 5 p.m. to hear Computer Talk. Mini'app'les will supply an "expert" for this show on the second Saturday of each month. If you have an Apple related question, here's your chance to get on the air! Note: Dave Laden was our representative for September.

The October representative has yet to be determined.

CP/M Liaison

As announced during the last few months, we are not promoting a Mini'app'les run CP/M SIG. Instead, we are suggesting that members interested in CP/M join the Twin Cities CP/M group. We are looking for a liaison individual within Mini'app'les who can steer people in the right direction and perhaps answer CP/M questions.

If you are interested, please telephone Dave Laden, your President.

Minnetonka Branch
by Steven E. Baker

The October 24 meeting of the Minnetonka Branch will be a demonstration and discussion by John Hansen of various SpreadSheet programs available on the Apple][.

John is treasurer of Mini'app'les and knows his way around several SpreadSheet programs. His presentation will cover The SpreadSheet Version 1 and 2, VisiCalc, Multiplan, and AppleWorks. That should be a large enough program selection to fill most people's needs.

During our November 28th meeting we are planning on having a demonstration of a new release of a locally written word processing program, the Executive Secretary Version V. Gene Hatfield is currently working with the program and has offered to present the program to the Minnetonka Branch. (The program is reviewed by Gene elsewhere in this newsletter.)

Those attending our July meeting were presented with an excellent discussion and review of AppleWorks by Jim Reitz of Southdale Digital Den. Jim was able to answer several questions from the floor and gave us a good overview of the powers and capabilities of AppleWorks. Thank you, Jim, for your fine presentation.

Our August meeting was attended by more than 30 individuals to hear Jim Hanson's presentation on the ASCII Express-the Professional, communication program. Jim's in-depth working knowledge of ASCII Express was clearly shown during the program. We want to thank Jim for the excellent program and for bringing all of his equipment for the evening.

GOTO 10

Telesoft Marketing

Specializing in quality APPLE & IBM software & hardware...

Free metro-area delivery...

24-Hour Support...

A Division of Arts & Farces Video

Stillwater, Minnesota

612-430-1629



Announcements Continued from page 9

Education Sig
by Jane Chatterjee

The Education Special Interest Group of Mini'app'les has been in existence for two years. We are a group of educators, parents and others interested in the educational use of microcomputers. We meet each month, after the Mini'app'les main meeting, at the same location. Most EdSIG meetings involve the demonstration of a piece of educational software, owned or used by a group member. Software we have demonstrated over the last year includes Bank Street Writer, Microzine, MECC, Learning Company, Spinnaker and Counterpoint software products. Periodically, we have an additional hands-on meeting, at a computer lab, with software for everyone to use. Occasionally, the Mini'app'les main meeting has an educational theme. In July, Joe Nathan, the well-known educational innovator from the St. Paul school district, came to speak on the future of computers in education.

An important role of the EdSIG is a networking group, where members can exchange expertise or locate help with educational computing matters. We keep a directory of members, including interests and expertise. We are continually seeking the help of members in

demonstrating software or providing software for demonstration.

Minnesota has long been a leading state in educational computing. The Minnesota Educational Computing Consortium (MECC) was set up by the state over 10 years ago, to serve the emerging educational computing needs of the schools. These days MECC is the largest supplier of educational software nationwide and has just become a private company. Some of the MECC products are the best available in their field. In late November, MECC will be holding their third annual educational computing conference, a national event featuring experts in educational computing as speakers and attracting several thousand attendees.

Educational software has been around for more than 20 years, notably Control Data's PLATO software running on the CDC mainframe computers. Educational software for microcomputers is as old as micros themselves (late 1970's). Much earlier software was designed by teachers for their own use and later made available for sale or as free, public domain software. The quality of this software varied and much of it was fairly simple. Then came the programmers and the flashy software! A few good products appeared with many of little educational value.

Lately, things have changed! Over the last couple of years, more software is being produced by cooperative efforts between educators and programmers. The best of this software combines good educational practices with quality programming, including emphasis on ease of use and appropriate use of graphics. Educational software is available for all ages and in a wide variety of subjects and skills. Types of software you will find include learning games, simulations of situations and events, interactive tutorials on a variety of subjects and drill & practise training programs. Each has its place educationally; the main concern is with the quality of the individual product. The market for home/education software has blossomed recently, with many products available to teach basic skills to young children, in an enjoyable way.

Though prices are gradually moving down, software is still expensive, compared to books, records, etc. It is often difficult to preview, as quality educational software is very costly to develop and violation of copyright is still a problem. Mini'app'les EdSIG provides a way of previewing some of the better quality educational software available for Apple computers.

GOTO 11

Professional Service

Get it done right the first time!

We give quality service on all Apple products and Epson printers.

Need on-site repair?

Call us-- on site and maintenance contracts available.

hagen

OFFICE EQUIPMENT, INC.

801 WEST 77½ STREET
RICHFIELD, MINNESOTA 55423 866-3441



Announcements Continued from page 10

The second annual Get Wise conference is aimed at young women in high school interested in pursuing scientific or technological careers. The conference will be held Saturday morning, November 3rd, in the Bell Museum, U. of M. Minneapolis campus. Last year's conference got very good feedback. Call me for more information.

The Science Museum is seeking instructors to develop and teach adult education computer classes. Any computer related topic will be considered. Suggestions are: languages other than BASIC (they have that already), utility software and graphics. They are presently scheduling for Winter/Spring. For more information, contact Chuck Tenson, Computer Lab. Director, at 221-4722.

Hope to see you at the Twin Cities Computer Show or at a future meeting of the EdSIG!

Urgent Help (still) Needed

Many of you already know that one of the members of Mini'app'les who works hardest for the club is Ann Bell, our Membership Coordinator. Ann has recently started her own business, and the resulting 12 hour days are making it difficult for her to devote the time needed to keep up with the Mini'app'les workload. Incidentally, that's why some of you new members maybe didn't get your first newsletter too fast or changes of address were late in being recorded. Anyway - ANN NEEDS HELP!

Ann lives in the New Hope area - so anybody who can get to New Hope occasionally and who is willing to put in a little time, please call Ann or one of the officers.

GOTO 12

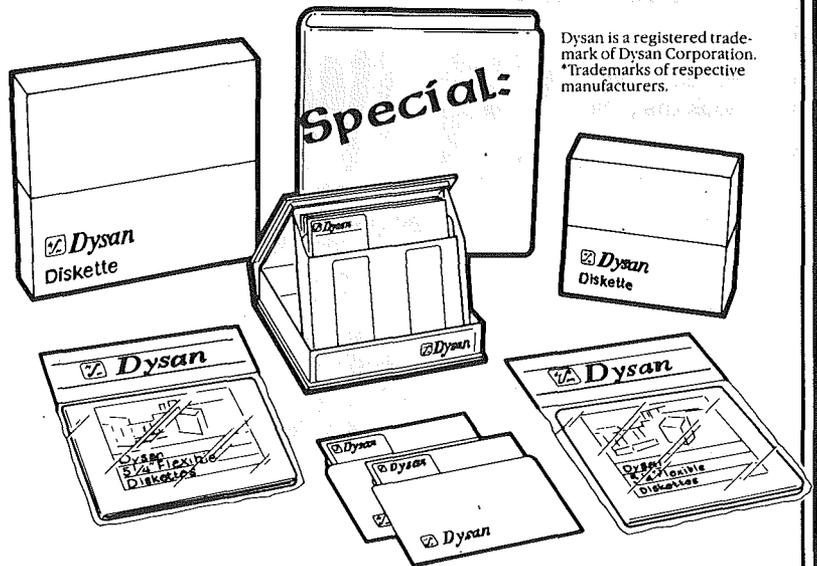
One Stop Shopping. The Complete Dysan Diskette Line.

Select from Dysan's complete media line, including 8" diskettes, 5 1/4" mini-diskettes, and the convenient mini-diskette two-pack. All come single - or double-density formats.

Dysan's advanced production techniques assure that every diskette is certified 100% error free. So you can count on Dysan for your IBM*, Apple*, Tandy*, Atari*, Commodore*, Osborne* or other personal computer.

So give us a call. Or stop by. We have a complete inventory on hand.

Dysan. The finest quality diskette available.



Dysan is a registered trademark of Dysan Corporation. *Trademarks of respective manufacturers.

SS/DD \$21.50
DD \$28.50



12366 River Ridge Blvd. • Burnsville, MN 55337 • (612) 894-9153



Announcements Continued from page 11

More Vendors at Club Meetings!

We are planning to allow vendors to come to club meetings and sell. We hope that October will be the first meeting when that can happen. Now all we need are the vendors.

Rana 8086 Bulk Purchase
by Dan Buchler

I started a thing going on setting up a bulk disk purchase for Rana 8086/2s. A detailed introduction and mini review is published elsewhere in this newsletter. Because of Rana's delay in getting the product out, we still don't have any firm prices. I had intended to buy one myself, but am now targeting a Mac (the fat variety) instead. Despite my Macish intentions, I am continuing to maintain a list of interested persons. At least two local dealers have expressed an interest in providing a "bulk" price, but not until the pricing firms up.

DOM Sales

DOMs (Disks of the Month) may be ordered by mail. Apple][, +, //e and //c DOMs are \$6 including postage. Send checks to:

Mini'app'les
PO Box 796,
Hopkins, MN, 55343

Attention DOM Sales

Please do not forget the Attention marking!

MacDOMs are presently only available at the Mac SIG meetings.

Twin City Computer Show
1984

This is the month!

The date is Oct 25-28 and the place is the Minneapolis Auditorium. See ad elsewhere in this newsletter. Unfortunately, there will be no discount tickets available this year (despite previous announcements to that effect).

We, Mini'app'les, will have a booth. Get show program for booth number. Items available at our booth include:

- Club Membership (Get your friends to join.)
- Regular DOMs
- MacDOMs
- Pascal DOMs
- DOM Catalogs
- Mini'app'les Software
- Ideas, arguments and friendship.

As in past years, we need a lot of volunteers. Call Steve George, at 935-5775, if you are interested.

The show will retain the same format as last year, but with emphasis on local dealers and suppliers and on distributors, manufacturers, etc. It will also showcase a wide variety of modern office equipment.

The show will host approximately 200 exhibitors, and organizers of the show expect 30,000 attendees. Admission will be \$6 for adults and \$3 for children 6-12.

Investment SIG
by Eric Holterman

The next meeting of the Investment SIG will be on **Thursday, October 18**, at our regular meeting place at the Hennepin County Library near Southdale. One of our members, Russ Kirby, will demonstrate **VALUE/SCREEN**, a program offered by Value Line, and **Stockpak II**, offered by Standard & Poor. These programs are designed to assist the investor with fundamental analysis of common stocks. They are offered by large, established firms with well known investment information services. Also, both programs involve subscribing to a service providing monthly updates of data on a disk in order for the program to be of continuing benefit. The programs allow you to look up information about the companies in their data base, screen or select companies based on the criteria you select, and maintain portfolios.

I have heard of a program called Micro/Scan which may provide a similiar approach to analysis. If you are familiar with this, or other similiar software, I would appreciate a call (822-8528) so that we might also comment on it at the October meeting.

The meeting on November 15th will focus on commodities. The first part will be a bit different from our usual format. Dick Seng rented a seat on the Minneapolis Grain Exchange and will talk about some of his experiences trading futures on the floor of the exchange. His comments will include information about the exchange, contracts traded there, trading operations on the floor and financial requirements for floor trading. (Incidentally, the exchange is encouraging qualified people to try floor trading.) The rest of the meeting will also be on commodities, but the agenda is still open.

December's focus will be on technical analysis. Specific programs or areas to be covered are not yet selected. If you have a program you would like to demonstrate, give me a call.

GOTO 13



Announcements Concluded from page 12

We have some public domain software and demo disks available. Bring a disk or two with you to a meeting and pick up a copy of what you want. This is subject to time and computer availability.

In mid-October a few of us will meet to look at SIG activities in 1985. If you are willing to be a bit more involved in the operation of the Investment SIG give me a call and include yourself in.

Our meetings are on the third Thursday of the month at the at the Hennepin County Library at Southdale. We will be in the Helen Young Room. Doors open at 7 PM and the meeting starts at 7:15 PM, adjourning by 9:15 PM. The library is located at 7001 York Avenue South. It is on the east side of the street, across from Target. Plenty of free parking.

New Hope Branch News by Jere Kauffman

By the time you read this, the September meeting will have come and gone. We had planned to look at Utilities that night. We will return to the Rockford Road Library for the October 23rd meeting when we have a demonstration of "Mockingbird". Bring your favorite game to the November meeting and perhaps get some ideas for Christmas presents. No meeting is scheduled in December. All friends in the New Hope area are encouraged to join and participate in our branch meetings held the 4th Tuesday of each month at 7:00 p.m. The monthly agenda is published in the Mini'app'les Calendar.

Calendar Announcements

Please submit all calendar dates, changes, etc., to Ron Androff. Ron has volunteered to be the calendar-maker for the newsletter. As for all newsletter items, timely submission helps us all!

DOMs by Mail

Continuing Service for Mini'app'les Members

by Chuck Thiesfeld

Now members can order DOMs (not Mini'app'les Software or MacDOMs) using their own diskettes. Here is the procedure:

Make up a package containing the following:

- 1. Blank diskette (or diskettes if more than one is desired).
2. Mailer. Diskettes will be returned in same protective device used to send the diskettes, provided such will fit in the mailer.

- 3. Send correct postage in stamps -- do not send money in lieu of stamps.
4. Self-addressed return label.
5. \$1.00 copying fee per DOM or disk.
6. A note indicating which DOMs are desired.

Send to: C. Thiesfeld
8416 Xerxes Avenue S.
Bloomington, MN 55431

Please allow 60 days for delivery in USA. Incomplete packages will not be returned. DOMs 1 thru 26, except 18, EAMON #3, and 8 Pascal disks are currently available. Mini'app'les Software disks (MSD) are not available! General questions about DOMs should be addressed to Peter Gilles.

Please note that DOMs may also be purchased on club-supplied media by sending \$6.00 to the software sales coordinator. See page 4. The first 3 Mini'app'les Software Disks (MSD): #1 - Mini'scrip, #2 - Micro Mailer, and #3 - Higher Print/Higher Word Processor/Message Maker are available by mail from software sales for \$17.50. Or, most DOMs, EAMON disks and some other public domain software are available at regular meetings, and at some Branch meetings, for sale to members at \$5 each, and the MSDs for \$15 each.



WE FIX BRUISED APPLES.

We're a fully authorized Apple service center offering fast, convenient and affordable repairs for Apple II, III, II-Plus and IIe models. We also service Epson, Okidata, NEC and Comrex printers. Extended service contracts available at reasonable rates for on-site or in-shop service. Use your Dayton's charge, MasterCard, Visa, or American Express. For information, call 623-7123.

DAYTON'S
© 1984, DHC

COMPUTER REPAIR SERVICE

DOM #31

October, 1984
by Pete Gilles

When is there going to be a new DOM? I would imagine Terry Schoepner and I have heard that question several hundred times this summer. Due to an unfortunate oversight, our membership in the IAC was allowed to lapse and our IAC disks stopped arriving. Then summer was upon us and our generous contributors all went on vacation. All but Tom Alexander, that is!

Tom's contributions make up over half of DOM 31. The DOM editor says "Thank You, Tom Alexander". Tom is not only a prolific program developer, he is also a good documentor. His group of programs entitled SECURITIES LEDGER came complete with a text file of documentation.

PRINT LEDGER DOC LEDGER DOC

Before running the following programs: LEDGER, PORTFOLIO, MARKET, SOLD, STOCKS, or SALES, please run the file PRINT LEDGER DOC. This short program will print the text file LEDGER DOC on any forty column printer. You may, of course, access the text file LEDGER DOC with a word processor such as APPLE WRITER if you wish.

LEDGER
PORTFOLIO
MARKET
SOLD
STOCKS
SALES

SECURITIES LEDGER is a group of menu driven programs which will allow you to record the purchase, current status and sale of common stock in a portfolio. The program LEDGER is the starter program. It will load and execute the other files for you. The file PORTFOLIO will allow you to update your personal portfolio with purchases and sales.

The file MARKET will produce a report on the market value of your portfolio and the file SOLD will generate a capital gains and losses report for your income taxes. These reports may be previewed on your monitor or sent to your printer. The files STOCKS and SALES provide some sample data to get you started with the SECURITIES LEDGER programs. Tom informs me that these programs reflect the latest changes in the tax law concerning long term capital gains.

PHONE BOOK

Another Tom Alexander program which will allow you to build your own telephone directory. The program creates a text file called DIRECTORY which will grow as you enter names,

addresses and phone numbers. If you are going to use this program for a very large phone book, you will want to move the program to another disk with more free space.

LONGEST DECIMAL

The last Tom Alexander program on this DOM contains a demonstration of a set of routines which will allow you to align the decimal point when you are printing out columns of numbers in an Applesoft program. The routines will search a group of numbers and determine which number has the greatest number of digits to the right of the decimal point. Zeroes are appended to the other numbers so that the entire column is aligned by decimal point.

PRINT SCRUNCHER DOC
SCRUNCHER DOC
HIRES SCREEN SCRUNCHER
HIRES.PACK
HIRES.UNPACK

This is a group of programs from Steve George which were described in the July, 1984 Mini'app'les Newsletter. They will pack and unpack a Hires page with a savings of 40 to 80 percent in disk sectors. Run the file PRINT SCRUNCHER DOC to print the text file SCRUNCHER DOC which is the documentation for the programs HIRES SCREEN SCRUNCHER, HIRES.PACK and HIRES.UNPACK.

PAINT DUEL

A human controlled tank vs. computer controlled tank, each firing paint canisters. It contains on-screen instructions. From Creative Computing, submitted by Will Schneider.

QUINTI-MAZE

A 5 x 5 x 5 three-dimensional maze with Hires graphics. It has a built-in timer. This also contains on-screen instructions. From BYTE, submitted by Will Schneider.

CHORD

A computer aid to music transcription. From Creative Computing, submitted by Will Schneider.

BAABAA
GREETING
XMAS

This group of three programs by Corbin Kidder produces six Lores capital letters (4x7 pixels) on the screen. You can get six or seven letters on a line. It's a handy "show-and-tell" series for teachers, and for people who just want to sit down and "do something" at the Apple.

GOTO 19



DOM #32

October, 1984
by Steve George

DOM #32 contains Diversi-COPY from Diversified Software Research, Inc. — another wonderful program by Bill Basham. Through a unique marketing technique, you can receive this very useful utility for only the price of a DOM! To legally use it however, you are requested to send \$30 to DSR. The honor-system of paying for what you use worked well for the previous DSR product: Diversi-DOS (our DOM #18).

Diversi-COPY has two primary sections: Disk copying and disk formatting. You can copy any unprotected DOS 3.3, ProDOS, Apple GP/M, or Apple Pascal disk. The disk you are copying to (destination disk) need not be previously formatted. It works with either one or two drives. If you have enough RAM memory, you can mass-produce backups so that the source disk needs to be read only once. (Diversi-COPY compresses information, so if the source disk is less-than-full, less memory is required.) It does an automatic verify of the copied information to assure accuracy at the byte-level. The destination drive's speed is continuously displayed and updated during writing to help isolate any copying problems. It will also copy 40-track disks!

The other primary option is to simply format empty "data" disks. Again, these can be in any of the four operating systems listed above. These disks will not contain the actual operating system, so they will not boot. The advantage to this is that you gain additional disk space by sacrificing the operating system. For example, an additional 32 sectors are available under DOS 3.3 format.

Diversi-COPY is menu-driven and easy to use. There is also an on-screen instruction section containing further information and detailed explanations of each function.

With the permission of the author, I have captured the documentation portion of the binary file DCOPY and saved it to disk as DCOPY.TEXT. That way, those of you who want formatted hardcopy can load it into your word processor for manipulation prior to printing. Permission was also obtained (though Bill Basham said it wasn't necessary) to put our Mini'app'les "greeting" prior to his programs. (Better safe than sorry!)

A "bonus", though a good program in its own right, is included: Dogfight II. It is found and run from within the Diversi-COPY main menu. This is an arcade-style shoot-'em-up where you battle for control of the skies. Use keyboard, paddles, joystick, or Joyport-adapted Atari controllers. Play options include easy/hard, one/two/multi-player team play, etc. Full instructions are available on-screen from the program, or you can use those in the textfile DOGFIGHT.TEXT (they're the same).

All this for a \$5 outlay, and \$30 more if you continue to use either Diversi-COPY or Dogfight. Amazing!!



Mini'app'les Software Disks MSDs

3 Great Disks:

- Mini'Scrip Checkbook Financial System - MSD #1. A home and small business checking and accounting package by Leighton G. Siegel.
- Micro-mailer - MSD #2. Mail list program by Juris and Paula Ozols of Prairie Microsystems Inc. Magic Window though not required works well in conjunction with Micro-mailer.
- Higher Text Extensions - MSD #3. Contains Higher Print by Dan Buchler, Message Maker by Charles C. Boody and Higher Word-processor by Don Hagberg.

Higher Print provides a high density print capability with a selection of fonts and more. If you own Higher Text from A.P.P.L.E. The newsletter headers and logo are printed with Higher Text.

Message Maker requires that you own HIGHER TEXT. It serves as a tool to create and display, on your screen, messages which scroll up and down, left and right and do other useful things.

Higher Word Processor is a easy to use line oriented text editor suited to letter writing and everyday home use. It integrates with Higher Print.

All MSDs are available at meetings, to members only, for \$15, or by mail from Terry Schoepner for \$17.50. See classified ads.

NO BAD MEMORIES

One of the worst memories you'll ever have is when the memory media you're using fails. Because that failure almost always means a loss in man hours, payroll, productivity and critical data.

That's why Opus is out to make a name for itself in memory reliability. We figure, if we make the best, most reliable magnetic media on the market today, you're bound to start remembering our name.

We build unheard of reliability into all the memory products we make—flexible diskettes, single-disk cartridges, multi-level disk packs and magnetic tape. So if bad memories haunt you, keep our name in mind. Because Opus could be the best memory you'll ever have.

SEE US AT
BOOTH 128

OPUS[®]
NO BAD MEMORIES





MacDOM #1

The First Mini'app'les Macintosh DOM
by Steven E. Baker

Done! The first Mac SIG DOMs have been completed! #1 should have been available during our September Mac SIG meeting and will be sold at the Computer show to Mini'app'les members for \$8.00. The disk is nearly full (less than 10k of disk available). The disk doesn't contain all of the required applications to run the programs on this disk. It is suggested you copy the programs from this disk to another disk containing the necessary application program to fully utilize this MacDOM. That will give you sufficient work room with the programs and allow this disk to be kept as a back up.

And now for the goodies in MacDOM #1.

MINI'APP'LES - Introduction MacWrite document to Mini'app'les, the Macintosh SIG, and the MacDOM #1.

AutoTEP - Macintosh Terminal Emulator Program with full mouse controls based on MacTEP by Dennis Brothers. This program lets you put that modem to work and turn your Macintosh into a telecommunication terminal. Program runs under MS-BASIC and requires you to run the program "Click for AutoTEP" to start it. (Also see 'modem' document.)

BINHEX - Program converts binary files to hex and back again. Needed to reconstitute hex files downloaded from CompuServe. MS-BASIC required and started from program "Click for BINHEX".

LIFE - This is John Conway's GAME OF LIFE made interactive and lightning fast. The program simulation is based on the simple rules that mimic the way natural processes occur in real life. Refer to Byte Magazine, 12/78, or Scientific American, 10/70, for additional details. Program by Bill Atkinson of MacPaint fame.

CLOCK - Demonstrates the usage of ROM tool box routine, TIME\$, user defined function. First appeared in the premier issue of ST.MAC. Enhanced by Paul Howe.

FILE DUMP - This program will dump the contents of any sequential disk file created by MS-BASIC. It will dump the file in both HEX and ASCII. Contributed by Paul Howe.

GRAPHER - This program will plot multiple data sets. A sample data file "Sample Graph" contained on this disk will demonstrate the program. Written by Paul Howe.

PAGER - This program will paginate a MS-BASIC program listing. It will print a page heading on each page consisting of the date, time, page number, bytes in file and file name. It will also respond to formatting commands imbedded in the text being printed. Contributed by Paul Howe.

TIC TAC TOE - The program plays Tic Tac Toe. Game is from the July, 1984, issue of A+ magazine. Entered by Paul Howe.

VARPTR/NUMS - This program demonstrates the use of the VARPTR function in MS-BASIC. VARPTR returns the byte address of the high order byte of any numeric variable. Contributed by Paul Howe.

VARPTR/STRINGS - This program discusses the storage of strings in MS-BASIC and demonstrates access to a string via PEEKS. Contributed by Paul Howe.

GOTO 18

PERSONAL BUSINESS SYSTEMS SELLS

- APPLE IIE & APPLE IIC SOFTWARE
- MACINTOSH SOFTWARE
- 5 1/4" & 3 1/2" DISKS
- PRINTER PAPER & RIBBONS
- MAILING LABELS
- DISK STORAGE BOXES

20% DISCOUNT

OFF RETAIL PRICE ON ANY
PAPER, DISKS & SUPPLIES
IN STOCK WITH THIS COUPON

PERSONAL BUSINESS SYSTEMS

MINNEAPOLIS

ST. PAUL

929-4120

698-1211

NOT GOOD WITH OTHER DISCOUNTS

EXPIRES 10/31/84

MacDOM #1 Concluded from page 17

WEEKDAYS - This program will determine the day of the week for any given date. Transported to the Macintosh from Sperry OS1100 operating system. Contributed by Paul Howe.

MacArt Folder - Contains MacPaint art work by a number of Mini'app'le and Mac SIG members. Just for the fun of it....

Tips/Hints Folder - Contains MacWrite documents containing tips, hints, and technique articles to aid you with using the MAC.

REVERSI - A Mac version of the game Othello written by Robert J. Woodhead of Wizardry fame. This is a super little game. You can easily become hooked on it. Try it.

And a few other surprises.

The first MacDOM is the result of the work of several people willing to share their time and

talent with the rest of us. William Busch and John Carter downloaded programs from CompuServe and John helped copy disks. Paul Howe wrote and/or contributed several MS-BASIC programs and MacArt pictures, Stephen Bibus contributed MacArt pictures and helped make copies of this disk. Hopefully this list will continue to expand and include your name in the future.

MacDOM #2 is described elsewhere in this newsletter. I need material for future MacDOMs. Submit your programs, your artwork, your goodies, anything you feel is of general interest to fellow Mac'ers. Submissions should be given to the MacDOM Editor.

(Editor's note: It is interesting to note that the MacDOM#1 contains LIFE and REVERSI. In the early days of the Apple][and Mini'app'les, you could count on there being a new version of LIFE on each new DOM - actually we didn't have DOMs in those days, just new library disks. REVERSI also was a program that appeared in the early days.)



PRODATA

"Most Of Our Business Is By Referral From Satisfied Customers. Find Out Why."

APPLE II HARDWARE

P.C. Systems	
80 Column Card (Videx Compat.)	\$ 89.95
80 Column Card w/Softswitch	\$ 99.95
Z-80 Card (Microsoft Compatible)	\$ 69.95
16K Ram Card	\$ CALL
128K Ram Expansion (w/Software)	\$224.50
32K Printer Buffer/Interface	\$129.95
Serial Interface	\$ 88.50
Fourth Dimension Systems	
Extended 80 Column Card (Ile)	\$ CALL
PR-1 Par. Printer Interface	\$ 69.95
GR-1 Printer Card w/Graphics	\$ 83.50
Practical Peripherals	
Proclock (Clock/Calendar)	\$148.00
Serial	\$148.00
Graphicard	\$ 89.00
Microbuffer II	\$188.00
Miscellaneous	
Appli-Card (6MHZ Z-80)	\$ CALL
Digital Research CP/M Gold Card	\$445.95
Kensington System Saver	\$ 78.95
Techtron Ile Numeric Keyboard	\$ 79.95

MODEMS

Anchor Automation	
Mark XII 1200/1300 Hayes Compat	\$295.00
Mark X Automodem Hayes Compat	\$149.00
Volksmodem 300	\$ 68.00
Axis Modem (Apple II)	\$179.00

SOFTWARE

	IBM	APPLE
Wordstar	\$325.00	\$325.00
R:Base 4000	\$395.00	
VISI Schedule	\$239.00	\$239.00
Microsoft Word	\$325.00	
Thinktank	\$169.00	
BPI Personal Acctg	\$ 86.50	
ASCII Express Pro		\$115.00
Dollars & Sense	\$ 69.95	\$120.00
Homeword		\$ 58.00
Data Capture 4.0		\$ 62.00
BPI Church Management	\$695.00	\$465.00
BPI Time Acctg. System		\$345.00

COMPUTER FURNITURE

SMITH SYSTEMS - DESKS	WORK STATIONS
CARTER CRAFT - CARRELS	PRINTER TABLES

MAGNETIC MEDIA

Diskettes	
Wabash 5" (Box of 10)	SS/DD \$ 22.00 Ds/DD \$ 27.00
Magnetic Tape	
Wabash Datateck	CALL
Disk Packs & Cartridges	
Magnetic Data	CALL

TeleVideo Systems, Inc.

Personal Terminal	CALL
914...924...950	CALL
TELEVIDEO COMPUTERS	
MS/DOS/CP/M	CALL

IBM HARDWARE

A S T Research	
SIXPACKPLUS	\$357.00
MEGAPLUS II	\$367.00
Hercules	
Hercules Graphic Card	\$465.00

DISK DRIVES

Newtech NF-555 Direct Drive	\$199.00
1/2 High Apple Compatible	\$185.00
Panasonic Drive (For IBM)	\$185.00
TEAC Drive (For IBM)	\$195.00

PRINTERS

Letter Quality	
JUKI 6100 (18 cps)	\$449.00
Televideo TP-750 (50 cps)	\$ CALL
Dot Matrix	
BMC BX-80 (80 cps w/Graphics)	\$275.00
OKIDATA	\$ CALL

PC PRODATA COMPUTER PRODUCTS (612) 541-9140

6009 Wayzata Blvd. # 113 • Minneapolis, MN 55416 (1 Mile West of Hwy. 100 on Hwy. 12)

MacDOM #2

The Second Mini'app'les Macintosh DOM
by Steven E. Baker

MacDOM #2 is scheduled for release during the October Mac SIG meeting and will also be available at the Twin City Computer Show later in the month. Price will be \$8.00.

Like the first MacDOM, certain application programs are needed before you can fully utilize the disk. Apple Computer and Bill Atkinson have made several programs available to Mac owners, and we are pleased to release some of them as part of this disk and future MacDOMs. See the MacPaint document we received from Apple and Mr. Atkinson, authorizing the release of this program.

The second MacDOM consists of the following:

SCREEN MAKER - This program allows you to make your own start up screens replacing the "Introducing the Macintosh" screen. The program converts a MacPaint picture into the StartupScreen. It's by Bill Atkinson of MacPaint fame. There are a couple MacPaint documents in the same folder as Screen Maker which show you the portion of the page Screen Maker displays and can aid you in centering your screen.

ROLADEX - Bill Atkinson's MacDex under development. Version 0.01!

HEXDUMP - Program allows you to enter the page of memory you wish to dump in hex (0-FFF). Also by Bill Atkinson.

WINDOWS - The program is a Mac Desktop Demo by Andy Hertzfeld. Contains the Pepsi Caps demo that may have been the force persuading John Sculley to leave Pepsi and become APPLE's president. Try it; you'll like it.

DALEKS - A game inspired by the British Dr. WHO television series.

CALENDAR - A new Desk Accessory that allows you to add a calendar to your Apple Menu. Can only be used at the Desktop level because of memory requirements.

MP FOLDER - Multiplan template for amortizing principal and interest payments on an installment type loan over a 60 month period. Can be modified to other periods easily.

MacSOUND FOLDER - Several MS-BASIC programs by Dennis Brothers showing off the sound capabilities of the Mac.

And a few other goodies I find room for.

The MacDOM endeavor seems to be taking off in the right direction. We have several good programs available for future months. But this does not mean we stopped looking for programs created by our membership. Please keep the programs and Mac related materials coming.

And again Thank You to the individuals that worked hard to put this MacDOM together. 

DOM #31 Concluded from page 14

The first program, "BAABAA", was named for the pleasure of finally being able to make random A's and B's come up on the screen. From there, it was all downhill.

The other two programs, GREETING and XMAS are just examples of further possible developments. 

QUESTIONS?

Get the answers from the experts on

COMPUTER TALK

KSTP-AM 1500 • Saturdays 5:05-6:00 PM



MacSIG Notes

by Tom Edwards

During the August MacSIG meeting (see announcements section of this newsletter), there were several questions from the floor on technique and Mac capabilities.

1. When a picture element is moved from Paint to Write, you lose the ability to place Write text in that horizontal slice of the document that is occupied by the picture. For now, if you want to add text to that area, you must go back to Paint and revise your picture element, then move a new copy to Write.
2. At least one brave soul has been trying to stuff data from Multiplan into the Habadex file program. Glimpses of the data seem to be tantalizingly close on the clipboard, but do not move properly(!) into the Habadex fields. The suggestion from the floor is to try the Notepad...maybe the result will be different. Most thought that the effort might be greater than the re-entry of data.
3. If the "Mouse" gives up, you are faced with a non-accessible Mac (unless you have another Apple and a Graphics Tablet!!! Read on). The Mouse can be returned to the dealer for warranty exchange, but once you are past 90 days (or as one unfortunate MacSiger found out, have the problem diagnosed as "abuse"), Apple makes no provision for repair. You have to get a new Mouse (\$60 greenbacks) or lean on someone for scavenger and repair operations.
4. Steve Baker has come up with 2 MacDOMs. (See elsewhere in this newsletter.) He may even have a 3rd by the time you read this. But that doesn't mean you should stop contributing. We want a fourth, a fifth..... a hundredth MacDOM! Let's give a hand: programs, art, stories, tips...any and all contributions are needed and welcome.
5. The question of group buys came up to the masses. Dan Buchler said that it has been left to the initiative of an individual to coordinate a purchase for the interested members. Board guidelines are also in the process of change regarding vendors at the meetings. Might pay to check. Most supporting stores will also cooperate if you make a reasonable request.
6. There continue to be MacRumors about mucho things related to the Mac. Your Recordist suggests that you don't go off the deep end on some of this stuff. If what you heard seems too good to be true, it probably is.

(See MacPlace elsewhere in this newsletter! - Ed.)

7. The (gasp) UPGRADE. A 512K retrofit of Mac certainly appears to be a solid product for the future. Timing (looks like early 1985) and price (maybe \$1000) are choicest offerings from the Rumor Mill. Everyone wants it yesterday, and for free, no less.
8. Although no "flood", the long awaited software entries are making an appearance. Seems that it just takes X many manhours to write X many lines of code. August has brought the first of the early harvest, and each day seems to add more. YR thinks that the MacPromise will be kept...look for the easy stuff first, followed by the moderately complex (now showing), followed by the "gee-whizz-do-all" programs last. Some of that "last" may be holding off for the 512K, too.
9. There is a video digitizer package available for Mac (and other computers). I missed full info on who makes it, but the cost is about \$400.

The program for the August meeting was Chuck Thiesfield and his coupling of the Apple Graphics Tablet (AGT) to the Mac... well, almost. Actually what he's done is hooked the AGT to an Apple II in normal fashion and then linked the Apple II to the Mac by way of the MousePort. With the addition of some home-brew software, which thinks the Mac is a printer connected to a standard printer interface card, he communicates pen information on the tablet to Mac for use in MacPaint. Tracing is easy, helped by some scaling factors that can be applied.

Chuck's first effort used the Apple II gameport for output, but the MouseButton was lost for lack of enough annunciator pins...he needed four wires just to get the XY info across. Switching to a parallel card solved the wire shortage problem.

The melding of the AGT and Mac haven't answered all of Chuck's needs for graphics, but he feels that for certain types of drawing, MacPaint is a more controllable program with the AGT, allowing him to draw with a more natural pen than the Mouse.

Certainly there is a greater awareness within the group that the Mac is "expandable". It just takes a bit more innovative thought to come up with the "how". Thanks, Chuck, for a very interesting look at making the Mac even more fun.





MacPlace

or Current Mac Rumors
by Dan Buchler

Mac deserves its own rumor column. So that is what MacPlace is about. I still need your input.

The first item isn't a rumor. Infoworld in August predicted that Apple would announce Fat Mac in September and they did! It seems that Apple was able to find enough 256K bit chips to satisfy themselves that could meet some sort of demand. One rumor says they have a 3 month supply of those chips.

For those who missed it, the announced prices are:

	<u>List</u>	<u>Ship</u>
Macintosh with 128K	\$2195	Now
Macintosh with 512K	\$3195	Now
(Both of the above include MacWrite and MacPaint)		
Upgrade 128K to 256K	\$ 995	Oct
(Includes MacDraw & MacProject)		

If you went out and bought the memory chips only, right now it might cost you more than the \$995!

Apple had been promising for some time that they would not penalize anyone pricewise for buying a 128K Mac and the upgrading it to 512K. However, the \$300 price cut in the 128K version, implies a \$300 penalty (at list prices). To sweeten the pot, Apple are offering a bonus to persons buying the upgrade who bought their skinny Mac when the list was \$2495. The bonus is a free copy of MacProject amd MacDraw. To obtain the bonus, you have to send in your original system disk. Apple then returns the bonus software plus a new system disk.

Talking about discounts, within 48 hours of the product announcement, the Fat Mac was reported to have been discounted to \$2600 at one dealer somewhere in the USA (not the Twin Cities).

If you work for a Fortune 2000 company which happens to be a "National" account of Apple, you may be eligible to buy Apple products through an employee purchase plan. This is a new idea from Apple. To keep the local dealers happy, Apple pays the dealer a certain sum for each product sold to "support" the product. In effect, you buy the product from Apple under the National account agreement, naming the dealer who will support you. The

dealer has to have been selected by Apple as being eligible to provide this type of support. If you need in warranty repairs or have questions, you call the dealer.

As reported in the September 11th Wall Street journal, a Future Computing survey predicts Mac sales at 252,000 in 1984, compared to 601,000 IBM PCs. That's not bad. I have heard other predictions that put Mac sales much higher than the above. We shall have to see. Some analysts blame lack of software on lower than fantastic sales for the Mac. But, did you see the latest software/ hardware list for the Mac from Apple? There were nearly 500 items in the August 1st edition. From my prospective, the software is really coming forth for Mac.

Anyway, Apple are planning to double their current 40,000 unit production capability to an 80,000 unit per month capability in 1985.

I see there is a DBMaster for the Mac and it is already released.

The various magazines on Mac are doing a pretty good job of covering the stuff - those who really are interested read those magazines. By the way, there are 3 such publications right now. But that number could go down before it goes up. Read on:

MacWorld Published by PCWorld Communications - that's the same company that publishes the very glossy PC World. MacWorld is similar. It goes for reviews and how to use new programs. Pretty good for beginners. \$24 subscription of 12 issues - that's a 20% discount rate. Will publish monthly starting in November.

St. Mac A deceptively skinny magazine published by Softalk. It seems to go to more depth than MacWorld and really gets a lot of good information in its few (62 in August) pages. Trial subscription free by sending in your serial number to St. Mac Circulation, Box 7041, N. Hollywood, CA, 91605. Unfortunately, Softalk seems to be in financial trouble and at this time we are not sure if they will survive. So don't send them any money!

GOTO 22



MacPlace (MacMore MacCrap) Concluded from page 21

SoftSpot A monthly magazine on disk. I have never seen it. It goes for \$199.00 for 12 issues. Might work well with the Mac - don't forget the disks would be worth about \$60.

The magazines are not always complimentary about the new software. Don Crabb did a detailed review of "Omnis 2" in the September 10th edition of Infoworld. In it he really lambastes the publisher of Omnis 2 who is Blythe and Organizational Software of the UK. Omnis 2 is a Database manager. Apparently, the program completely sidesteps the use of the "standard Mac interface" - no pull-down menus, no cut and paste, etc. This, as you all know, is completely contradictory to what Apple has been advocating as the reason for buying a Mac - a standard user interface. The publisher simply brought the software over from IBM PC and other systems on which Omnis 2 runs without any regard for the interface.

The graphics capability has generated a new phenomenon - picture art. Now there are several companies selling "clipboard" art. These are disks of little and sometimes big (DaVinci below) pictures (shapes if one must relate to AppleSoft) which can be combined into your own artwork or graphics. Here are some of them:

- McPic 130+ pictures by Magnum Software \$49.95
- Click Art 250+ pictures by T/Maker Graphics \$49.95
- Clip 1 100+ pictures by MacNificent Sftw \$29.95

Mac the Knife
500 illustrations, borders, maps - by Miles Computing \$39.00

DaVinci Landscapes
100s landscapes by Hayden Software

DaVinci Interiors
100s interior designs by Hayden Software

DaVinci Landscapes
100s buildings by Hayden Software

We have been able to demo most of this stuff at the Mac Sig meetings!

Tidbit seen in InfoWorld - Apple has seeded over 250 software developers with "Color Macintoshes". This seems quite likely according to an interview with Daniel Kottke, an Apple hardware engineer on the Macintosh project. Another interview with Doug Clapp, printed in the August St. Mac, revealed that most of the additional hardware you need for color is the RAM required to increase the screen buffer from 20K to 80K. Clapp intimated that a Color Mac would likely use a separate RGB monitor such as the one just announced by Apple.

Apple's upcoming Laser printer will be really great. It won't be in a price bracket for the home purchaser, but should be considered a must for any business that has more than one Mac. Expect to see it around the beginning of the new year.

I wonder what Apple will do for an encore to its last two years of Annual stockholders' meeting in January.

- 1983 Apple //e
- 1984 Macintosh
- 1985 Color Mac?
- AppleBus?
- Laser Printer?

I have a business interest in the art of integrated graphics and text and the idea of moving graphics between otherwise incompatible systems. Look for some fantastic happenings with the Mac that will let it interface with other systems. Mesa Graphics, who developed a Tektronix emulator for the][called Tek-a-like, has released a Tektronic 4014 emulator for the Mac. It allows one to do things like send Mac graphics to ISSCO mainframe graphics (Tel-E-Graf and Displa).

PERSONAL COMPUTER REPAIR

FRESH LOGIC maintains major brands of personal computers for home and business. FRESH LOGIC stocks a complete line of personal computer supplies and accessories—selected to keep your computer running better...and longer.

Ridge Square North
12989 Ridgedale Drive
Minnetonka

COMPUTER (612) 544-0022
FRESH LOGIC
SERVICE CENTER



D.A.M.

DESK ACCESSORY MOVER

A Review

by Steven E. Baker

DESK ACCESSORY MOVER (D.A.M.), for the Macintosh, allows you to add, delete, and rename desk accessories available on the pull-down menu under the Apple symbol on Mac software. The disk contains a MacWrite document giving complete instructions on how to use the program.

D.A.M. is being distributed under the MacHonor (TM) System by its author. The instructions indicate "Please give copies of this diskette to all your MacFriends. Please take this diskette, try it out, and see how you like it. If you decide it doesn't fit your needs, just erase the diskette and forget about it. If you choose to keep Desk Accessory Mover, please send \$15.00 for a user's license and registration."

The copy of the program I received included several additional desk accessories, including Executive Decision Maker, FRP Die Roller, RPN Calculator, and Clock. The documentation only refers to the first two accessories, so the other accessories were probably added later or sometime along the way.

The diskette can be directly ordered from the author. Send \$20.00 to cover distribution cost, user's license and registration to:

Donald Brown, % CE Software,
801 73rd Street, Dept. M,
Des Moines, IA 50312.
Phone (515) 224-1995

The MacSIG has received permission from the author to distribute D.A.M. for a small copying charge to our membership. So any member wishing a copy of the program can acquire one during the MAC SIG meeting or at the Computer show for the cost of the diskette (\$5.00).

I have found the program extremely easy to use and feel it would be a good addition to every Macintosh owner's software library. And I encourage all users of the program to pay the licensing fee to allow CE Software and other authors to write and distribute quality and reasonably priced software by this method. (Editor's note: This is exactly how Diversi DOS was distributed by the author, Bill Basham. And, it is pleasing to note that Bill was successful in receiving 'donations' which allowed him to become a successful software supplier. This editor encourages users of this program to send their \$15 in to the author so that he may make more good software!)



Let's face it . . .

There are lots of books that **try** to teach BASIC. Now, there's one that **succeeds**, and it's written by two members of the Mini'app'les User Group:

**FRIENDLY BASIC FOR THE APPLE II,
APPLE II+, APPLE IIe AND APPLE IIc**

by **Jean Rice and James Henke**
from **Reston Publishing Company, Inc.**

It's successful because it gets **you** to teach **yourself**. Tested in children's classrooms, adult learning centers, and with senior citizen's groups, the book is written in plain language, gives you plenty of opportunity to program and solve problems, and it keeps you honest with lots of self-check questions. You can also order a companion disk that contains many of the longer programs and additional sample tests. Book price: \$15.95/
Disk price: \$10.00.

To order, call 800-336-0338 (toll free) between 9 AM and 5 PM (East Coast Time) and ask for Customer Service.

Allow 4-6 weeks for delivery. Prices are subject to change.
School discounts are available.

Do these names ring a bell?

MY STUDENTS USE COMPUTERS by Beverly Hunter and
MICROCOMPUTER RESOURCE BOOK FOR SPECIAL EDUCATION by
Delores Hagen. If so, you're probably a teacher, student of
education or parent who wants to understand and effectively
use computers to teach kids. The Reston Computer Group
published these classics, but we didn't stop there. Here's
what's new for Apple II users:

SCIENCE COMPUTER PROGRAMS FOR KIDS AND OTHER PEOPLE by
Tom Speitel, et. al. Science concepts for self study by 6th to 12th
graders. Book price: \$9.95.

THE BANK STREET WRITER BOOK by Don Beil. Gets to the heart of
what you need to know to use this word processing package
effectively. Book price: \$19.95.

THE APPLE MATH AND READING DEVELOPMENT KIT by Ed Burns.
Lab tested BASIC programs that can be modified to meet the
needs of elementary grade students. Book price: \$16.95.

For Logo newcomers, get acquainted with our introductory books.
Logo enthusiasts, we continue to grow with you.

For a free Computers in Education catalog, write:

Reston Computer Group
11480 Sunset Hills Road
Reston, VA 22090



Reston Publishing Company, Inc. is a Prentice-Hall Company.

News from Afar

or Current News and Rumors
by Dan Buchler

Now that the 'c' is launched, just about everything new coming out of Apple is Mac or Lisa related. I know that I am going to get pinged on by the membership for emphasizing Mac, but if you don't like it, give me some material that I can publish. Software development for the][,][+ //e and //c by 3rd party developers continues at a reasonable rate, but I hate to tell you this - most of the really great stuff is being done for the *** PC or the Mac!

One exception is AppleWorks which, though it has been out for only a few weeks, has risen to the top of the best selling list, outselling the new Flight Simulator by a ratio of 3:2 (according to Softalk - August). A review of AppleWorks is contained elsewhere in this newsletter. Anyone volunteer to review Flight Simulator?

Apple has just released an enhanced version of AppleWriter II called Version 2.0. It is designed to run on the //e and //c. It runs under PRODOS and supports the Profile hard disk in conjunction with a program selector by Quark called Catalyst IIe.

New features supported include:

- Horizontal scrolling
- Page and line count
- Terminal mode for communicating to other computers from Applewriter
- Ability to format a Prodos disk so you don't need to but Prodos.

Price is \$149. Current users of AppleWriter II may upgrade for a limited time for \$50 exchange price.

Apple //c Users' Note - LCD Screen problems. If you bought or are thinking of buying a //c with the hope of getting a light portable screen to go with it, you may have to wait awhile. According to September 24 edition of InfoWorld, the LCD screen manufacturers (Sharp, et al) have problems making a screen with 25 lines by 80 characters. Apparently, everything is OK, or at least tolerable, up to 16 lines. Problems occur above that, like with 25 lines of 80 characters. The problem has something to do with retention time of maintaining contrast with large displays.

However, some manufacturers are saying that they can do it, some are saying it can't yet be done.

Did you realize that the demand for the //e currently exceeds supply? Funnily enough, at the same time, the bottom has fallen out of the used][+ market.][+s have been selling for as little as \$250 (Computer only). You guys who paid \$1500-\$2500 for your system a couple of years ago, don't expect to get your money back!



Liberate your Apple!

For Apple II

* Specify II or //e	List	Ours
PFS: File *	125.00	99.95
PFS: Report *	125.00	99.95
PFS: Graph *	125.00	99.95
PFS: Write //e	125.00	99.95
Flight Simulator II	49.95	39.95
Beagle Basic	34.95	27.95
Format II	150.00	121.95
Master Type	39.95	31.95
VersoForm	389.00	310.95
Dollars & Sense	100.00	79.95
Homeward	49.95	40.95
Pie Writer	149.95	122.95
Magic Memory	99.95	79.95
Fontrix	75.00	61.95
Fontpak, each		
Vol 1, 2, 3, 4, 5	20.00	16.95

For Macintosh

ThinkTank	117.95	Show Special	
Run for the Money	40.95	ClickArt	34.95
Millionaire	49.95	Murder by Dozen	28.95
PFS File/Report	159.95	Microsoff Chart	99.95
Multiplan	159.95	Dollars & Sense	119.95
Microsoft BASIC	122.95	MacForth	119.95

MN residents add sales tax.
Include \$3 per order for shipping.

MICRO MAIL

Dept. M13
P. O. Box 1451, Burnsville, MN 55337

General Interest

-24-



Talk About Support...

Sierra On-Line, Inc.

by Eric Holterman

User support is part of what I buy in a software package. From my point of view, when I shell out as much as \$100, \$200, or more for a program disk and manual, I expect more than the program and physical contents of the box. I want to know that if I need help in the operation of the program, after having read the manual, I can get it. This can mean the difference between the satisfactory implementation of the program which meets my needs, or frustration in not being able to properly use all those features that looked so nice in the ads or store.

The need for that extra help, at least in my case, has been met by Sierra On-Line. I am probably like many other personal computer users in that my three "workhorse" programs are a spreadsheet, word processor and data base management program. Two of the three are from Sierra On-Line, ScreenWriter] [for word processing and The General Manager for data base management. I use them both extensively, and often together. For example, I handle all the records, correspondence and billing for Mini'app'les' advertising with these two programs. I require that they work closely together and use virtually all of the features of both (must admit, haven't used footnoting in ScreenWriter yet). I also use the Dic'tio'nary, a spelling checker, from Sierra.

On several occasions I have found the need to call Sierra's customer support department. The folks at Sierra have always been helpful, and on occasion have needed to show a good deal of patience and tolerance with some pretty picky questions from me. There have been times when the person on the other end of the line has not had the answer on the spot, and they have needed to call back or write with further information. They have never failed to follow through. They have also sent some extra flyers on interfacing Screenwriter with printers and an extra user program to use with General Manager. The only complaint I have is that they have recently cut the hours that phone support is available to the morning, west coast time. I have had no problem in getting through, it's just that I would prefer to call after 5 PM central time to get lower phone rates.

Back-ups and updates: I do not like software I purchase to be copyprotected. Let me repeat that. I do not like software I purchase to be copyprotected. My spreadsheet isn't, (THE Spreadsheet, Ver 2.0 from A.P.P.L.E.), and that is one of the reasons I selected that

particular program. Unfortunately, somebody forgot to make the world exactly the way I would like it, and most commercial software is copyprotected. Sierra On-Line hasn't seen fit to handle copyprotection my way, but they do offer a reasonable alternative.

First, they provide a back-up copy of the program in the original package that you purchase (at least in the case of their business programs -- I don't know what they do with their entertainment products). With some programs you have to send in to get the back-up, even when there is no charge for it. With programs like word processors and data base management packages, I want the back-up on hand when I use the program from the very start.

Second, with the back-up included in the package, it is included in the price. If you have to pay extra for the back-up, make sure you include that cost when looking at the original purchase price of the program. I have actually managed to buy some programs on sale (I like sales!) where the back-up costs more than the original program. One solution in these cases is to buy two copies of the program on sale. Come to think of it, maybe the reason the programs were on sale at such a low price is that they weren't selling well because of the unreasonable back-up policy!

Third, they will replace any defective disk within 90 days at no charge. After that they charge \$5 for a replacement disk for an unlimited time period. The \$5 replacement after 90 days isn't stated in their warranty, so I suppose it is subject to change at any time. I do know they have followed this policy for over two years, since I purchased my first program from them.

Fourth, they have provided updates reflecting minor changes or corrections in the programs at no cost. Over the past two years, I have received updates for all three programs I purchased from them in this manner. I had to return one of my original disks, which allowed me to keep using the program while I was getting the update, and they sent me the update and a new back-up.

Fifth, when they added some new features to ScreenWriter (mainly 80 column support for the //e, and produced a new manual, they made them available to existing ScreenWriter owners for \$15, a price I feel is reasonable.

GOTO 30



COUNT ON QUALITY.

If you count on quality, you can count on MEMOREX flexible discs for your personal computing applications.

Features like the uniquely sealed jacket and protective hub ring make MEMOREX discs last longer. And a soft inner liner cleans the ultra-smooth disc surface while in use. It all adds up to better performance and reliability. And it's backed up by a full, one-year warranty.

Count on the flexible disc known for quality performance and memory excellence.

MEMOREX



The full line of Memorex Flexible Discs is available

CALL TODAY
827-5448

SEE US AT
BOOTH 904



you
can
**Count
on it**

3515 Hennepin Ave. So., Minneapolis, MN 55408

DaisyWheeling

Fish Story
by Arsen Darnay

Anciently — meaning back about ten years ago — I attended a conference in Atlanta (no, not a computer conference) and heard something that I've not forgotten since.

The talk dealt with growth, as in "economic growth," and the speaker used the analogy of the ocean and its evolution. He asked us to imagine the oceans of the world at the time when life first appeared. Here was the primordial soup, a brine of organic molecules. And the first ultra-simple creatures that appeared were in a kind of paradise — alone, as it were, on a continent made of hot fudge and whipped cream — and they started to eat madly, bigger was better, and the great race of life began. No talk of "new" frontiers. The whole world was frontier.

But soon that riot of feeding and growing came to an end. The harvesters of long molecules were all alike and now swam around in a very thin soup, each exactly like every other, and time had come to make some distinctions — like you eat the plankton, buddy, and as for me, I will eat you. And then the feeders began to separate on the basis of methods of feeding; the predators changed to keep up with their prey. And it was the ninth day of creation, and the ocean was full.

So now you wonder what all of this has to do with Apple computers, right? Well, the point is coming, but I tell stories the southern way, nice an' slow. There was this feller I once knowed. Had a coondog named Ellie, etc., etc. That's the style, and the story is not about coondogs at all . . .

The point of the story is that, in that ocean — and aside from the most daring of the fish that ventured out of the sea and onto land (they were the mystics of the lot, the dreamers, the crazy fish) — what had been easy, "horizontal" growth based on getting "bigger" had become another game entirely. The only way to gain advantage nowadays was to get "better" in a narrow niche. The niches were multiplying, the skills were deepening. You couldn't just "gold rush" a state and call it California. You had to become inventive, find a better way. You had to find your fortune in the "vertical" dimension.

It's this notion of the "vertical" dimension that I have in mind today — and no, I'm not thinking about computers particularly and how

each brand must become better in order to maintain itself. Rather, I was thinking about that strange phenomenon, the User Group.

Ours is a "vertical community," one of tens of thousands — based not on the "horizontal" dimension of geographical proximity but on the invisible dimension of an "interest." We're representatives of a new evolutionary movement in the social ocean.

Daniel J. Boorstin, the social historian (he was writing in Fortune, in September 1967), recognized and named the phenomenon. "A Consumption Community," he wrote, "consists of people who have a feeling of well-being, shared risks, common interests, and common concerns that come from consuming the same kinds of objects."

Boorstin saw the phenomenon early but saw it only darkly, as through a glass — because the consumption of objects is almost incidental to something else: a common enterprise of exploration, application.

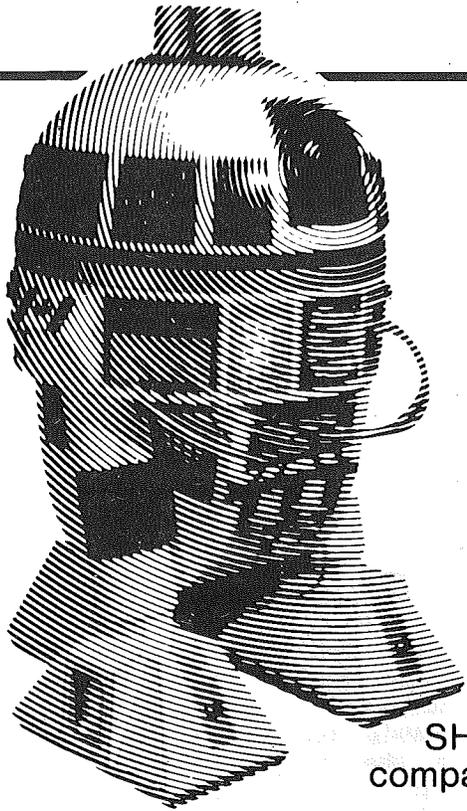
The horizontal conquests of the past were but an impulse to find the planet and to unify the human experience. That old impulse to explore — driven by greed for gold and glory, often violent and harsh, created the global village of today — so successfully that frontiers, Outer Space aside, have disappeared.

New frontiers have emerged in their place, but in another dimension — and we're engaged in discovering the size, meaning, and use of one of these. Mini'app'les is a small ship on a voyage of discovery. We're on it because we too, like all explorers, seek gold or glory for ourselves. And like those of the people who came before us, our conquests will benefit mankind far more than we now imagine.

Come on, Darnay, what sort of garbage is this? Most of us just want cheap software, bargain goods, neat tricks, help in a crisis, and ways to beat the system. Why get all theological on us? This is a user group, for Pete sake, not a literary circle.

Okay, okay. Just keep your cool. The hidden hand is working here. Like it or not, know it or not, you're breaking virgin ground on a new continent. Why you think you do it is your business. But telling shaggy fish stories is mine — and philosophy comes with the territory.





THOUSANDS OF COMPUTERS AND OFFICE MACHINES ARE GATHERING AGAIN IN MINNEAPOLIS

Thinking about buying a business computer, a word or data processor, a video game or a personal or home computer? The TWIN CITIES COMPUTER SHOW & SOFTWARE EXPOSITION is the place to go to compare all the makes and models.

SAVE TIME AND MONEY – The Computer Show offers you, at one convenient location, the opportunity to learn about, try out and compare thousands of different products in a non-intimidating, no obligation, fun-filled atmosphere. If you decide to buy at the Show, you may save hundreds, even thousands of dollars because many of the products on display are for sale at super show prices.

SEE IT ALL – The Show's more than one hundred displays feature all of the hardware and software made for every major computer for business, industry, the professions, government, education, home and personal use. The Show also features the latest equipment for the modern electronic office – typewriters, telecommunications, business machines, furniture and much more.

IF YOU ALREADY OWN A COMPUTER – The Show features thousands of software, hardware, peripherals, accessories for every conceivable application.

ADULTS \$6, CHILDREN 6-12 \$3.

SHOW HOURS
THURSDAY – SUNDAY
OCTOBER 25 – 28, 1984
10:30 A.M. – 6 P.M.

**MINNEAPOLIS CONVENTION
CENTER – Lobby A**
Third Avenue
Minneapolis, MN

TWIN CITIES COMPUTER SHOW AND SOFTWARE EXPOSITION

FOR MORE INFORMATION ABOUT EXHIBITING OR ATTENDING,
CALL OR WRITE: COMPUSHOWS, Inc.
P.O. BOX 3315, ANNAPOLIS, MD 21403, TELEPHONE: 1-800-368-2066

SHOW UP FOR THE SHOW



Mail Bag

by Arsen Darnay

This month I will give you a brief profile of the kind of mail we get before I report on the few items that I found interesting. Here is what came in since I compressed the last pile of junk mail into a page or so:

- Discount house mailings - 7
- Publishers' magazine promotions - 5
- Accessory promoters - 4
- Network promoters - 4
- Conference promoters - 3
- Disk drive sellers - 3
- Book sellers - 2
- Software seller - 1
- Educational catalog - 1
- Computer store - 1
- Coupon package - 1

And this was a dull month as mail goes. The magazines offered dealt with the Commodore, new technology, classified advertisements, microcomputers generally, and campaigning for political office. Wording included such tried and true phrases as "reach for the future NOW," "leading edge," "you're going to have to scramble just to keep up," "integrated environment," "to realize all the power and promise of your system," "we're no johnny-come-lately," etc., etc.

The discount house mailings ranged from multi-page, slick, four-color books down to one smeared postcard printed on what must be an ancient dot-matrix with a very faded ribbon. They should contact another outfit that sells machines to ink your ribbons; and the mailing from the last-mentioned organization was done in print so dark that I suspected over-inking of their ribbons.

Here, then, is the additional stuff that I kept to report on:

CP/M Users can get a free catalog from The Software Toolworks, 15233 Ventura Blvd., Suite 1118, Sherman Oaks, CA 91403, telephone 818-986-4885. This organization claims to have excellent CP/M software for the Apple, including a spreadsheet program, a compiler, etc. — each program at \$60 or less.

Speak to Your Apple using a system by The Voice Connection, 17835 Skypark Circle, Suite C, Irvine, CA 92714. Telephone 714-261-2366. I know nothing about voice synthesizers, speech recognition, and so on, but this one intrigues me. The claim is that you can put 80 words into the system. When it hears one of these words, the package will transmit a series of keystrokes to the computer. You

enter the keystrokes at the same time when you speak the words. Thus it should be possible to say "Print" out loud while running Visicalc, and the system will automatically send a slash-P to the software. This board, combined with one that speaks to you (see the following paragraph), hints at the kinds of capabilities that will soon be available for the blind. The cost is still high (\$1000 range).

Have Your Apple Speak To You by buying Voice Box III from The Alien Group, 27 W. 23rd St., New York, NY 10010 (212 741-1770). The maker claims that the system can take any kind of text file in English and produce its equivalent in sound, i.e. will "read aloud" a speech, command, instruction that you have inserted in the form of letters of the alphabet. The package comes with a plug-in board and software on disk for \$129. Quality is said to be truly excellent.

This intrigues me even more than talking to the machine, and the price, here, is reasonable.

Another Conference dealing with technology for disabled persons will be held under the auspices of the University of Wisconsin in Chicago on October 1-3, 1984. Cost is \$175 at the gate, \$125 in advance. Write Office of Continuing Education and Summer Session, University of Wisconsin-Stout, Menomonie, WI 54751. Telephone 800 45-STOUT.



Talk about Support Concluded from page 25

There are many things to look at in choosing a software package. Be careful not to miss the publisher's support policies and reputation. These may be more important than many of the items on the "important features" list that creative copy writers come up with. They may also be hard to learn about. Often the support policy is unwritten or unadvertised even though it is well established and run. Other times it may be unwritten and non-existent. The cost of a phone call to the customer support department **before you buy** may be an excellent investment in getting a feel for what to expect. I have tried this a few times and as a result have not purchased software that otherwise looked attractive.

The bottom line on Sierra On-Line is that I like the programs I have bought and their ongoing product support.



AppleWorks

A review
by John L. Hansen

What it is, What you get, Booting, and Menus



AppleWorks is an integrated spreadsheet, word processor and data base package for the Apple //e and //c. The title page says, "By Rupert Lissner and Apple Computer, Inc." A similar program for the Apple /// is called "/// E-Z Pieces." Although the AppleWorks Reference Manual (319 pages long) implies that the program can be used on a //e without extended memory, I find it hard to believe you could do much with it. On a //e with extended memory and a //c, the screen reports 55K of memory to be available.

Because AppleWorks is an integrated program, it is possible to move from word processor to spreadsheet to data base whenever you desire. In my work, I find it convenient to prepare tables with a spreadsheet. Using my word processor, Super Text Professional, and THE Spreadsheet V2.0, I now print the tables on separate sheets of paper and insert them into the report. With AppleWorks, I could cut out sections of the spreadsheet, transfer them to a clipboard, and then insert them in my report at the desired spot by transferring them from the clipboard to the word processor. Similar use could be made of the data base.

The AppleWorks package includes three disks (5 sides), the AppleWorks Tutorial (140 pages), the AppleWorks Reference Manual (319 pages), and the AppleWorks Quick Reference Card. The program makes use of two disks (the "Startup" and "Program" disks); these come on a two-sided disk. First suggested step is to make copies of these (using the ProDOS User's Disk or COPYA, depending on which one came with your computer). The second disk (also two-sided) contains "Apple Presents Appleworks", a training disk that guides you through the program. Third disk contains "AppleWorks Sample Files" for use with "Apple Presents AppleWorks" and the tutorial. The training disk is used first, followed by the tutorial. Both are well-done. The screen prompting of the program makes it very easy to use. In my experiments with it, my occasional problems occurred because I did not follow the instructions on the screen. Holding down the "Open-Apple" key and "?" simultaneously provides a complete list of commands for the portion of the programs that you are using.

AppleWorks functions at two levels of activity. At the top level, it contains information about file storage locations and printer information. It also moves files to the Desktop (RAM) and saves them for you when

you're done working with them.

The bottom level involves actual use of the Word Processor, Spreadsheet, and Data Base: creating, reviewing, changing, and printing files.

To run the program, the disk called "Startup" is booted. After a brief run, you are requested to insert the "Program" disk. The current date is requested (a //e with ProDOS and the proper clock card automatically takes care of the date and time; on a //c, you must enter a date). Pressing Return brings up the Main Menu. Your computer's RAM is called the "Desktop". Each use you make of AppleWorks requires that you make a file. This file has a name (in ProDOS format) and can be stored in the computer (temporary) or on disk (permanently). A file in RAM is said to be on the Desktop. When you need a file, you call it to the Desktop through a series of menus. Each menu and file appears on the screen as a "file folder" with a label tab. As many as 12 file folders can be on the Desktop at one time.

The Main Menu is the first folder. Its options are:

1. Add files to the Desktop
2. Work with one of the files on the Desktop
3. Save Desktop files to disk
4. Remove files from Desktop
5. Other Activities
6. Quit

The screen also displays the number of the drive currently active, the name of the active menu, instructions ("Type number, or use arrows, then press Return"), and where to go for help ("Open-Apple"-?). The first item on each menu is highlighted in inverse mode. If you select a different item by typing the number or using the Down-Arrow, the highlight will move to the selected item.

If we hit return for Item 1, the "Add Files" Menu will overlay the Main Menu (the tab of the Main Menu is still visible). At the top of the screen, the words "Escape: Main Menu" tell you how to get back to the Main Menu.

Our choices on "Add Files" are:

Get files from:

1. The current disk: Drive 1
(or 2, if you have changed it)
2. A different disk

GOTO 32

AppleWorks Continued from page 31

Make a new file for the:

3. Word Processor
4. Data Base
5. Spreadsheet

Again the first item will be highlighted. Pressing Return would, in one of my Zoo examples, give me:

AppleWorks Files

Disk volume /ZOO.TABLE.1 has 74k available

Name	Type of file	Size	Date	Time
ZOO.1	Spreadsheet	26K	8/04/84	9:32am
ZOO.1.SORT	Spreadsheet	26K	8/04/84	10:03am
ZOO.2	Spreadsheet	4K	8/11/84	10:45am
ZOO.3	Spreadsheet	4K	8/11/84	10:54am
PAM.LETTER	Word Proc.	4K	8/11/84	11:14am

Using the up and down arrows, I can move the highlight through the list to the file I desire to load and select it by pressing the right arrow. The file will then be loaded into the spreadsheet or word processor depending on its type. Note that if the computer has a clock card, like the //e at the Minnesota Zoo, it will automatically record the date and time the program was last saved.

Back in the Main Menu, if you select "2. Work with one of the files on the Desktop", you are shown a list of the files on the Desktop and asked to select one. If you select "5. Other Activities", another file folder is displayed:

1. Change current disk drive or ProDOS prefix
2. List all files on the current disk drive
3. Create a subdirectory
4. Delete files from disk
5. Format a blank disk
6. Select standard location of data disk
7. Specify information about your printer(s)

Moving the cursor to any of these and pressing Return will bring up another folder that, in most cases, has sufficient information for you to carry out the activity without need of additional instructions.

Commands

Except for the use of "ESC" to return to the Main Menu, AppleWorks commands are given by holding down the "Open-Apple" (OA) key plus a letter or number. All 26 letters and 9 digits are used. The usage is consistent through the three units of the program, where possible. For example, OA-D is "Delete text" in the Word Processor, "Delete records or report category" in the Data Base, and "Delete columns or rows"

in the Spreadsheet. OA-S is "Save the current file to disk" in all three. Some OA combinations work with only one or two of the units. OA-L is not applicable to the Word Processor, provides options to change the record layout in the Data Base, and to change the cell layout in the Spreadsheet. OA-W creates windows in the Spreadsheet, but has no application in the other two units.

Usage is quite mnemonic. A = Arrange, B = Blank, C = Copy, D = Delete, E = Edit, F = Find, I = Insert, M = Move, etc.

OA-E toggles between insert and overstrike cursors. To insert text into material already on the screen, use OA-E to get a flashing underline cursor. A second OA-E will toggle to a blinking rectangle. Anything typed with this cursor will write over material already present. Either can be used to enter fresh text, depending on the one you prefer.

The combination OA-1 through OA-9 is called the "Ruler", which permits you to move rapidly through a document. OA-1 will move the cursor to the beginning of a file, OA-9 to the end, and OA-2/OA-8 proportionally within the file. For example, in a 20-line file, pressing OA-1 through OA-9 will move you to lines 1, 3, 5, 8, 10, 12, 15, 17, and 20. In a 100-line file, the moves would be 1, 13, 25, 38, 50, 62, 75, 87, and 100. In the Spreadsheet, OA-Left Arrow and OA-Right Arrow will scroll horizontally one screen display. In all three units, OA-Up Arrow and OA-Down Arrow will scroll vertically one screen.

Integration obviously supplies a consistency in the commands usually not found when you use three programs from different vendors.

Data Base

Guidelines on use of AppleWorks' Data Base include the following:

Maximum number of records, regardless of size or number of categories	1350
Maximum number of records in a file, assuming an average record size of 75 characters	
//e with 64K RAM	about 140
//e with 128K RAM	about 750
Maximum number of categories per record	30
Maximum entry length - characters	76
Maximum length of category name	20
- characters	

The Data Base allows you to work with lists of information, organizing them, changing and updating them and, finally, printing out reports. You can create a new data base from scratch, from "Quick File", from a text

GOTO 34

We'll give you one less thing to worry about.

October Special:
SS/DD \$21.50

1. TOWED-AWAY CAR.
2. CRABGRASS.
3. KILLER BEES.
4. TAX AUDITS.
5. BROKEN ZIPPERS.
6. GODZILLA.
7. ACID RAIN.

DS/DD \$26.50

~~8. FLOPPY DISK FAILURE.~~

With 3M diskettes, you can forget about data loss from floppy disk failure. 3M diskettes are certified 100% error-free. And they're guaranteed for life. Because only 3M controls every single aspect of the manufacturing process.

Come see us today.

You've got enough to worry about without worrying about diskettes. 3M diskettes. Available for most computer systems.



12366 River Ridge Blvd.
Burnsville, MN 55337

894-9153

The 3M logo, featuring the letters "3M" in a bold, sans-serif font, with the word "diskettes" written in a smaller font below it. The logo is set against a dark, triangular background that resembles a floppy disk.

3M
diskettes

One less thing to
worry about.



AppleWorks Continued from page 32

(ASCII) file, or from a DIF file. Using a new file or an existing file, you can enter, review, or change data. The sequence for creating a new data base from scratch is "Main Menu" to "Add Menu" to "Data Base" to "Scratch", which tells you to assign a name (15 characters maximum, letters, numbers, periods, spaces). Next, assign category names (20 characters maximum), press "ESC" when they are all assigned, and you're ready to enter data.

Single-record layouts are used for data entry. Multiple-record layouts containing up to 15 records can be displayed. OA-Z permits you to toggle between the two. OA-1 through OA-9 let you browse through the records in multiple-record display. New entries can be made from either the single-record or multiple-record display (the latter takes you to single-record display for record entry).

Standard values can be created. For example, if 75% of those on a mailing list live in Minneapolis, Minneapolis can be assigned as the standard city value; only the entries for the other cities would have to be changed. If a category contains the word "date" or "time", AppleWorks will enter the date or the time in a standard format.

Records can be deleted, copied one or more times, moved (using the Clipboard), and displayed using selection rules (the selection rules include equals, greater than, less than, does not equal, is blank, is not blank, begins with, ends with, does not contain, does not begin with, and does not end with). These can also be combined using one or two connectors (and, or, through). Records can also be found using OA-F. A request to find all records containing "ace" would display any containing "Horace" or "Place". Records can be sorted on a category from A to Z, Z to A, 0 to 9, or 9 to 0, and records with standard dates or times can be arranged in chronological or reversed chronological order. A file's layout and structure can be changed.

Reports can be printed as tables or labels. The Report Menu offers the following options:

1. Get a report format
2. Create a new "tables" format
3. Create a new "labels" format
4. Duplicate an existing format
5. Erase a format
6. Keep working with current format

The Report Format displays three lines from the multi-record display and provides the options of changing category positions, changing column widths, sorting on a category, deleting a category, changing printer options, changing selection rules, creating calculated

categories, etc., and, finally, printing the report. Printer options include platen width, left, right, top, and bottom margins, characters per inch, lines per inch, paper length, special codes for the printer, report header, line spacing, line width, and printing length.

Word Processor

The Word Processor has two main functions. Using the first function, working with information, you can type a document, edit it, delete, move, or copy blocks of text, replace old information with new, and find specific information. The second function, formatting documents, lets you define the layout of your document.

Word Processor files can contain a maximum of 2250 lines, approximately 28 54-line pages with 128K of RAM. The maximum size file for 64K of RAM is about eight pages.

New files can be created from scratch or from text (ASCII) files, including Apple Writer and the Pascal Editor. However, DOS files must be converted to ProDOS before AppleWorks can use them.

The Word Processor uses word wraparound; the Return key is used only to start a new line. OA-Z lets you zoom in to see where existing carriage returns are located. The blinking-bar and blinking-rectangle cursors function as described above. Material can be deleted using the Delete key or the OA-D command. With the latter, you use the cursor movement keys to highlight material to be deleted.

Two types of text can be found or replaced. If Text is specified, an attempt to find "the" will also find "The" and "THE" if present. If Case sensitive text is specified, a search for "The" will find it, but not "the" and "THE".

Text can be moved in a document using OA-M and copied using OA-C. Markers can be set to permit you to move rapidly to specific locations. Using OA-T, tabs can be quickly set or cleared.

If your printer can handle them, printer options available include controlling horizontal spacing, control print density, controlling vertical spacing, controlling layout (hanging paragraphs, headers, footers), special printing techniques (boldface, underlining, superscripts, subscripts), and page control. Proportional printing, justification, centering, spacing, page numbering can all be used. Sticky spaces can be used to avoid splitting a name. The printer can be instructed to stop printing to



AppleWorks Continued from page 34

allow you to type information into the document directly from the keyboard (This would be a very slow substitute for a mail-merge feature, but would not bother me because I never do mail merges -- at least, not yet!).

Spreadsheet

AppleWork's spreadsheet has 127 columns and 999 rows. VisiCalc has 63 columns and 254 rows; Lotus 1-2-3 has 254 columns and 2048 rows. With a 128K Apple, using 9-character cells, each containing llllllll, I was able to fill 4454 cells (100 rows from A to AR plus 54 cells in column AS) of the 126,873 available. About 11,000 can be filled on a 256K Apple ///. About 16,400 cells can be filled in the same manner on an 320K IBM PC with Lotus 1-2-3. This is not a very good technique of determining usable spreadsheet size, however. My largest Zoo Table, which requires 34-35K with VisiCalc and THE Spreadsheet V2.0 and is too large for THE Spreadsheet V1.0, requires only 25K with Appleworks, leaving 30K of usable space. Obviously, I plan to investigate this further.

Files can be created from scratch or VisiCalc and DIF files can be used. DIF files must have been created with the C or column option to load correctly. VisiCalc files can be used directly. However, both must be converted from DOS to ProDOS to use with AppleWorks. Using the A.P.P.L.E. Spreadsheet Converter, I converted some of my "THE Spreadsheet V1.0" Zoo files to V2.0, converted them to ProDOS, and was able to load them into AppleWorks. I did find the conversion had changed some variable column widths to a global value, but when I readjusted the column widths with AppleWorks, I found all my data and headings were still intact.

Loading my largest Zoo Table took only 26.34 seconds compared to almost 33 minutes with VisiCalc and THE Spreadsheet V2.0. The actual time to load the data was 14.67 seconds; 11.67 seconds were used to load the Spreadsheet program into RAM from the Program disk. Appleworks loads the data first and then the program, the reverse of the procedure used by other spreadsheets.

Label and number entry is very similar to VisiCalc. Any letter is automatically a label. A number or mathematical operator (+, -, /, (, or *) is automatically a value. To enter a number as a heading (e.g., a year), the quote (") must be used to indicate it is a label. Entries are confirmed by the Return key or any of the four arrow keys. AppleWorks has text-streaming. If a label is too long to fit in one cell, it is automatically extended into adjacent non-numeric, non-protected

cells. This was one of the outstanding features of "THE Spreadsheet V1.0"; the only other spreadsheet I've seen with it is Lotus 1-2-3.

Following is a comparison of functions in AppleWorks and a few other spreadsheets:

	AppleWorks	SS V1.0	SS V2.0	VisiCalc
@ABS	+	+	+	+
@AND	-	-	+	+
@AVERAGE	+	+	+	+
@CHOOSE	+	-	+	+
@COL	-	-	+	-
@COUNT	+	+	+	+
@ERROR	+	+	+	+
@EXP	-	+	+	+
@FALSE	-	-	+	-
@IF	+	+	+	+
@INT	+	+	+	+
@ISERROR	-	-	+	+
@ISNA	-	-	+	+
@LN	-	-	+	+
@LOG10	-	+	+	+
@LOOKUP	+	+	+	+
@MAX	+	+	+	+
@MIN	+	+	+	+
@NA	+	+	+	+
@NOT	-	-	+	+
@NPV	+	+	+	+
@OR	-	-	+	+
@PI	-	-	+	+
@ROUND	-	-	+	-
@ROW	-	-	+	-
@SQRT	+	-	+	+
@SUM	+	+	+	+
@TRUE	-	-	+	-

+ = available, - = not available, +- = available in a roundabout way

THE Spreadsheet V2.0 obviously has many more functions (usable??) than the others. AppleWorks has all the functions that I have ever needed and a few more. For other users, this may not be true.

AppleWorks defaults to standard or global display values for value formats, label formats, column widths, protection, and recalculation. OA-V allows you to redefine the standard values at any time. Values can be displayed as fixed, dollars, commas, percent, and appropriate (default). Up to 7 decimal places can be displayed except for the latter. Fixed, dollars, and commas allow you to display trailing zeroes. Dollars will display a "\$" and commas. Commas eliminates the dollar sign. Label formats can be left- and right-justified and centered. Columns widths default to 9, but can be set from 1 to 75. Cells can be protected so that entries cannot be changed inadvertently. Recalculation can be done by rows, columns, automatically, or manually.

GOTO 36



AppleWorks Continued from page 35

OA-L allows you to change value formats, label formats, and protection for specific cells, rows, columns, or blocks, and column widths for specific columns.

One unfortunate factor with AppleWorks' value displays is that it is not possible to assign a value format to an individual column unless values are present. For example, if you have a column where you want to enter all values with 3 fixed decimal places, you cannot preformat the column. You can enter all your numbers in the column and then format; enter a "0" in each cell of the column, format, and enter your numbers; or use a global format, which you may not want in other columns.

AppleWorks, as do most other spreadsheets, lets you set two windows (side-by-side or top-and-bottom) and allows you to fix the titles or headings. In addition, with OA-Z it is possible to zoom in and display the formulas in every cell. While zoomed in, you can print the formulas with OA-P.

AppleWorks has an excellent feature that I have previously seen only in Lotus 1-2-3. Any areas that are blanked, columns or rows that are inserted, deleted, or moved, and information that is copied (replicated) is highlighted in inverse by cursor movement so that you know exactly what items will be zapped, changed, or moved.

Another excellent feature of this Spreadsheet is the ability to sort rows in a spreadsheet by values in a specified column. Sorting can be done from A to Z, Z to A, 0 to 9, or 9 to 0. I did this very rapidly with my largest Zoo Table and my Zoo cohort was extremely pleased with the new data presentation. Sorting 90 counties and states using the MOVE command was not something I wanted to do.

AppleWorks will find a cell for you by coordinate, by the last text that you entered, or by text that you specify.

OA-0 gives you access to all the print options. They are similar to the ones described previously. My large Zoo Table fills four standard sheets using 17 characters per inch. Without referring to the manual, I was able to figure out very quickly the best procedure for printing the table.

Cut and Paste

Cut and Paste is a process by which you can transfer information within AppleWorks. The portion of memory used for the transfer is called the "Clipboard". Information can be transferred from a file to the Clipboard and then to another file of the same or different type.

A total of 250 Data Base records can be transferred between two Data Base files or to a Word Processor document (must be complete records). Up to 250 lines can be copied from one Word Processor document to another. 250 rows of a spreadsheet can be transferred to another spreadsheet or to a Word Processing document (parts of a file can be transferred or an entire report). To make transfers between two data bases or two spreadsheets, the files are copied or moved to the Clipboard and then moved or copied to the receiving file. For some undetermined (by me) reason, when a file is transferred from a data base or spreadsheet to a word processing file, it must be PRINTED to the Clipboard, not MOVED or COPIED, but can be moved or copied to the Word Processor file.

AppleWorks can send files to a printer, print formatted files to a disk, print text (ASCII) files, and it is possible to print a copy of the display on a printer. It is set up for use with the Apple Dot Matrix, Apple Daisy Wheel, Silentye, Imagewriter, Epson MX, MX Grafrax+, RX, FX, and the Qume Sprint 5 and Sprint 11. An appendix provides instructions for using a printer not on the list.

Other appendices discuss using AppleWorks with a ProFile harddisk and sending AppleWorks files over phone lines.

Summary

For the types of files I work with, AppleWorks appears (at least at first glance) to be an excellent program. It is well-designed, has a good tutorial manual, and a very good reference manual. It is literally possible to carry out most of the program operations by referring to the screen prompts and using the OA-? "Help" command.

The Word Processor and Spreadsheet are the two functions I would use most often. The former supports superscripts and subscripts, a necessity for a chemist, and the ability to make tables in the Spreadsheet and move them directly to a Word Processor file is a big selling point for me.

Adequate memory for my Zoo files on a //e with expanded memory, sorting capability, cursor-highlighting operations that I have become accustomed to with Lotus 1-2-3, and text-streaming for headings make the Spreadsheet the closest approach to my wished-for combination of THE Spreadsheet V1.0, V2.0, and VisiCalc.

The Data Base program provides very easy manipulation of records. I have not worked with it except for the examples, but it should



A New ScreenWriter

A review
by Ken Slingsby

A new version of ScreenWriter by Sierra ON-LINE Systems has been released. Version 2.2 as it is called features an enlarged and improved manual, new goodies such as incremental spacing for even the Epson, and the ability to support and utilize the features of the Apple II, II+, and //e. The Apple //c probably can use the features of this program as well. I do not have access to a //c.

NOTE: This article was supposed to be ready for printing a long time ago. It "fell into a crack" and was forgotten. (This review will not repeat all the features of ScreenWriter, as they have been covered in previous reviews on these pages.)

Some of the commands are activated by different keys on the //e than on the other IIs. In particular, the arrow keys are fully supported. Other new features of the //e are supported such as shift and shift-lock and 80 column display with the 80 column board. Seventy column display and the shift key mod are still supported for the II+. Unfortunately, 80 column boards (for the II+) such as the Videx are not supported by this package. ScreenWriter determines the machine it is being used in each time the program is booted.

The most obvious feature is the manual. It is almost half again as thick as the old. There are more examples. Much of the text is expanded from the old manual. The tutorial in the first chapter must have been written by a panel of human factors experts as it employs much of the new thinking on manuals, including icons, shading and a limited use of color. The shading continues throughout the manual, but the icons and color do not. The remainder of the manual has been enlarged and now includes index tabs for each chapter. Several sections that were in the appendix (or missing) in the old manual are now in the chapters where they belonged. I thought the old version had a good manual but the new is much better.

The incremental printing using the Epson (with Graftrax) and the infamous APL card (also the Grappler+ or Apple Parallel cards) was the new feature that I had to try first. The printhead motion reminds me of the old Maytag as it goes along. It prints a few characters, backspaces, moves forward, backspaces, and prints a few more. This cuts down the speed by at least half. I do not recommend using

this feature except on rare occasions as I'm sure the printer will not stand for a lot of this apparent abuse. It is my guess that the program puts out a few graphics characters to get as little as 1/120 inch spacing whenever required. This may happen both between letters and words. Incremental justification is supported for Qume, Diablo, and Spinwriters as well. (Editor's note: the latter 3 printers are of the daisywheel variety, and, as such, will handle the incremental spacing without backing up the print head.)

The new disk has a tougher protection scheme than before. The older version allowed one to boot a fast DOS such as Diversi then run the Editor to speed up program and text loading. The new version does not allow this but does have a fast DOS -- almost as fast as Diversi. A backup disk is included.

I have not found any features missing from the old version, so if you need compatibility with all Apple IIs and want a faster loading program as well, the new ScreenWriter has some advantages.



AppleWorks Concluded from page 36

be very adequate for a telephone list I plan to make at work. If you can accept the limitation of file size, it is very flexible. Setting up files and entering data is very easy. Moving data around in the data base can be readily accomplished and the sorting and selection features are versatile.

This is a well-designed package. If you are a new computer owner and have not yet selected separate programs to do these functions, I suggest you investigate AppleWorks. It's the top selling Apple program accord to "Softalk" and I can see why.

The list price of AppleWorks is \$250.



Tell our Advertisers

you saw it here.

COPY

A comparison of 10 DOS 3.3 COPY programs

by John L. Hansen

If you purchased your Apple computer prior to the release of ProDOS, you received the DOS 3.3 Master. Included on this disk were two copy programs, COPY and COPYA. COPYA is the program to be used for copying a diskette if you are using DOS from Applesoft Basic. You have probably used it to make backups (as recommended) of programs and data disks.

COPYA is a relatively slow program. It formats the target or duplicate disk and then copies from the original to the target disk. There are programs available that will make backup copies much faster than COPYA. Described below are some (I'm sure not all) of the programs available. These programs are not nibble copiers like Copy][Plus, Nibbles Away II or Locksmith 5.0 (though a couple of them are associated with two of these programs) and generally will not copy protected commercial programs.

Most of the faster copy programs do not format the target disk, but read one or more tracks from the original and write them to the target disk. Some of them verify the copy to be sure it is correct.

The table below lists the times needed to copy a disk. Times are given in minutes and seconds (e.g., 1:25.34 = 1 minute and 25.34 seconds). Note that if you run a similar experiment, your times might differ from mine because of differences in drive speed (and, perhaps, what we select as the start and end of a copy). However, the relative order should be similar.

Program	Time to Format	Total Time
COPYA	38.29	1:28.45
Copy][+ COPY		43.76
The Filer		
Filer Copy	31.16	1:24.58
Fast Copy (Verified)		45.14
Ultra Fast Copy (Verified)		1:05.34
Locksmith 5.0 Fast Copy		
Unverified		20.33
Verified		27.21
Disk Muncher 1.1		
Unverified		26.73
Verified		34.08
Disk Muncher 1.0		25.73
Dan Patcher 1.0		25.73
Fast Copy		48.30

COPYA is a program supplied by Apple Computer, Inc., on the DOS 3.3 Master Disk.

COPY][+ is a product of Central Point Software, Inc., Portland, Oregon. In addition to the Disk Copy program, it will also copy individual files or DOS. To make it even more useful, it also has utilities to catalog, delete, lock/unlock, rename files, format a disk, verify, verify identical files, verify drive speed, display a track/sector map showing where each program is located on a disk, view files, fix file sizes, undelete files, edit sectors, and finally, it also includes a nibble copier and a good manual. Price is \$39.95. The program is copy-protected, but a copy procedure is supplied.

THE FILER is also from Central Point and appears to include some of the features of COPY][+ without the nibble copier. It allows you to copy individual files, DOS, or entire disks. The target disk must be formatted. The Fast Copy Program does full read- and write-error checking and will support Micro-Sci A2, A40, and A70 drives as well as the Apple Disk][. A write-read test, bad-sector scan, and disk-speed test are also included. Price is \$19.95.

ULTRA FAST COPY is a product of Computer Advances Ideas, Inc., of Berkeley, California. It will copy and verify DOS, SOS, C/PM, and Pascal disks. Each track is read, written, and verified (total of 3 rotations, they say). The program also includes a technique to create a custom copy program that will copy protect your disks. Last price I have seen was \$30.00.

LOCKSMITH 5.0, until recently, was a product of Omega Microware, Inc. of Chicago. According to Hardcore COMPUTERIST issue No. 10, Omega has filed for bankruptcy and LOCKSMITH 5.0 marketing rights have been acquired by Alpha Logic Business Systems of Woodstock, Illinois (see November issue of Mini'app'les for additional information). As noted in my review of this program in the March issue of Mini'app'les, the program has many features, but one of the most spectacular is the FAST DISK BACKUP program. The copy is obviously much faster than any of the programs listed above and if you have 100K or more of RAM, an entire disk is read into memory and copies can be made in 15 seconds (8 write, 7 verify). With a Language Card and a 32K RAM

GOTO 39



Copy Concluded from page 38

card, 22 tracks are read on the first pass and the balance on the second. LOCKSMITH 5.0 automatically finds any RAM cards that you have. The program is protected, but a backup copy was provided. Omega prices were \$99.95 for a first-time buyer, \$24.95 to update from Version 4.x, and \$34.95 to update from Version 3.x. I have no information on prices from Alpha.

The second group of programs listed above are not commercial programs, but appear on various bulletin boards and can be downloaded (sometimes a fee is required to access the bulletin board section where they appear).

DISK MUNCHER 1.0 and DISK MUNCHER 1.1 are the original and an update of the same program. The major difference is a VERIFY option in Version 1.1. The program automatically finds a 16K RAM card in Slot 0 and provides an option for you to enter any other RAM cards that you have. The times listed above were run with a Language Card and a 16K RAM card (Slot 4). The more memory you have, the more tracks that are read before the write/verify

procedure starts. The programs were written by THE STACK of CORRUPT COMPUTING and are available on THE SAFEHOUSE BBS, which has a \$10.00 fee for access to these and other interesting items.

DAN PATCHER 1.0 was on a disk of copy programs that an unidentified friend of mine got from an unidentified source. Except for the author listings on the title screen, the program is identical to DISK MUNCHER 1.0. I have seen a document describing the writing of DISK MUNCHER 1.0 by The Stack. Interesting that two programs could be so similar. I don't know where this one is available. These three programs all read and wrote in three blocks of 12, 12, and 11 tracks.

FAST COPY was written by John M. Pechacek and can be found on THE SAFEHOUSE BBS. Unlike the other programs that start copying from Track \$0, FAST COPY starts at Track \$22 and copies down in blocks of 8, 8, 8, and 3 tracks on my Apple.

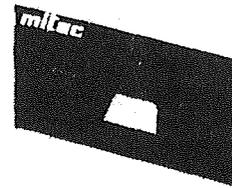
All of the programs mentioned have been copyrighted by the companies or authors listed.



PRICE BREAKTHROUGH

mitac
Disk Drive
for Apple

\$159
Regularly \$269



16K Card

\$49⁹⁵

Printer Card with Cable

\$49⁹⁵

Z80 Card

\$65⁹⁵

Call for pricing for other Apple peripherals.
No shipping charge for local phone orders.



Quannon Computers

12475 Plaza Drive
Eden Prairie, MN 55314

(612) 944-5616

494 & State Hwy 5
Next to Menard's

Executive Secretary

A review
by Gene Hatfield

The subject of this review is EXECUTIVE SECRETARY. Through a mix-up at a local store, after having purchased the PERSONAL SECRETARY (which is a watered down EXECUTIVE SECRETARY), I found that I had received a "pre-release copy" of a new version of PERSONAL SECRETARY instead of a production copy of the previous version. Because it was a "pre-release" version the program and manual did not speak the same language. On calling John Riskin, author of both PERSONAL SECRETARY and EXECUTIVE SECRETARY (and founder of Personal Business Systems, which he subsequently sold) I found out that the pre-release copy of EXECUTIVE SECRETARY was not ready to "go to press". Knowing that I was planning a review, he kindly provided me with a copy of the latest version of the more powerful EXECUTIVE SECRETARY.

John (Riskin) told me that it would be well to spend the time going through the manual with the aid of the included SAMPLES - document disk. The same advice is also given by the manual. Even though I have already become somewhat familiar with the "Personal Secretary", I can only say "DO IT THEIR WAY, BY THE NUMBERS."

I have spent some time now "playing" with the various commands, examples and formats that this program has and HAVE YET to use them all!!!

This is the MOST POWERFUL AND VERSATILE Word Processor that I have ever used!!

EXECUTIVE SECRETARY comes with a very detailed "hand holding" start-up procedure that will automatically force you to correctly configure the program for your hardware and requirements the first time you boot it up.

Since I use the Omega II programmable key board and have a 80 col. card (not Videx but "compatible"), upper/lower case and SHIFT key shifting worked fine. This program seems to allow a wide range of equipment, both printers and cards.

Each Menu is very clear, and, while there are several to go through at times, as with any program that has the power of many options, they are straight-forward and easy to follow.

I tried this program on some of the files I had written with the "pre-release" PERSONAL SECRETARY and it worked fine with no changes.

One of the things that stands out with EXECUTIVE SECRETARY is that, when in the EDIT mode, you can see between which lines you are, page wise, and about how many words you can still type in this "page", as far as this FILE is concerned.

To EDIT just press the ESC key and the RETURN moves you UP while the / moves you DOWN. Right & Left Arrow do just that. The Arrow keys are supposed to move a word at a time but with my OmegaBoard (keyboard), they only move a letter at a time. While in EDIT mode you can set indentations, window (width) and various other format information.

In the EDIT mode you will see a mark at the left side of the screen where the end of the page is as you have pre-set it.

To SAVE a file, use ESC twice and the Menu provides for not only SAVE but PRINT also.

Using "embedded" commands, one is able to automatically center headings, right & left justify, etc.

"." commands are another form of embedded commands which, as well as providing for the merge capability, described above, provide for very effective printer controls to do things such as Shadow Print, Bold Print, special character set selection, etc.

For example The "." command ".sd" allows one to predefine the printer control code for "SHADOW printing on". It works like this:

```
>.sd #27,87
```

associates the ASCII code sequence 27 followed by 87 (Esc W) with the Shadow printing embedded code ".sd". Example coding is for the Comrex CRII printer. Similarly, one "pre-defines" the necessary printer code for "SHADOW printing off".

Then, to print a word in SHADOW

as in the above line, one types in:

```
"Then, to print a word in .sdSHADOW.so".
```

A special code is used for underlining - " ". Thus underline, which is a word with the "special underline code", produces underline. While each program author has his/her own way of using these controls, once you settle on a set of commands which you use frequently, it does not take long to do them naturally.

GOTO 41



Executive Secretary Concluded from page 40

An interesting "Merge" capability has been incorporated into this program. If you have a text (boilerplate, body of letter, formletter, etc.) that you want included at a certain point, then all you have to do is insert an embedded command at the position you wish to merge in that text. Subsequently, when you print out the letter the program will "go and get" the indicated information or file as you have commanded, and insert that information at that spot. In this way you can type what becomes a MENU and let the program "go and get" one after another separate files or information. Therefore, if you have a lot of words that you constantly use such as WORD PROCESSOR or names that are hard to remember, EXECUTIVE SECRETARY will help you. All you have to do is set up the word(s) as a dot command. Example:

```
>.wp word processor
```

Then just use ".wp". The program will insert the whole word automatically!!!

You could set up a file as "commands & words" and bring that up to start your letter. In this way all "your specials" would be automatically defined at the start of the letter. The definitions will not show on the printed page except as you call them out with dot commands or embedded commands. Alternatively, you may wish to be able to edit the letter in true page length. Then, just before printing, create space for your specials at the front of the letter.

EXECUTIVE SECRETARY allows you to define your entry window, which with an 80 column board, can be up to 80 columns wide. On type in, words "wrap" when you reach the right limit of the window. If you refrain from using the dot commands described above, you can effectively utilize EXECUTIVE SECRETARY as a "what you see is what you get" type of word processor. However, use of any dot commands will immediately cause the printed copy to be different from the entry screen. However, the program does provide a preview screen which will translate all of the dot commands and show you on the screen what you would get on the printer.

When printing or using the preview screen, you get a "print format" screen on which you define such things as margins, line lengths, etc. If you change the "print format" when typing a letter, the screen will prompt you to decide if the new ones are to be saved or not. You may record the "current print format" you are using and the "Scroll code" for reference.

"FANCY PRINT" is name of the menu item used to generate "mailable" copy. I define "mailable copy" as the copy that contains all of your predefined dot commands translated into their final form. Or, you can print a "rough draft" complete with line numbers. The draft copy will not translate the dot commands. Then you can "go to" for fast EDIT moves.

If you have need to use proportional spacing, multi-columns, form letters, mail list, mail labels, card file, telephone list, get addresses from a file for insertion into letters and AUTOMATICALLY PROVIDE FOR ADDRESSING THE ENVELOPE, YOU GOTTA GET THIS!!!

Would you believe a section that will:

1. Stop printing the letter in a pre-determined spot,
2. Ask a question on the screen (name/address, etc.),
3. Put that answer into the letter along with a response,

or

4. Set up a form for FILLING IN THE SPACES ON A PRE-PRINTED FORM??

Well, EXECUTIVE SECRETARY will!!! Auto-center, auto-indent and a host of other specials are yours to play with.

It will take you some time to MASTER this Word Processor but it is well worth it. There is also a version that has a speller built in.

The price of both EXECUTIVE SECRETARY and PERSONAL SECRETARY have recently been reduced. The new prices are:

EXECUTIVE SECRETARY	\$159.95
EXECUTIVE SECRETARY with speller	\$189.95
PERSONAL SECRETARY	\$ 69.95

These prices put both programs in everyone's range now.

If the deadline for this issue were farther away there would be time to play and find more of the "goodies" in the program.

(Editor's note: I had looked at EXECUTIVE SECRETARY about 3 years ago when it first came out and rejected it in favor of Pie Writer. It sounds now like EXECUTIVE SECRETARY is a highly flexible word processor with lots of features in the same class as AppleWriter [], Screenwriter [] and PieWriter. None of these programs are super easy to learn, like Bank Street Writer and Word Handler. But once learned, they are easy to use and very powerful.)





Rana 8086/2

Preliminary Details
(or mini review)
by Dan Buchler

In the July newsletter, the Announcements section provided a brief description of the new Rana product known as the Rana 8086/2. I was able to play with one, an pre-production version, one afternoon in July, compliments of Team Electronics, Hennepin and Honeywell Defense Systems Division. For continuity, some of the information previously published in this newsletter, is repeated below.

This product was announced about 9 months ago and scheduled for shipment in early 2nd quarter. Like most new products, it didn't come out on schedule, and, in fact, is not ready to ship. We understand that the product still has problems that have yet to be resolved. Therefore, any features, hardware or software, discussed herein could change before the product is finally shipped. When this will be, is not known. You might have to wait a while. As to the price — figures used herein are also very tentative.

What you get is this:

Hardware

- A box somewhat larger than the size of two half height disk drives containing (funny enough) two drives.
- An interface board for the Apple.
- A cable to connect interface board to the inside of the back panel of a //e. If you have a //+ you patch to the interconnecting cable below.
- A 25 wire interconnect cable.
- A coax to connect the Apple video out into the Rana. This is so you don't have to unplug the monitor when you go from Apple native mode to 8086 mode.
- A power cable.

Software

- MS-DOS 2.11 which includes BASICA and a variety of utilities and Rana enhancements (see below) including a print driver for Lotus 1-2-3.
- ProDOS (version 1.01)

The MicroSoft Windows, previously promised with this product, is not mentioned. Not surprising, since the IBM PC version hasn't been released yet.

Documentation

- A Rana 8086/2 manual
- An MS DOS 2.11 Manual
- An 8086 BASICA manual
- A manual that tells you how to you Rana

enhancements such as:

- Putting 40 tracks on both sides of disk in Apple mode. This gives you 328K.
- How to format PRODOS with the Rana Formatter
- ProDOS user's manual

Inside the Rana 8086/2 box is a disk controller electronics and an 8086 coprocessor chip with supporting logic. The 8086 is the 16-bit version of the microcomputer used in the IBM PC. That means it runs faster! The box also contains 256K bytes of random access memory, expandable to 512K bytes. Read Only Memory (ROM) containing a Basic Input Output System (BIOS) package is provided. This is the software which makes the system compatible with IBM PCs. The 8086 mother board also has space for an 8087 floating point IC. Finally there is video logic compatible with the IBM which provides low and high resolution black and white and color output:

Graphic modes -

- 640 x 200 monochrome
- 320 x 200 monochrome
- 320 x 200 color
- 640 x 400 monochrome
- 320 x 400 monochrome
- 320 x 400 color

Text modes -

- 40 column monochrome or color
- 80 column monochrome or color

Screens are stored in a dedicated 32K RAM providing 8 pages of 25 lines in text mode or 2 pages in graphics mode.

The back panel of the box has connectors as follows:

- Video in from the Apple
- RCA jack for video out.
- 9 pin jack for RGB
- DB25 for the interface cable

The industry standard 9 pin connector is for attaching to an IBM compatible RGB color monitor. An RCA jack provides connection to a standard Apple type composite video color or monochrome monitor. As far as I could tell, the system does not support the high resolution character IBM type monochrome monitor. If you expect to use a monitor for text work in 80 columns, an RGB monitor is strongly recommended.

GOTO 43



Rana 8086/2 Continued from page 42

The box is connected to the Apple through a cable and board which plugs into a slot in the Apple. The board may be plugged into any slot, but Rana seems to recommend slot 6, although their documentation gives 3 examples, 2 of which put the Rana in slot 6, and the 3rd has a Rana Hard disk controller in slot 6, and the 8086 interface in slot 5. The problem we experienced might make one think differently.

We were curious to see if there were any drive compatibility problems, particularly because of the multi-function nature of the Rana drive. The Rana 8086/2 may have that problem, but based on the small sample we tried there is insufficient evidence one way or the other. The Rana would not boot one Apple protected disk - Word Challenge. It did boot VisiCalc. It wouldn't boot an IBM format version of Advanced DB Master either.

The real problem is that the boot starts from the highest number slot containing a disk interface card. So, if you have a regular floppy drive as well, it looks like it can't be the boot disk. Therefore, a regular floppy Apple disk would be used as a 3rd and 4th drive controller in Slot 5.

Apple Hardware Requirements

It won't work on a][before Rev 7. It will work on a][+, but you need a Videx Keyboard Enhancer. This provides the shift that the 8086/2 requires. The other thing that the Rana depends on is the //e Open and Close Apple Keys. See section on keyboard below. A special card comes with the Rana which allows you to order free from Rana a 2 key membrane switch. These are the Open and Close Apple keys and they plug into the Game port. The instructions that come with the Rana show the membrane switch installed on the][+ just above the '=' and 'Reset' Keys on the Apple casing around the keyboard. All our testing was done on a //e.

Keyboard Considerations

A //e has 62 keys. A][+ with Videx Enhancer, and the Membrane keys, (see above) has the equivalent. An IBM PC has a full keyboard, a keypad, 10 function keys and an 'Alt' key which can be used in combination with just about any other key.

Rana has done a fairly decent job of providing ways of emulating the IBM keyboard. For example, the commonly used Function (F)1 to F10 and the Open Apple key in conjunction with numbers 1 through 0. Alt A through Alt Z is obtained with Open Apple with A through Z. Of, course compared to the IBM, one is using

an extra finger (the open and closed Apple keys) quite frequently. The individual user must reflect on how inconvenient that really is. One other option would be to buy an add on keyboard, most of which are programmable in either ROM or RAM. By then, of course, one is paying even more. See discussion below on Price/Performance!

I couldn't see any reason why they didn't simply require the Shift Key mod instead of the Videx Enhancer. Perhaps that interferes with the Open and Close Apple membrane swiches which also plug into the game port.

IBM Compatibility

With any 8088/8086 micro, the key question is always, "How compatible is it with the IBM PC?" The usual benchmark is SubLogic's Flight Simulator and Lotus 1-2-3. We didn't have a copy of the Flight Simulator handy, but we did have Lotus. This particular copy had been configured for a Color display and a parallel printer. It worked on an IBM or a Columbia PC. Much to my surprise, it booted and without a hitch. We worked with it for about 20 minutes trying various options. We didn't try printing as we didn't have a printer on the Apple. (Hard to do without a printer!) Also, the manual warns you that some Apple printer interface cards do not pass the high order bit (the old Epson interface card is one example). The graphics interface requires a full 8 bits, so you must have one of the more modern cards to do print graphs. There is a Lotus driver on the MS-DOS disk which we think is needed for printing graphics with Lotus PRINTGRAPH. We couldn't find any documentation to confirm this, though. The Rana 8086, by the way, was noticeably faster than our Columbia, which uses an 8088.

Peripheral/Interface Considerations

MS-DOS uses certain conventions when talking to peripherals. These are file names which are dedicated to specific devices. In order to allow use of Apple slots and peripherals connected through interface cards in those slots, certain relationships had to be established. These are:

MS-DOS Name	Device	Apple Assumption
LPT1	1st Printer	Serial or parallel printer with interface in SLOT 1
LPT2	2nd Printer	Printer interface in SLOT 4

GOTO 44



Rana 8086/2 Concluded from page 43

COM1	1st Aynch communications interface	Super serial with modem or certain unspecified modems in SLOT 2. The manual doesn't specifically say so, but it sounds like a Micromodem II would work.
COM2	2nd Asynch communications interface	As above in SLOT 4 Note that this is same as 2nd printer!
	Clock/timer	Thunderclock or equivalent in SLOT 7
	Mouse	Apple Mouse in SLOT 7
	2nd Clock	SLOT 5
	2nd Mouse	SLOT 5

Additional disk requirements and slots were discussed above. Devices not being used by MS-DOS can obviously be placed in any Apple slot provided there is no conflict in what MS-DOS might expect there. The software for all of the above is in the Rana 8086/2 ROM.

Price/Performance
or
Who needs it?

We think the list price will be around \$1800. At a discount of 20%, the selling price would be \$1440. Let's compare this with some IBM PCs and compatibles (also assuming 20% discount). Let us also assume we need 512k (not so little these days with programs like Symphony around).

	Rana 8086	IBM PC
Base machine	1440	\$1600
Memory to 512k	220(1)	500
2nd drive	incl	300
Videx Enhancer	100	-
MS-DOS 2	incl	incl
ProDOS	incl	60(2)
Total	1760	2460

Notes

- (1) Set of 9 200nanosec. 64Kbit chips at \$55
- (2) The ProDOS is for the old Apple!

Now, before your head hits the ceiling, realize something about IBM PC and compatibles. You are not dealing with home computer prices. If you go out and buy an IBM compatible PC, you still fork out about \$1600

at discount prices for a 2 drive system with 128 or 256k, without any options. You may get some software, but usually not what you want. The point is: "the darn things arn't cheap!"

On the other hand if you like Charlie (on TV), you could buy a starter system for under \$1000!

Disadvantages:

1. You tie up your Apple.
2. You use up an Apple slot.
3. You must use the Apple keyboard wherein control combinations have to be substituted for IBM PC compatible function and other special purpose keys which are not contained in an Apple keyboard.
4. You get no IBM PC compatible expansion slots.
5. \$1760 is still \$1760!

You could also consider trading in your Apple and buying the PC or compatible with a Quadram board, which allows the IBM PC to run Apple software (maybe).

Anyway, if anybody thinks they might be interested in a bulk purchase or negotiated block purchase with some dealer, once the thing comes out and we have a chance to evaluate it a bit more thoroughly - let me know!



NOW THAT YOU HAVE YOUR
COMPUTER
you should think of
SECURITY & FIRE ALARM
DEPENDABLE - ECONOMICAL

GENE HATFIELD 541-1752

CESCO
SECURITY SYSTEMS
ELECTRONWARE

3525 HILLSBORO AVE. N. NEW HOPE, MN 55427



Wizard Interface

Graphics Print and List Routines
for Wizard Interface cards
by Julian St. Martin

Many of you own the Wizard-IPI printer driver card by Wesper Microsystems — probably purchased with a dot matrix printer capable of printing graphics.

I'd had one for quite a while before I tackled the job of actually printing some graphics with it (on a C. Itoh Prowriter).

I found the chore of feeding the card its various instructions tedious enough so that I wrote a brief program in BASIC that will (1) load a picture, (2) print the picture, and (3) return control to the primary Apple screen.

Thought that some of you would find it useful, so here is the program:

```

1000 REM -----
1002 REM
1004 REM GRAPH PRINTER ON THE
1006 REM WIZARD-IPI CARD
1008 REM
1010 REM -----
1012 REM
1100 HOME
1110 PRINT: PRINT "GRAPH PRINTER" : PRINT : PRINT
1120 INPUT "FILE NAME: ";F$
1130 INPUT "DRIVE #: ";DR
1132 REM
1140 HOME
1150 VTAB 3 : PRINT
      "TURN ON PRINTER AND PRESS ANY KEY.";
1160 GET Z$ : PRINT
1180 REM
1200 HGR2
1210 PRINT CHR$(4);"BLOAD";F$;"D";DR
1220 PRINT CHR$(4);"PR#1"
1230 PRINT CHR$(9);"G";2
1240 PRINT CHR$(4);"PR#0"
1250 TEXT : HOME

```

Line 1120 obtains from the user the name of a file containing a picture; line 1130 asks for a drive. A wrong file name or a wrong drive (like Drive 3) will abort the program with a SYNTAX ERROR.

In line 1210, the picture is loaded and appears on the Apple's screen. Then the printer is turned on (line 1220); it is assumed to be in Slot 1.

Line 1230 sends a CTRL-I to the printer followed by the letter G, to indicate Graphics mode. The numeral, 2, indicates that the image from High Resolution Screen 2 (HGR2)

should be sent to the printer — since that's the screen we turned on in line 1200. (If you have some make of interface card other than the Wizard, which has a "screen dump" option, you can substitute the appropriate code instead of the CTRL-I G 2 - Ed.)

Finally, the normal screen (PR#0) is turned back on, the graphics screen is switched off, screen cleared, and control returned to you.

If you don't have a picture of your own, create one on the HGR2 screen first. When you are done, type a carriage return and then BSAVE PICTURE, A16384, L8192. And then another carriage return. This will store the image on the screen to your diskette.

* * *

Another frustration of mine has been to create program listings that skip over the perforations of the paper. With the Wizard-IPI, you can take care of that with a brief little program also, and here it is:

```

63000 PRINT CHR$(13); CHR$(4);"PR#1"
63002 PRINT CHR$(9);"80N"
63004 PRINT CHR$(9);"60P"
63008 LIST 0,62999
63010 PRINT CHR$(13); CHR$(4); "PR#0"

```

Save this to your diskette as a text file. Later, when you want to list a program to your printer, make sure that the program is in memory. Then EXEC this program (I call it LISTER). It will load underneath your program, but make sure you have no lines 63000 and higher. The sequence of commands is:

```

EXEC LISTER
RUN 63000

```

The printer should be on and ready, of course. If it is, the proper listing will be printed, with page skips in the proper places. The listing routine, itself, will not be listed. The program prints 80 columns across, 60 lines to the page. If you adjust the paper properly, it will leave 3 lines blank at top and bottom of each page.

If you don't know how to create EXEC files, look on page 76 of the DOS manual (Apple][+ users) or page 97 of the DOS Programmer's Manual that comes with the Apple //e.





Binary Capture

Capturing Embedded Text from a Binary File
by Steve George

Perhaps someone else could benefit from a technique I used to capture the documentation portions of the two main programs on DOM #32. The programs are long binary files with the text embedded within. (There are utilities which will allow you to view consecutive memory locations, but, if you lack such a utility, why not try this technique to get a feel for what they do? The process just might be a useful learning experience.)

We will use a program from DOM #32 called "DCOPY" as our example. To begin, boot a "normal" 48K DOS disk. BLOAD DCOPY and then enter the Monitor with CALL-151 [RETURN].

At the asterisk prompt, enter these commands to determine where in memory the program has been stored:

*AA60.AA61 [RETURN] to find the length
AA60- FA 7A (Apple's response)

*AA72.AA73 [RETURN] to find starting address
AA72- 00 08 (Apple's response)

*7A+08 [RETURN]
=82 (Apple's response)

CONTROL-C [RETURN] to re-enter Applesoft.

The results for DCOPY are: starting address = \$0800 (00 08 above) and length of \$7AFA (FA 7A above) and that it loaded through \$82F9 (82 FA -1 above). \$0800 corresponds to decimal 2048 and \$82F9 to 33529. This last result was obtained by entering:

?8*4096+2*256+15*16+9 [RETURN]
33529 (Apple's response)

Since it starts at \$800, and Applesoft programs start at \$801, it isn't safe to enter a program to look at memory. What to do? If we enter the Monitor again (CALL-151) we can use its memory move command to copy the start of DCOPY into the text-display area of Apple (\$400-\$7FF).

CALL-151 [RETURN]
*400<800.BFFM [RETURN]

This allows us to see what's stored from 2048 decimal to 3071 decimal. Display of embedded text can take several forms depending upon whether it is uppercase, lowercase, etc. Usually, uppercase will be displayed as letters which are NORMAL when moved to the text page. Lowercase will be a distinct sequence of entirely FLASHing numerals and punctuation marks. Experimentation is the

best way to be able to recognize text in a memory move.

Nothing in what was just moved appears to be text, so we are safe to enter a short Applesoft program to examine the rest of the range.

(But what if it was text? Well, we could just BLOAD the program higher in memory, as long as it doesn't over-write DOS.)

The following program is a little more involved than one might expect, because it does some automatic corrections for errors it may encounter. Prior to entering it, enter FP [RETURN] to reset the Applesoft pointers.

```
10 ONERR GOTO 90
20 LOW = 3072
30 HIGH = 33529
40 START = LOW
50 FOR START = START + 1 TO HIGH
60 PRINT CHR$(PEEK(START));
70 NEXT
80 END
90 START=START+1:POKE216,0
100 ONERR GOTO 90
110 GOTO 50
```

Now, OPEN THE DRIVE DOOR(S)!! Some assembly codes will execute when printed in the manner (such as trying to BRUNDOG FIGHT at 6879 decimal)!

CONTROL-S will pause the display for easier reading, and any key will resume program execution.

It's a good idea to have used the program so that you can distinguish between what are on-screen prompts and actual instructions. For example, the text located between 3000 and 3200 is part of the prompting during DCOPY execution and may fool you the first time through. On the second pass though, when the actual DCOPY instructions start to appear, you'll have to hit RESET to stop the execution of the loop. Then if you enter:

?START [RETURN]
8611 (Apple's response)

This will display the value of the variable START when the loop stopped, and this value will be a little beyond the starting location of the text. Change lines 20, 30 & 60 as below to "zero-in" on the exact starting location.

```
20 LOW = 7800
30 HIGH = 8500
60 PRINT START,CHR$(PEEK(START))
```

GOTO 47



Binary Capture Concluded from page 46

And RUN the composite program.

This will cause consecutive memory locations to print up the left side of the screen and the contents of each location to print up the middle. When the text appears, RESET to stop execution so you can write down the exact beginning address (it was 8261).

Change the values in lines 20 & 30 to 8261 & 33529, respectively to cover the maximum possible range of the instructions. Also, alter lines 40, 50 & 90.

```
40 FINISH = LOW
50 PRINT CHR$(PEEK(FINISH));
90 FINISH = FINISH + 1 : POKE 216,0
```

Then RUN again so that you can see the entire message. CONTROL-S will pause the scrolling so you can read it as you go, if you'd like. When its obvious that the text portion has stopped and weird characters commence jumping and beeping on-screen, RESET again to stop the program. When I printed the value of FINISH in immediate mode (?FINISH), Apple said 17695. Because FINISH keeps incrementing after the useful text disappears and the jibberish starts again, its value will be a little higher than the end of useful text. So, I arbitrarily selected two numbers for the LOW and HIGH values which might include the end of text:

```
20 LOW = 16800
30 HIGH = 17500
and changed 60 to:
60 PRINT FINISH,CHR$(PEEK(FINISH))
```

Run this composite program one last time and when the end of text is in sight, stop execution and write down the value of FINISH (16909).

The following one-liner will save the instructions to a textfile named INSTRUCTIONS.TEXT:

```
10 START=8261:FINISH=16909:D$=CHR$(4):
FILE$="INSTRUCTIONS.TEXT":
?D$"OPEN"FILE$:?D$"WRITE"FILE$:
FOR LOC=START TO FINISH:
?CHR$(PEEK(LOC));:NEXT:
?:?D$"CLOSE"
```

Now you can load the text file into your word processor for formatting, spelling corrections, changing lower to uppercase, etc.

Personally, I would have liked the instructions for DCOPY separate from the body of the program because they take up space which in this case could be put to better use during the copy process (especially during mass production).



Keytec

A Keyboard Enclosure
by Steve George



Nearly the dollar value of 3 pieces of sheet aluminum, 5 sheet metal screws, 8 hex nuts, 4 rubber feet, 5' of ribbon cable, etc., doesn't add up to the \$60 price tag. Where the 'value' enters is in the additional freedom this enclosure gives you.

A detached keyboard. Envy.

As I was debating about sending for the kit, two thoughts kept crossing my mind: 1) why do I need a detached keyboard anyway, and 2) ehh, what's \$60 compared to the overall system price. Add to this the fact that I've been chopping away at the Apple case since day one. Whenever something was added I seemed to need to drill or saw part of the case. Needless to say, it's no longer a pretty sight. The potential of removing it from public view was the final deciding factor!

Keytec's ads state that they ship by return mail and it arrived 3 weeks later. What came was in good condition, though half the parts were missing. A quick trip to the hardware store and a perusal of my computer junk box for some ribbon cable, got the unit up-and-running. And it works like a charm. But then, what's not to work. "This has fewer moving parts than..."

I like it because: 1) it gives more desk-top space to clutter up, 2) it gives more freedom in how and where the system is setup, and 3) it's a familiar keyboard because it's the same one you've used all along. This last fact may be considered a negative by some, but I've grown accustomed to its feel and I like it.

Two versions are available, so be sure to specify which you'd like if you order one: 1) for the][/][+, and 2) for the //e. To use it you won't have to do any cutting or defacing of your Apple. The][version supports the shiftkey mod. All of which leads me to conclude that it is definitely worth the \$60 price.

[It really is a joy to be sitting in a swivel rocker with the keyboard comfortably resting on your lap, leisurely typing away! Although it doesn't seem to affect the number of typos!]



Tell our Advertisers

you saw it here.



Magic Window II & Videx Videoterm

CONTROL-S / TAB RIGHT PROBLEM
by Dick Marchiafava

Note: The problems described here do not apply to MAGIC WINDOW IIe! Magic Window II is a versatile word processing program that is easy to use and is reasonably priced for its capabilities. One of the reasons that I upgraded to this word processor was the ability to generate and display lower case characters that are software generated (Soft 70) without the need for an 80 column board.

However, it does require a 16K RAM card in order to use the Soft 70 portion of the program. The program is large, and the Soft 70 uses some memory space. The RAM card provides additional memory to increase the space available for a document. Even with the 16K RAM card, the length of a given document is limited to 50 sectors of disk space. Since I already owned a 16K RAM card, there was no further expenditure needed.

I have used Magic Window II for many months, and it was everthing that I needed. Now, the nature of my writing has changed, and I found myself chafing under the limitations of the document length of 5 pages (50 sectors). If I went to 80 column hardware I could double the length of a given document.

Well, I found that I was going to upgrade my accounting program and would require an 80 column board to run the new package. This package needed a Videx Videoterm. At least it needed the Videx to insure that the package would run properly. Since accounting is the single most important task for which I use my computer, I chose to use the Videx and not chance software/hardware incompatibility in this area.

Several persons told me that I would find the hardware 80 column display easier to read than Soft 70, and it is true. I had ordered the Videx with Soft Switch to allow the 80 column display to be switched from the keyboard, and then had to install an Inverse Video chip in order to run Magic Window II. I would recommend this configuration to anyone considering this 80 column board. My thanks to those who helped me sort out the Inverse Video problem.

A short time later a problem showed up when using the word processor. When I did a TAB RIGHT (CONTROL-S) the cursor would disappear, or the move to the next tab stop would be slow, and jerky if repeated tabs were done.

A call to Magic Window II's publisher (Artsci), and discussion with their technical person revealed the cause of the TAB problem. The Videx card uses CONTROL-S as a SCROLL command. Magic Window II uses it as TAB RIGHT. The Videx checks the keyboard with each character entered, and intercepts the CONTROL-S, often causing the described problem.

This problem is specific to the combination of Magic Window II and the Videx Videoterm. There is no fix for the problem.

If anyone using either of these products is considering the purchase of the other, they may want to consider a card other than the Videx, if the other card does what they need, or the purchase of a different word processor.



```

*****
**
** TENCAL-COOL+TIME Fan,
** Surge and Clock-----$ 69.95 **
**
** HAYES SMARTMODEM 300
** For the IIc-----$245.00 **
**
** HAYES MICROMODEM IIe-----$229.95 **
**
** ZOOM TELEPHONICS MODEM---$ 94.95 **
**
** MICROMAX Extended 80 Col Card
** Add on 64K for only--$119.95 **
** Add on 128K for only--$189.95 **
**
** SENTINEL SS/SD Diskettes-$ 18.50 **
**
** ROLLTOP 100 Disk File----$ 29.95 **
**
** DISKETTE 70 Holds 70 Disks
** (Like Flip & File)---$ 14.95 **
**
**
** SOFTWARE PLUS
** 560/4077
**
*****

```



In the Dog House

with Beagle Bros
by Steve George

The following Beagle Bros. program will allow you to LIST a line of a running Applesoft program. An example for which you might use this is for "help" sections of a program.

```
10 INPUT "LIST LINE #";N
20 GOSUB 60000
```

> your pgm.
> goes here
>

59999 END

```
60000 L$= RIGHT$ ("0000" + STR$(N),5):
      L = PEEK (121) + PEEK (122) *
      256 + 51: FOR J = 1 TO 5:
      POKE L + J, ASC ( MID$ (L$,J,1)):
      NEXT : LIST 00000: RETURN
```

When RUN as is, it will ask for a line to LIST. The proper line number is then POKED into the "00000" area of the LIST command in line 60000.

(Editor's note - Mini'app'les received permission from Beagle Bros. to publish short programs that had previously appeared in their advertisements, and which were not credited to any specific individual.)

(2)

Here's an excellent example of using Monitor routines from an Applesoft program. Beagle Bros. (again! these guys really grow on ya) has done just that. The program POKES the delimiters for the move into memory and then PRINTs the character which is to be repeated into a single screen location (upper left, 1024 dec, \$400).

From there the Monitor move routine duplicates what it found there into the remaining screen locations.

```
5 POKE 768,216: POKE 769,160:
  POKE 770,0: POKE 771,76:
  POKE 772,44: POKE 773,254
```

```
10 FOR X = 1 TO 12: VTAB 1: PRINT
  MID$ (" :+*@+-:",X,1)
```

```
20 POKE 60,0: POKE 61,4: POKE 62,254:
  POKE 63,7: POKE 66,1: POKE 67,4:
  CALL 768: NEXT : RUN
```

For an interesting change, alter line 10 to read as follows:

```
10 FOR X = 0 TO 255: VTAB 1: PRINT
  CHR$(X)
```

(3)

Yes, Virginia, you can READ in immediate mode! The 'trick' is to precede the READ command with a colon (:). Where Beagle Bros. come up with these I'll never tell!

Try this:

```
FP
10 DATA 1,2,3,4,50,60,100
```

```
READ A$: PRINT A$ (SYNTAX ERROR right?)
```

Now try:

```
:READ A$ : PRINT A$ (Ah,ha! it worked!)
```

Now try:

```
:CLEAR:FORI=1TO7:READ A$:PRINT A$:NEXT
```

Amazing!

(4)

Another short but sweet routine from Beagle Bros., this time on a "twirling cursor":

```
10 A$ = "!/-" + CHR$(92)
```

```
20 HOME : PRINT "ANY KEY:"
```

```
30 FOR X = 1 TO 4: VTAB 1: HTAB 9:
  PRINT MID$(A$,X,1)
```

```
40 FOR Y = 1 TO 20: NEXT Y,X
```

```
50 KEY = PEEK (49152): IF KEY < 128
  THEN 30
```

```
60 POKE 49168,0: VTAB 1: HTAB 9:
  PRINT CHR$(KEY - 128)
```

This is a great substitute for the mundane, normal flashing cursor when awaiting a GET.

Try substituting other characters in A\$ and see what happens.

Try some other characters not available directly from the keyboard by using the CHR\$(function.

Classified

These ads are provided free to members for non-commercial use, and are limited to 10 lines. Commercial ads will be charged at 20 cents/word for members or 40 cents/word for non-members. Contact the Advertising coordinator. **DEADLINE** for ads is the second Friday of the month preceding the month of publication. Ads will be repeated on request only. Also, please notify editor if item is sold. Unless otherwise noted, all items are **For Sale**.

Want **QUALITY?** SSDD 3M
Scotch Diskettes; \$20.00
 Box 10, tax incl.
 Bob Pfaff 452-2541

Microtek Parallel Printer
 Card for Apple II, II+,
 and IIe; \$30. **Apple**
Paddles; \$15.
 Dion 888-6629 (eves)

Want to **BUY:** bare Apple
 II+, 64K. Offering \$400.
 Jim 489-4713/298-3671

Wesper parallel printer
 interface card with 16K
 buffer and graphics (BPO);
 \$80. **Apple Cat Modem,**
 with extras; \$160.
 Scott 623-4656 (work)
 920-9091 (home)

LET US SELL YOUR
USED COMPUTER
 CORPORATE OR PERSONAL
 WE'RE
THE USED COMPUTER PLACE
 (612) 861-5529

BUSINESS SFTW: Continental
 General Ledger \$120
 Acct Receivable \$ 75
 Acct Payable \$ 75
 All new and unopened. Also
 Magic Window, used \$ 40
 Visidex \$110
 Magicalc spreadsheet \$ 75
 with warranty cards.
 Ron 448-5743

Back Issues of Softalk,
 February of '82 thru
 August of '84 (April '82
 missing). 30 issues -
 \$20. **Omron calculator,**
 with rare 12 digit display
 - very easy to read.
 Portable, battery
 operated, includes case &
 AC adaptor. \$15.
 Eric 822-8528

ORDERING DOMs or MSDs

A reminder that **Disks of the Months (DOMs)** and **Mini'apps Software Disks (MSDs)** are available by mail: DOMs at \$6.00 each; MSDs at \$17.50 each. MacDOMs are not yet available by mail. Send your order to:

MINI'APPLES DOM's
 PO Box 796
 Hopkins
 MN., 55343
 Attention DOM Sales

Most **DOM's** and all the **MSDs** are available at club meetings. Because of the volume of disks distributed, they are not tested. Club members are asked to make every effort to get the **DOM** or **MSD** running. For example, occasionally the **DOS** on the disk will be bad, but it will catalog OK and one can run the programs. Master Create on your System master disk will fix-up the **DOS**. Of course, if you have a disk with bad programs, we will cheerfully replace it!

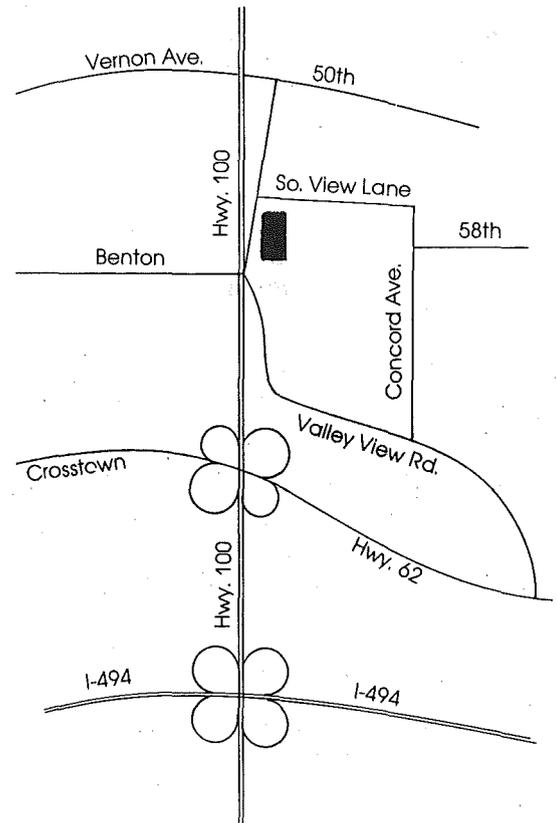
A service to copy **DOMs** (not **MSDs**) to your own media is also available. See announcements section.

Meeting Place

Edina Community Center
 5701 Normandale Road
 Edina

Use entrance '1' on West side of building near the flag pole.

Centrally located on Highway 100 between Highway 62 and 50th Street in Edina, MN





ATTENTION:



WE HAVE YOUR PRINTER PAPER

- IN STOCK -

11" X 9½" - 15# or 20# Paper

SMALL QUANTITIES TOO: 250, 500 or 2000 per carton

Also: MANY OTHER SIZES AND TYPES OF PRINTER PAPER (Stop in and see our selection), DATA PROCESSING AND OFFICE SUPPLIES, SNAP-A-PART FORMS AND WEDDING INVITATIONS.

OPEN MONDAY thru FRIDAY - 8:30 - 5:00

NOTE: New Hours 

NEW!
In-Stock
Continuous Postcards,
Index Cards and
Micro-Perf Printer Paper

For more information call:
(612) 332-4866

House
of **F**orms

20 NO. 1ST STREET • MINNEAPOLIS, MN 55401

SAVE THIS COUPON!

THIS COUPON ENTITLES MINI'APP'LES MEMBERS TO A

10% DISCOUNT

ON ANY PURCHASE AT



This Discount Will Not Apply
On Sale Merchandise
Or With Other Discounts.

Expires December 31, 1984.

20 North First Street
Minneapolis, MN 55401



Visa and
MasterCard
Accepted.



SIZE, SIDES, DENSITY

PRICE PRICE PRICE
/10 /40 /100

ELEPHANT #1 5-1/4, SS, SD
ELEPHANT #2 5-1/4, SS, DD
ELEPHANT #5 5-1/4, DS, DD
ELEPHANT #80 8, SS, SD
ELEPHANT #90 8, DS, DD



\$ 19 \$ 69 \$ 165
\$ 22 \$ 79 \$ 189
\$ 27 \$ 99 \$ 239
\$ 22 \$ 79 \$ 189
\$ 35 \$ 129 \$ 319

GEMINI 10X PRINTER
APPLE CAT II MODEM

\$299.95
222.95

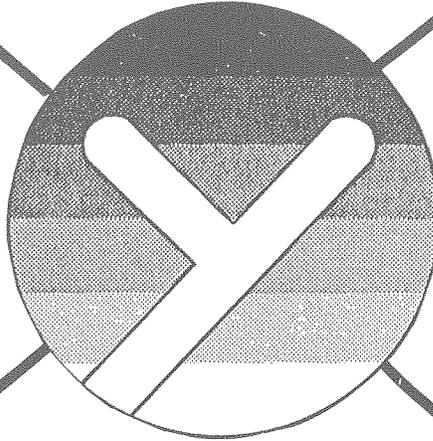
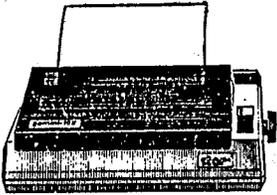


\$59.95



KoalaPad™ \$77.95
with *Micro Illustrator™*.

SYSTEM SAVER \$67.95
MACH II JOYSTICK 31.95
80 COL 64k CARD 119.95



(612) 935-1038

yukon computer products, inc.
p.o. box 93 · hopkins, mn 55343



TRIPLE DUMP

\$46.95

THINKTANK \$115.95
SUMMER GAMES 31.95
SARGON III 38.95
BEAGLE GRAPHICS 41.95
BEACH LANDING 31.95
ALGEBRA I 31.95
DOLLARS & SENSE 67.95



CALL US TO SAVE YOUR MONEY / OUR NEW PICK-UP CENTER OPEN SAT. 12-6 / SUN. 12-5
VISIT US AT THE TWIN CITIES COMPUTER SHOW FOR SPECIAL SAVINGS ! ! ! !

Price includes UPS delivery. MC/VISA
MN residents add 6% sales tax.

Mini'app'les
Box 796
Hopkins, MN 55343

Address
Correction
Requested

1 241 4-1-85
SALO, BILL
6908 - 114TH AVE NORTH
CHAMPLIN MN 55316-2006

Bulk Rate
US Postage
PAID
Hopkins, MN
Permit 631