

mini'app'les

apple computer user group newsletter

VOLUME VIII No 1

JANUARY 1985

CALENDAR

CALENDAR

CALENDAR

WHICH

WHEN

WHERE

WHAT

St. Paul Branch
Note 3

Pascal & Apple ///
Note 1

Dakota County Branch
Note 7

Board Meeting
Note 2

Computers in Medicine
Note 13

Business SIG
Note 10

St Cloud Branch
Note 15

REGULAR
MINI'APP'LES
Note 5
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Education SIG

Investment SIG
Note 4

NorthWest Branch
Note 16

Minnetonka Branch
Note 8

Macintosh SIG
Note 9

St. Paul Branch

Pascal & Apple ///

Geneology CLUB
Note 11

Dakota County
Business

St Cloud Branch

REGULAR
MINI'APP'LES
Note 5
Map next month

Education SIG

Investment SIG

Macintosh SIG

Northwest Branch

Strictly Business

Minnetonka Branch

Tue Jan 1
7pm-10pm

Wed Jan 2
7:30pm

Tue Jan 8
7pm-10pm

Wed Jan 9
7:30 pm

Wed Jan 9
7:00pm

Wed Jan 9
7:30

Thu Jan 10
7:30pm

WEDNESDAY
January 16th
Prgm-7:30pm
SIGs-8:30pm+

Wed Jan 16

Thu Jan 17
7-9:30pm

Tue Jan 22
7:00pm

Wed Jan 23
7:30pm

Mon Jan 28
6:30/7pm

Tue Feb 5

Wed Feb 6

Sun Feb 10
2:00pm

Tue Feb 12

Thu Feb 14

Thu Feb 14

WEDNESDAY
February 20th
Prgm-7:30pm
SIGs-8:30pm+

Wed Feb 20

Thu Feb 21

Mon Feb 25

Tue Feb 26

Feb 25-27

Wed Feb 27

Mahtomedi Fire House
Hallam & Stillwater.

Minnesota Federal
9th Ave S Hopkins

St. John Neumann Church
4030 Pilot Knob Rd, Eagan

Minn Federal of Roseville
Lexington & Larpenteur

Health Associates Ctr.
2221 University SE, Rm 115

Edina Community Center
5701 Normandale

Walte Park City Hall
5th Ave & 3rd St N.

UNIVERSITY MINNESOTA
ST. PAUL
Student Ctr., Buford Ave.
Near State Fair Grounds

After Regular Mtg.

Henn Cty Lib at Southdale
7001 York Ave S.

Rockford Rd Library
New Hope

Glen Lake Community Ctr
14300 Excelsior Blvd room E

Edina Community Library
50th & Hwy 100

Mahtomedi Fire House

Minnesota Federal

Minnesota Historical
Society Library St Paul MN

St. John Neumann Church

See February for Meeting site

Walte Park City Hall

Edina Community Center
5701 Normandale
7 blocks S. of 50th St.

After Regular Mtg.

Henn Cty Lib at Southdale

Ties, PCA Bldg, Cty Rd B2

Rockford Rd Library

Hyatt Regency

Glen Lake Community Ctr

Happy new year
No Meeting Tonight

Pascal & Apple /// Special
Interest Group Meeting.

Regular Board Meeting. All
members are welcome!

Pro Tax Program w/MN forms
Softax by Ron Schlangan

Bill Johnson & Dave Peterson
of Apple Computer, Minneapolis;
Andrew Niemic of Checkmate
Technology on 160 col card.

Discussion on MECC Conf. - Note 12.

Basics of Technical Analysis
by Harold Hoffmann

4 Word Processors
reviewed.

La Triviata and Omnis
(Apple II version) reviewed.

Mike Carlson discusses
new Apple hardware.
Note 3
Note 1

Note 7

Note 10

Note 15

To be announced

Note 12

Demo of Investment Software - Note 4

More data bases - Note 9

AppleWorks Demo

250 booths!

Note 8

Notes: (See page 2 for telephone numbers)

- | | | | | |
|-------------------|----------------|-----------------------|---------------------|------------------------|
| 1. John Schoepner | 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 Marchlaffava | 13. Stewart Haight | 16. Jere Kauffman |
| 4. Eric Holterman | | | | |

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KX-P1091 (120 CPS)	319
KX-P1092 (180 CPS)	459
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EXP 500	349
EXP 550	449
EXP 770	825
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10X	269
OKIDATA	
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ML84	689
ML92	389
ML93	609

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36x36 Parallel	30
25x25 RS-232	25
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16"x22" printer stand	40
ENDSTAT static control	169
64K RAM Kits	36

MONITORS

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V310A 12" amber (for IBM)	175
ZENITH	
ZVM-122 12" amber	115
ZVM-123 12" green	115
PRINCETON GRAPHICS	
MAX-12 amber (for IBM)	189
HX-12 (RGB)	489
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Mini'app'les

The Minnesota Apple Computer Users' Group, Inc.

P.O. Box 796
Hopkins, MN 55343

Board Members

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SIG Director 2	Dick Marchiafava	572-9305
Branch Director	Ron Androff	452-5230

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Shows and conventions	Steve George	935-5775
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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

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Dakota County	Bob Pffaff	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

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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

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	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



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Yukon Computer Products	BC

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ANNOUNCEMENTS

January Regular Meeting

The next regular meeting of Mini'app'les will be held on Wednesday, January 16, at the near usual spot on the "Ag" campus - Student Ctr., Buford Avenue, University of Minnesota St. Paul campus. This is a double headed program:

1. Bill Johnson and Dave Peterson of Apple Computer (Minneapolis) will talk to us and answer questions.
2. Andrew P. Niemic of Checkmate Technology will be talking about their 80/160 column cards. That card draws about 1/3rd of the power used by a Videx Ultraterm!

MacSIG
by Dan Buchler

The next meeting of the MacSig will be held on Monday, January 28th at:

Edina Community Library
50th and Hwy 100.

This is the building right next to the Police station, East of Hwy 100, and on South side of 50th St. Don't go to the community center several blocks away!

Since this meeting follows the annual board meeting of Apple Computer Inc., we have persuaded Mike Carlson to elucidate on those goodies which we very much expect Apple to announce at their board meeting. Candidate items are:

- Apple Laser Printer
- Apple Bus
- New Mac versions

This year (1985) we will try to alternate meeting places as we do for the main Mini'app'les meetings. January will be in the Edina Library as stated above, but February will be at the TIES offices in the PCA building, on County Road B2 near Rosedale. Watch the calendar!

We are trying to get our act together so we can announce the Mac SIG program in the newsletter. As this newsletter goes to press, the December MacSIG meeting will be taking place, at which there will have been a session on the pros and cons of various database programs.

A report by Tom Edwards on the November MacSIG meeting is printed elsewhere in this newsletter.

MacDOM's Past and Future
by Steven E. Baker

The Macintosh phenomenon continues and our MacDOM endeavor is proving to be a big hit. We have produced four MacDOM's during 1984 and hope to provide a good output throughout 1985. In order to assure this continuation of MacDOM's, I am

continuing to look for new contributions from our membership in the following areas:

- Microsoft Basic programs
- MacPascal programs
- Stand alone Mac programs
- Templates for Multiplan, Filevision, etc.
- Tips and Techniques items for MacReference Sheets
- Clipboard/Scrapbook art
- Software and Hardware reviews for the newsletter

As an inducement to get you to contribute to your MacDOM, you are entitled to a free MacDOM (you must supply the media) for each contribution which we use.

It is very helpful if program descriptions are included within the program information area, within the program

GOTO 7

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 Schoeppner for \$17.50. See classified ads.



Announcements continued from page 6

itself, or as a separate MacWrite article. A lot of the public domain software, which I receive, comes without any documentation at all. I don't have the time myself to figure out each one and document the operating instructions.

So please, if any of you have taken the time to understand one of these public domain programs, write up some documentation and share your findings and work with the rest of us. There are some real nice programs for the Macintosh, just waiting for you, and, best of all, they are priced right.

Speaking of prices and MacDOM's, they are now available for mail order. The price is \$9 each, including postage. Make checks payable to Mini'app'les and send checks to:

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

Attention MacDOM Sales

All past and current MacDOM's will continue to be available at the monthly Macintosh SIG meetings, priced at \$8 each for members, and \$10 each for non-members. (D.A.M. utility disk is still \$5 for all.) I am still looking for assistance with MacDOM's as follows:

MacReference Sheet-Someone to collect Mac tips and techniques ideas and prepare them for inclusion in the newsletter and/or MacDOM's.

MacART-Someone to collect clip art, MacPaint pictures or art for start-up screens for future DOM's.

Membership Sales-Someone, who attends monthly meetings, to do the following: explain to potential members what Mini'app'les and the Macintosh SIG is all about, take membership dues, distribute new membership kits, and handle membership related questions.

MacDOM Production-Someone to assist myself in getting the MacDOM together and several individuals to help copy disks and label them. Living in southwest portion of Cities would be helpful, but not required.

MacDOM Sales-Someone to assist myself in MacDOM sales at monthly meetings, and to fill in during my absence.

In most cases, more than one individual could be put to work. Please see me during the monthly meetings regarding the above jobs.

Please continue to mail or give your contribution(s), MacDOM related question(s) or comment(s) to:

Steven E. Baker
c/o Advantek, Inc.
7750 West 78th Street
Minneapolis, MN 55435
Home Phone: 935-1192

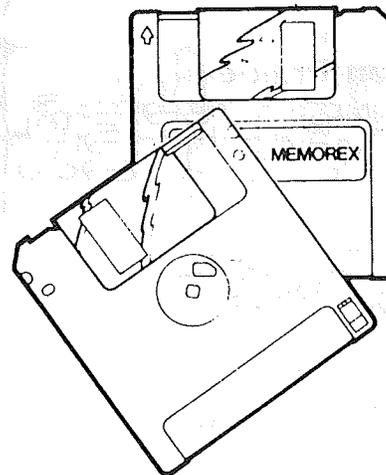
Strictly Business Computer Show

by Dan Buchler

The Strictly Business Computer Show will come again to Minneapolis in February. at the Hyatt Regency Hotel on February 25, 26 and 27. Approximately 270 booths are expected (contrasting with 100 at the Twin Cities Computer Show). We will have a booth there. The booth will be administered by members of the Business SIG. However we do need additional volunteers to staff the booth. Call Dan Buchler at 890-5051 if you are interested. Next month we hope to publish a \$2.00 coupon to help defray the cost of entrance into the show. Admission to the show is restricted to senior citizens over 21 years in age! If you are under 21, and really want to go - call Dan Buchler at 890-5051.

GOTO 8

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Announcements continued from page 7

WWTC Computer Talk

Tune in, not to KSTP, but to:
WWTC (1280AM).
It happens Sunday morning, 9AM-10AM, not Saturday night.

Mini'app'les will supply an "expert" for this show on the second Sunday of each month. If you have an Apple-related question, here's your chance to get on the air! Note: Tom Edwards was our representative for December. Thank you Tom.

Business SIG News
by Dick Marchiafava

The Mini'app'les Business SIG will meet at the Edina Community Center, 5701 Normandale Road, Room 101, for the January 10th meeting. The meeting starts at 7:00 PM with "Random Access", a question and answer session. The program starts at 7:30 PM.

Remember, the Business SIG will meet on the Thursday before the main club meeting from now on!

Upcoming Meeting Subjects

January 10th, Tax package SofTax 84. Demo by Ron Schlangan, the author. This package is for the tax professional, and includes Minnesota and Federal schedules.

February 14th, AppleWorks demo by Mr. Ernie Bedor.

The Business SIG will be meeting at a new location starting in February.
WATCH THE CALENDAR AND ANNOUNCEMENTS FOR NEW LOCATION.

February 25-27th. COMPUTER EXPO 85, Strictly Business. See above.

March 14th, Small Applications for the busy executive. Erik Carlson.

April 11th, Apples for Large Corporations.

May 9th, Tentative: Manufacturing Inventory Control on a Micro.

Future: Corporate Users, MAC/LISA - Connection to a Mainframe
Business Productivity Tools

Summer Meeting Schedule

The Business SIG will commence the summer meeting schedule in June. We will gather after the main club meeting for an informal meeting in an adjacent room. Summer schedule dates are June 19, July 17 and August 21st.

I am pleased to announce that Mr. Erik Carlson has joined the SIG Committee. Erik has been an active member of Mini'app'les and the Business SIG for a long time. His talents will be valuable to us.

Investment SIG
by Eric Holterman

The next meeting of the Investment SIG will be on Thursday, January 17, at our regular meeting place at the Hennepin County Library near Southdale. One of our members, Harold Hoffmann will discuss techniques of basic technical analysis, including such things as moving averages, RSI, oscillators, use of stops and controlling risk. Harold is the author of the Cyber-Scan programs and brings alot of expertise to the subject. If you have questions concerning the January meeting only, please contact Bill Jensen (338-0002) who will be coordinating the meeting.

Harold will also be available after the meeting to answer questions concerning his programs which he is offering to Mini'app'les members at a 40% discount! They range in price from \$195 (\$117 with 40% discount) for Market-Aid to \$1,695 (\$1017 discounted) for Cyber-Scan

GOTO 9

NEW

Silicon Prairie

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LINE

with: Ray Douglas
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WWTC am 1280
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Announcements continued from page 8

including Mini and Super-Tic intra day data analysis systems. The most popular packages are Cyber-Scan, for commodity traders, and the Stock Market Analysis package (actually Cyber-Scan plus additional programs for the stock and options markets), each listing at \$595 and available at \$357 to members. There are more features, studies, charts, etc. than I have space to cover here. The club does have demo disks and tapes, that can be borrowed for short time periods, or you can get further information from Harold at (612) 485-4233 or PO Box 250, Winsted, MN 55395.

At our December meeting, Pat Jandro, the Dow Jones News/Retrieval regional representative from St. Louis, demonstrated both the service and some of their programs. There was alot of interest and questions from those present and we appreciate Pat taking the time to help our group.

Our meetings are on the third Thursday of the month at the at the Hennepin County Library, near 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. Also, please be aware that the Library is being remodeled and we may have to change meeting times, dates or places on relatively short notice. Check each newsletter for the latest info. 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.

Minnetonka Branch
by Steven E. Baker

The Minnetonka Branch will hold its first 1985 meeting on January 23, Wednesday night, starting at 7:30 p.m. Our meetings will continue to be held at the Glen Lake Community Center, Room E, located at 14300 Excelsior Blvd.

The January meeting will feature two topics. The first will be a demonstration of La Triviata, a computerized trivia game running on the Apple][+, //e, and //c. La Triviata is locally produced by Quest Learning System of St. Paul.

The second topic will be a demonstration of Omnis, a relational database program for the Apple series of computers, presented by Jim Hanson. Jim has been working with Omnis for a couple of months now, and should provide us with a good review and demo of this program.

Those attending the November meeting were presented with a excellant demo and review of Executive Secretary by Gene Hatfield. Gene provided an in-depth review of the word processing program and its various options. Thank you Gene for a fine presentation.

Upcoming programs are still being decided at this time. If you are interested in a specific topic, and would be interested in presenting it, or know of someone that would present a program, please get in contact with Dick Peterson, 473-5846, or Steven E. Baker, 935-1192. The Minnetonka Branch meetings are always open to all owners of Apples, even Mac's. (Note: I think I'm the only Mac owner that regularly attends this meeting, and I'm taking a ribbing. So Minnetonka area Mac users: come and join the fun!)

DOM Sales

DOMs (Disks of the Month) may be ordered by mail. Apple][,][+, //e and //c DOMs are \$6 including postage. MacDOMs are \$9 including postage. Send checks to:

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

Attention DOM Sales

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Attention MacDOM Sales

GOTO 10

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Announcements continued from page 9

Program Submissions
by Steve George

Please indulge me for a column and allow me to toot my horn (CALL -198). Hopefully, the following will motivate some of you to contribute Apple][,][+, //e, & //c programs (before MAC consumes us all! - {The disease has already been diagnosed as malignant - Ed.})

Recently Mini'app'les received the newest IAC disk #41. Its contents are all related to Appewriter (AW)][, //e, & //c. Some are glossaries, tutorials, tech notes, Word Processing Language for AW (WPL) usage, AW customization, and a fix for using AW//e on a //c.

Mini'app'les contributors include: John L. Hanson, Arsen Darnay, Chuck Boody & me. Others are Sandra Brockman (Kansas City), Dianne Lorenz (Wash. Apple Pi), & Don Lancaster (via Apple Assembly Lines).

The origin of my glossary programs was the personal frustration of trying to remember (and having to input) each printer control code. With that 'conquered', I set forth on WPL to turn the glossary usage into an on-screen help utility. The result: the AW glossary files on Mini'app'les DOM #29... and ultimately the new IAC #41.

I encourage our Software Director to re-release our DOM #29 with the additional programs supplied by the IAC.

[If you have created a BASIC, WPL, or other program related to AW, call me for the address of the IAC Librarian. He says that another AW utility disk will be issued when enough material has been received.]

So you see, a program to fulfill a personal need can definitely be helpful to others (AW or not). I encourage each of you to consider submitting a program to Mini'app'les that you have developed which fulfills a general or specific need. Other members have probably had a similar problem, but lacked the know-how or time to solve it.

You can help them out! After all, that's the real purpose of YOUR user group: to help each other make the best use of our Apples.

Education SIG
by Jane Chatterjee

The Education SIG will meet in January as usual, right after the main meeting. The topic will be a presentation and discussion on the recent MECC conference.

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

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.

GOTO 11

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Announcements concluded from page 10

- 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 29, 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.



Mockware

from CE Software

by Steven E. Baker

Mockware is a series of Macintosh desk accessories available from the same folks as the Desk Accessory Mover. CE Software is continuing its marketing of software under the MacHonor (TM) system. That is, the software can be freely copied by anyone and if you choose to keep it, just send a specified dollar amount for a license fee.

The newest disk contains three Mockwares.

MockTerminal is a complete though simple terminal package in a desk accessory. It boasts of such features as a seven-number phone book, automatic redialing of busy numbers, 300/1200 baud operation, and recording to disk of text received.

MockWrite is a small text editor in a desk accessory. It allows you to read from MacWrite "text only" files, make changes, perform searches, print it out, and save it all back to disk again. You can adjust the size of your editing window at will, and use the scroll bar to page through your text.

MockPrinter is a desk accessory that will print text files while you keep using your Macintosh. It reads and prints your files a line at a time, so there is no limit to how big of a file it can print.

The above information comes from CE Software's latest bulletin. The complete disk includes the three desk accessories, manuals in MacWrite documents, and a special "Desk Accessory Installer" program, for those who don't have the Desk Accessory Mover. The license fee for all three programs is \$25.00.

The MacSIG will be distributing the programs subject to the licensing fee request for \$5.00 to all interested parties. The program should be available during the MacSIG's January 1985 meeting or can be obtained directly from:

CE Software,
 801 73rd Street,
 Des Moines,
 Iowa 50312.
 Phone number (515) 224-1995.

An open invitation is made to any Mini'app'le member to write a newsletter article/review on Mockware. (See your name in print.)



Is your Apple fyreproof?

Well...here's your chance to find out! All you need is the new adventure game developed by TRISOFT called FYREQUEST! FYREQUEST will give you hours of challenging fun and excitement...as you're searching the castle of over 250 rooms to slay the evil dragon, ALSANTZ. But, beware: There are many dangers lurking in every shadow ready to confound your assault on ALSANTZ. If you're ready to try a HOT one like FYREQUEST just send \$20 or contact: TRISOFT, 1292 E. Como Blvd., St. Paul, MN 55117. But act now!

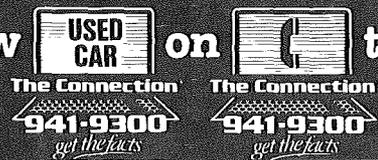


Dear Mom,

I was messing around with my home computer today and I found some great **HOT DEALS** on . (I selected



“Sales & Specials” from “MAIN MENU”). My car broke down this morning so I found a new **USED CAR** on  too.



Then I got my new **USED CAR** some brand **NEW TIRES**, an **OIL CHANGE**,



TUNE UP and a **NEW BATTERY**, all by checking the business index.



Then I used my home computer to find Lisa (my new girlfriend), a **DIAMOND RING**, **NEW DRESS**, **FUR COAT**, **LINGERIE** and **FLOWERS**.



I found all these great gifts in the business index. All the presents made Lisa hungry, so I used  to check out



all the great **DINING INFO**. But don't worry mom, I still love you



best and next month  will have **FREE LOVE LINES** and I'm



going to have a special message for you.

So why don't you leave a message for me and we can both use our home computers to find great stuff and read all the free love messages in **LOVE LINES** next month!

Love & Kisses,



Sonny

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Z80 Card Update

Z80 Cards & Applied Engineering
by Andre Marc van Meulebrouck

Reprinted from the Denver Apple Pi
"Seed" V6 #9 Sept. 1984
Keyed in by Steve George

After a nearly one year long search for the ultimate Z80 card, I finally feel satisfied that I have found it. If I were giving out awards, my award would go to Applied Engineering. In this article I will start by explaining why you would want a Z80 card, then, I will describe the motherboard problems some Apple owners may experience when trying to run a Z80 card and how Applied Engineering's end user support can help. Next, I will enumerate the advantages of the Applied Engineering Z80 card, and last, I will explain why having 64K of RAM on a Z80 card is not an asset.

Why CP/M?

First of all, what is a Z80 card? It is a printed circuit board that has a Z80 MPU (micro processing unit) on it. It allows you to run the operating system called CP/M (Control Program/Microcomputers). The advantage of the CP/M operating system is the enormous amounts of software available for it. The CP/M operating system was created by Gary Kildall, starting in 1973. The system was written in PL/M (a high level language), and gives the impression of being modeled after operating systems on mainframes. It was the first real operating system for personal computers. This gave it a momentum of software following that is still impressive today. The reason you would want CP/M is to be able to tap into that huge base of software, and a Z80 card is needed to run CP/M since it is based on the Z80 MPU (originally, however, it was based on the Intel 8080, but the Z80 mnemonic set is a superset of the 8080 set). CP/M is rich in business software, and also quite rich in languages. Although everyone's reasons for wanting CP/M are different, mine are for the languages, and public domain software available for it. The highly respected TLC (The Lisp Company) LISP is available in Apple CP/M format. Two public domain LISPs are available; XLISP (written in C), and a LISP written in Pascal. Both are from the SIG/M Users's Group public domain library, and are available in the Denver Apple Pi Users's Group library in Apple format. In addition, Prolog, the language of choice in Japan's 5th Generation Computer Project is available in Apple CP/M format. For an Apple owner, there may be more software available

under CP/M than there is under DOS 3.3, or Prodos. Many Apple owners are aware of this, in fact, there is said to be more Apples running CP/M than any other brand of computer in the world (reference 1 in bibliography).

Testing Your Motherboard, and Applied Engineering's End User Support.

One thing to consider if you buy a Z80 card is: can your Apple drive it? In the case of the Applied Engineering card, you don't need to worry about this because Applied Engineering's user support is excellent. However, if you are considering a different brand, you should check out the vendor to find out how reputable they are, and how good their end user support is. This is important because Z80 cards sometimes don't function in some Apples since some Apples have bad chips in them. Apple buys their chips from the lowest bidder, and this creates deviations in the chip specifications since some chips may be on the high side, and some may be on the low side, or, the vendor may not be in specification at all! Chips of dubious integrity, when put in combination with other chips, may not work right. This may not affect DOS or Prodos, but may affect a coprocessor board. My computer had bad chips, and I know of another user who actually had to have his entire motherboard replaced to run CP/M. The only way to know if your motherboard is completely okay is to try a Z80 card (from a friend or a computer store) that is known to work, in your computer. If it does not work, some of the chips on your motherboard are weak and/or out of specification and will need to be replaced. I tried three different Z80 cards in my Apple; an imitation Microsoft Softcard, an ALS card with 64K of RAM on it, and, finally, an Applied Engineering card. None of them worked, so I finally became suspicious of my computer. After trying the Applied Engineering card in another computer, I knew my computer had problems. I phoned Applied Engineering and told them my Z80 card did not work. They told me: "No problem, we'll send you another one." I told them my computer was at fault, and the technician there told me to send my computer in and they would fix it for free, including

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Z80 continued from page 13

paying for the return UPS shipment. All the users of Applied Engineering products I talked to, both before I bought my Z80 card, and after I had trouble, had nothing but praise for Applied Engineering, and they all said they would not hesitate to send their computer to them. So, I shipped off my computer. It was received on a Friday, and the technician I talked with fixed it on Saturday! On Monday, after a weekend of testing, my computer was shipped back to me! This kind of user support is rare, and is a refreshing change from the "end user drop dead" attitudes I have gotten from Digital Research and a few other companies.

Why the Applied Engineering Card?

The Applied Engineering card will run in Apple II's, II+'s, //e's, and Franklins. It will work with all popular 80 column cards automatically. I have never heard of anyone having trouble with any make of 80 column cards with this card. Parallel and serial interfaces can be installed using the CONFIGIO basic program which is a utility that comes with Microsoft's Softcards. The Applied Engineering card lists for a mere \$139 and it will run the latest version of CP/M (CP/M 3). It also runs versions of CP/M earlier than 2.0, and all the versions between 2.0 and the latest versions. This card will run CP/M software downloads from 8 inch disks (8 inch format is the CP/M standard), and it will run Microsoft Softcard CP/M formats. This card runs at 4 MHZ, does Z80 interrupts, and supports graphics in GBASIC. The graphics in GBASIC are very similar to the graphics in Applesoft. Applesoft programs need little translation to run in GBASIC. The Applied Engineering card is rather small in size because it has such a small number of chips on it. This means less power is required, less heat is created, and, there are less chips that can potentially fail. If you look at the card you will see it is very well made. All chips are in housings (sockets). This card will run a variety of CP/M operating systems that come with various packages. In addition, Applied Engineering is developing an operating system that will be available to all future and past owners of their card. It will be called "CP/AM", standing for "Control Program/Apple Microcomputers".

Why 64K of RAM Onboard Is a Bad Idea.

The CP/M cards which have their own memory (64K of RAM) do not run the Microsoft Softcard CP/M format because they do not access the Apple's I/O memory the way the Softcard does.

This is a severe disadvantage because the point of CP/M for most Apple owners is to try to be compatible with the largest base of software possible, so the cards with 64K on them defeat the purpose and advantage of having CP/M! The Applied Engineering card is the most compatible of them all, running more formats and software than any of the other cards. The Microsoft Softcard set a defacto standard for Apple CP/M formats, despite its being non-standard. So, if you get CP/M, and can't run the Microsoft Softcard format, you have cut out a huge base of Apple CP/M programs. In fact many times when software is advertised as being available in Apple CP/M format, what is meant is that it is in Microsoft Softcard format. Thus, you want to get a card that will run Microsoft Softcard format as well as standard CP/M formats like you get when you download an 8 inch disk into Apple 5 1/4 inch format. The Applied Engineering card is the only one I know of that can accept both formats well, in addition to running CP/M 3, the latest version of CP/M.

Microsoft Softcard //e—like all the other cards that have 64K of memory on them, this card will not run the Microsoft Softcard format. In addition, this card will not run CP/M 3. This card has its own video equipment. Why pay for video equipment if you already have a video card? You can't use your own video card with this card, which is too bad if you like your video card better than the video equipment on this card. This card is huge and requires more power and creates more heat than the Applied Engineering card, and, because it has so many chips on it, your chances of developing a bad chip is greater. A very unpalatable quirk of this card is the fact that it must go in the auxiliary slot. If you have a card in slot 3 that will coexist with an Apple extended 80 column card in the auxiliary slot, you may not want a Z80 card that requires that slot. It is likely to cause problems with such a set-up. This card is EXPENSIVE, and it will run on //e's only.

PCPI APPLI-CARD—this is the card Franklin sells as their CP/M card, and this card, under the name "StarCard", is often bundled with Wordstar. It has 64K of memory on it, so it too will not run CP/M 3 either. It is more expensive than the Applied Engineering card also.

Digital Research Gold Card—this card is ludicrously overpriced. The marketing strategy for this card seems to be a belief that people will pay absurd prices for

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Z80 concluded from page 14

anything that bears the Digital Research label. With this card, you will be more or less restricted to what can be downloaded from 8 inch standard CP/M formats. This card, like the Softcard //e, has its own video equipment and will not let you use your own video card's display (if you have one). It is rather large, with a lot of chips on it, meaning more heat, more power needed, and more chances of card failure due to bad chips. When I called Digital Research to find out about this card, they told me there is no support for Apple end users (and will not be in the future). They also said there was no technical support line. Digital Research will not answer any questions about the Gold Card unless you are a dealer. Despite the fact I work at a computer store on Saturdays, I was still not allowed to even know what the dealer support phone number is. I was told to see the dealer nearest me. The one and only dealer for this card in Colorado turned out to be the store I work at on Saturdays. I explained to Digital Research that I worked there, and that no one there knew about their card, nor had even seen one, and that I was trying to find out about them. I was told they would mail me literature, but they never did. I also wrote for information as per the instruction in a magazine, but received nothing that way either. I sent for both nearly 3 months ago. When I had one of the store owners call for me, the answer to my question about graphics was: the Gold Card supports no graphics. I'm not sure the representatives of Digital Research that I talked with knew what they were talking about, so I don't know if any of this information is correct; however, I will probably never buy any Digital Research products.

Advanced Logic Systems "The CP/M Card"
—Digital Research had a big hand in the development of this card. Like most cards with 64K, it won't run the Microsoft Softcard format. It does not officially support any video or parallel/serial cards other than the ones made by ALS. Others may work, but you must find out for yourself. The price is much higher than the Applied Engineering card.

All the above cards have 64K of RAM on them. After what I've said so far, you may be thinking that the Softcard is not so bad after all. Don't let me leave you with that impression.

Microsoft Softcard--this card does not run CP/M 3.0, and it is more expensive than the Applied Engineering card.

Conclusion

The choice is yours, but in my opinion the winner is clearly the Applied Engineering card. I think it is the best Z80 card there is for the Apple II series.

BIBLIOGRAPHY

1. Steven Frankel: The Compleat Apple CP/M; 1984, Reston Publishing Company, Inc., Reston, Virginia.
2. Joseph Reymann: Understanding CP/M; 1984, Alfred Publishing Co., Inc., Sherman Oaks, CA.
3. Z80 Plus User Manual; Applied Engineering, Carrollton, TX.
4. Charlie Allen: Comparing CP/M cards; At, volume 2, Issue 3, March 1984, Ziff-Davis Publishing, Co., New York, NY.

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Stocks

A Review of Stockpak II and Value/Screen
© 1985, by Eric Holterman

These two programs are very much alike and different at the same time. They are alike in that they are both designed to assist the investor with fundamental analysis and operate in the same general way by screening information from a data base. The data is updated monthly with new data disks mailed to you by the publisher. What you are really buying is the information service first and the ability to manipulate the information on your computer second. The programs have no use without the information provided by the publisher specifically for their programs. In neither case do you pay a separate price for the program. They are both closed systems in that you can not add more information to the data base provided or use the information outside of the program provided. The documentation for each is at least satisfactory. I have not had the opportunity to test their customer support services.

VALUE/SCREEN is published by Value Line and costs \$495 per year. A trial subscription for one month, including the complete program and one month of data, can be purchased for \$49. It includes only those stocks followed by Value Line, approximately 1,600. Stockpak II is published by Standard & Poor's. The cost depends on the stock group(s) you subscribe to. The NYSE (1,500 stocks), ASE (800 stocks) or a composite group (1,500 leading NYSE, ASE and OTC companies) databases each cost \$275 per year. The OTC (2,200 stocks) database is \$520 annually. A demo disk is available for \$10 (the club has a copy you can borrow). S & P will also let you cancel a subscription at any time for a pro-rata refund. Both program and data disks are copy protected. Value Line offers free replacement while you are a subscriber and does not provide back-ups. S & P achieves its protection through a 'data integrity' card that requires a slot. The disks can be freely copied but only used on a machine with the card.

Since the primary thing you are buying with either Value/Screen or Stockpak is information, that is where you would start in choosing between these services. It may also be where you stop comparing because your information requirements may be met by one but not the other service. Further, once you have gotten this far, you need to decide if you really want the service on disk or in the more conventional printed subscription format that each publisher is more widely known for.

I will sidestep the question of the information provided by these two services beyond a few general comments. First,

these programs aren't cheap, and there is no information provided with them that you can not get from these same services at the local library. If you are not familiar with the Value Line and Standard & Poor's, I suggest you spend some time at the library or your broker's office studying the services.

This will not only help you decide between the services, but also on how you want to get the information, i.e., by disk, broker, library, conventional subscription, etc. While both provide alot of data, Stockpak II provides more raw data on the company's financial and market results than Value/Screen. On the other hand, Value/Screen provides more advice and projections based on Value Line's judgement.

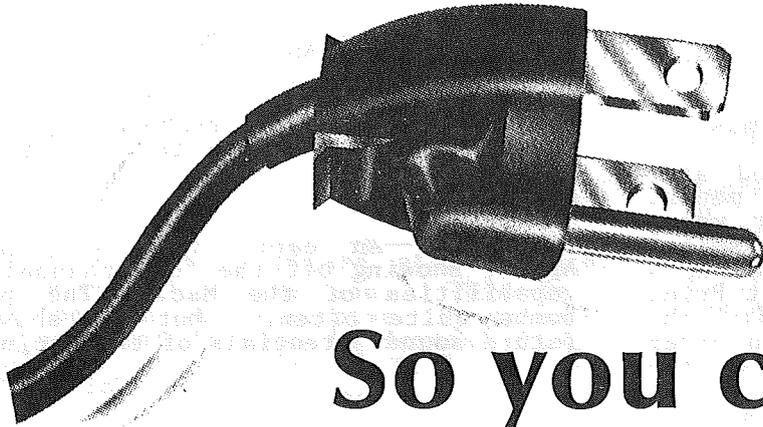
While both of these programs perform as advertised and are reasonably well executed, I feel that Stockpak II is the better of the two. The operation of the program is significantly faster. For example, it takes Stockpak about 5 seconds to recall data stored on disk on a particular stock compared to 40 seconds for Value/Screen. Stockpak will also produce bar charts comparing up to 4 items on 5 different stocks at the same time, or any 1 item on any number of stocks, and charts showing earnings per share and sales on any one company over the past five years. Stockpak's printouts and screen displays appear clearer and easier to follow to me. You can also store report formats which you can't do on Value/Screen (it doesn't take long to create one but it is irritating to create the same one over and over again).

Stockpak II will allow you to create your own ratios or data on a stock based on the information in the data base and include it as a part of any report. You may also screen the data base on on your own data or ratios as a part of the regular operation of the program. I see this as a major plus for Stockpak. Some of this could be accomplished in a round about fashion with Value/Screen, but no where nearly as well as with Stockpak. Both will let you store lists of stocks to run with new data from month to month. The edge does go to Value/Screen in evaluating a portfolio to appraise its characteristics. Note that neither of these programs provides for portfolio recordkeeping.

The bottom line as I see it is that if you like and use Value Line, Value/Screen will probably be your choice to aid you in your use of this service. Otherwise Stockpak II is easily my choice. If you would like more information on these, feel free to call me. Don Steinkamp, who helped at our October Investment SIG meeting when we demonstrated these programs, has also offered to field questions. He can be reached at 341-4333 week days and uses Stockpak II regularly.



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MacDom #4

December 1984
by Steven E. Baker

Our fourth MacDOM contains several interesting programs. Our first Pascal programs make their appearance on this disk. Leighton Siegel, a long time Mini'app'les member, has contributed two Pascal utility programs to the club.

Here's what is on MacDOM #4:

Banner—Banner was written by John Gregory, PowerTools Software, and placed in the Public Domain for all Mac'ers. The program prints large signs on your dot matrix printer. Because of the large amount of printed output, it takes a significant amount of time to print a banner - 3/4 hour for "Merry Christmas"!

To use: select the font, style and size from the font and style pulldown menus. You can type and edit your banner using the standard Mac techniques. Next, select the shape and shading of the printed dots from the Tweak menu, and then select Print Banner from the File menu. NOTES: The Imagewriter ICON must be present in order to print the banner out, otherwise the printer backs up several lines and quits. For better results with this program, move

it to a disk with about 15K of free disk space. Banner size appears to be limited to only what you can see on the screen window.

MacMelody and MacMelody.doc—The program is a simple "Interactive Music Program with Graphic Display" by Jeff Miller. MacMelody displays a picture of a four octave piano keyboard, a row of 8 boxes with pictures of musical notes, and various other boxes labeled PLAYBACK, DELETE NOTE, CLEAR, QUIT, TEMPO, VOLUME, DISPLAY, and ERASE. To use: click the mouse while pointing to a given key on the piano keyboard and you will hear a short tone of the pitch corresponding to that key. Please refer to the MacWrite file "MacMelody.doc" for complete program documentation.

Sound Lab—An early demo program from Apple, showing off the four channel sound capabilities of the Mac. The program bombs quite often, but it shows the future sound potentials of the Macintosh.

GOTO 19

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MacDOM #4 continued from page 18

Hendrix—Another early sound demo program. To use: simply move the Watch ICON around the screen using the mouse to produce difference sounds. To Quit, press the Command key and "Q". There may be other commands possible. This program bombs (causes system errors), and is generally rather unreliable. So, be prepared to get out the paper clip to eject your disk!

Sound—A MacWrite file describing both the generation of computer sound and the sound hardware in the Mac.

The Towers of Hanoi—Old favorite Apple][program adapted to the Mac. Demo shows the required movements necessary to move a user-determined number of rings from the left stack to the right stack.

Hilbert—Demo program showing fill graphics on the Mac. If anyone can explain what this program is doing or (even better) why, please step forward. Your Editor thinks he can. This is a variation on a recursive programming technique that is used in several "Logo" manuals as an example of that process. The code looks something like this:

```
TO SQR :LENGTH
  IF :LENGTH <5 STOP
  REPEAT 4 [FD :LENGTH RT 90]
  SQR :LENGTH/2
END
```

Enlarge and Enlarge.doc—This Microsoft Basic program enlarges any MacPaint compatible picture file into four files, each of which contains one quarter of the original image, doubled in size. These quarters may be printed out, using MacPaint, and pasted together to form a large picture that is twice as high and twice as large as the original. Or, each quarter can be enlarged, producing sixteen pictures which can be cut and pasted to form a very large picture which is four times as wide, and four times as long as the original. Please refer to the MacWrite file "Enlarge.doc" for complete program documentation.

MacPaint Doc.Format—A MacWrite file written by Bill Atkinson. He explains that MacPaint documents are easy to read and write, and have become a standard interchange format for full-page bitmap images on Macintosh. Their internal format

GOTO 20

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"CLIP 1"

A Macintosh review
by John Carter

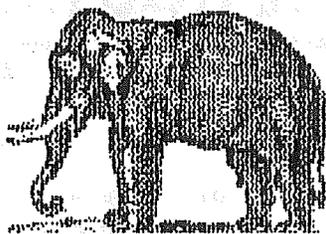


Introduction by the Editor: **CLIP 1** is, as John calls it below, an "art" disk. This puts in the category of several disks previously released for the Mac, such as the **Da Vinci** series (Hayden Software), **Click Art** or **Mac the Knife**. Each of these disks consists of a series of MacPaint files containing one or more "pictures" per file.

The idea is that you select a picture of choice, modify it, if need be, and then copy it, via the Mac Clipboard (and perhaps the Scrapbook), to whatever it is into which you wish to paste it. The 3 illustrations contained herein are taken from **CLIP 1**.

The Review

Most art reviews are subjective and depend, in large part, on the reviewer's personal opinions. This review is no different, and takes the approach of asking "How can I use this art disk"? First reaction was... "Here's another one!" In the last few months I have had the opportunity to sample a number of so-called art disks. And by "sample" I mean I had run print-outs, filed and forgotten them. The reason? In nearly every case the pictures and drawing were fun to look at and manipulate, but were not useful to me.



As a non-artist I definitely have need for "canned" drawings for business use, but the selection of drawings available on art disks just aren't applicable. For example, a lot of my work involves the use of overhead projection of transparencies (the type used in sales and marketing presentations).

Detailed, heavily shaded pictures don't show well when projected to large groups. If the drawing is complex it rarely communicates the point clearly and simply, and in any case, it's physically difficult (and expensive) to produce good transparencies with a lot of detail (requires photograph processing)... Alas,

CLIP 1 drawings were detailed, heavily shaded and complex - no good for my use!

CLIP 1's manual was certainly comprehensive (wordy) and explanatory for the novice Mac user. Perhaps too wordy even for the novice (It seemed to be a MacPaint manual in its own right). I did take the time to read most of it, hoping to learn the "subtle points" that **CLIP 1** said they had learned in developing the disk. I couldn't find anything new that wasn't already published. Overall, the manual was well written and "chatty", but did not measurably contribute to the disk contents.

Conclusion



CLIP 1 is similar to many other art disk on the market, perhaps lacking in variety (too many drawings on the same theme). Is it worth \$40? I think not.



MacDOM #4 concluded from page 19

is described here to aid program developers in generating and reading MacPaint documents.

MacART folder--Contains a highly detailed picture "OBSCURE", author unknown. See it to believe it.

Pascal Utilites--
Crossref Fancy and Crossref Plain. Two versions of the same Pascal program, adapted for Macintosh Pascal by Leighton Siegel. The Crossref Fancy program will generate a line numbered listing of a Macintosh Pascal program, and a cross reference list of all program words. It then sends them to the Imagewriter printer. Identifiers and reserved words are separated into two different lists. And a lot of other nice things are also done, as you will see. Leighton advises that, for loooooooooooooong programs, a Fat-Mac (512K) may be needed. The second version (Crossref Plain) does the same job, but without the bells and whistles contained in the first.

Now that Pascal language is available, I hope additional Pascal programs will be written and contributed to future MacDOM's. Ok you Pascal-nites (sic), its up to you!





MacPlace

November MacSig Meeting Report
by Tom Edwards

Gad, how this group does grow! I arrived about 6:45, and already the 60-70 chairs set out were well on their way to being filled. More were set out and probably totaled 100-110 by the time Mike Carlson started the meeting at 7:00. Prior to that, Steve Baker was kept busy selling the 3 MacDOM's that the club has, plus the Desk Accessory Mover disk.

It's kind of hard to give you an organized report on this type of meeting. There was no "presentation" as such, but the interest of the MacGroup was high. We had real, live Apple employees that fielded questions, offered information and voiced some opinions about Mac/Lisa, Apple, software, hardware, development and future directions.

The Apple representatives were Jim Hogan, National Accounts Executive, and Kirk Olsson, Technical Support. They are part of 23 Apple employees now working out of the new Minneapolis office which replaces the previous distributor arrangement (Clothier-Harold Co.). This office now covers direct sales to "National Accounts", retail, educational, "VAR" (replaces OEM), and educational structures. They have 10 phone lines into the new digs (893-1840, but please don't abuse the number...try your other options first).

This is just the way things came up for discussion. For the sake of ease, I'll not identify the source of each point. Some things were initiated by Jim or Kirk, some were responses to questions from the MacGroup, and some were statements from the floor.

- The Macintosh has continued to sell quite well. The installed base is now about 250,000. The 512K upgrade is available. Initial shipments since announced availability (early October) have been slow, but hopes are that December will see reasonable deliveries. The upgrade is a board swap, and does not improve the serial port rate, contrary to some early rumors. A new system disk is part of the swap, and it figures in a sweetner for owners of record prior to Sept. 10, 1984 (those early buyers can get MacDraw and MacProject as a bonus).
- Development is heavily focused on the Mac. Jim handed out a listing (dated November) of 600 products of which Apple is aware. Macworld has a "Buyer's Guide" that gives short reviews on a number of new things in a pretty slick format. (I've seen a copy, and probably will buy one when I can find it for sale; about \$8.00.) Apple has a

"Developer's Handbook" that gives contact information for which many have been looking. (Macworld published a mail address that might help too: for those interested in Apple Software Industry Relations, or MacCollege, write to Software Industry Relations, Apple Computer, 20525 Mariani Ave., Mail Stop 23AF, Cupertino, CA 95014.)

- Apple is not doing a great deal of development. They hope the same type of support comes from "3rd party" as happened with the // series. With 512K, Mac will soon be the tool for developers directly, removing Lisa from that part of the cycle and opening things up for the smaller guy. Apple hopes to put the information needed, such as "Inside Macintosh", into a more open distribution channel. {See "Rumors" below - Ed.} Other tools, like 68000 assembler, "C", and other popular development languages, are on the near horizon. (Some of the "C"s are, in fact, out. Again, see "Rumors" below - Ed.) Apple is also trying to expand on the "MacCollege" courses, and offer on-line support in ways that will build a larger developer base.
- Apple is committed to supporting the Lisa, making it even more compatible with the Mac by ironing out the display discrepancies and perhaps a few more things, but will not take it much farther. Further innovations under the Office System software will again be left to the 3rd party group. With 7/7 software, Lisa is a powerful choice for certain situations. Even with recent price reductions of the Mac, in selected configurations Lisa may cost (slightly) less and offers some capabilities that are still dreams in Mac-ers' eyes (integration, IMG memory, UNIX, to name three).
- One of the big dreams still over the horizon for Mac, is the 1-2-3 syndrome, regarded by some as needed to make the Mac into a bigtime player. Lotus calls their Mac product "Jazz", integrates 5 programs, needs 512K, prices it (tentatively) at \$595 and says look for it in March '85. Some have seen early copies of the product and think that it cures a lot of the negatives of Symphony by taking full advantage of the Macintosh interface. (Specs for Jazz were published in last month's MacPlace - Ed.)

GOTO 22



MacPlace continued from page 21

The other price grumble was on the upgrade to 512K. Some, that know chips and boards, seemed to be of the opinion that \$995 is off by a factor of 2. It was acknowledged that the dealer is dipping here too, and must be paid for the labor of the swap (about a half hour). The only redeeming thought was that you get a new board with the "latest" circuit revisions, but golly! you don't even get to keep your old board for that \$995.

Now don't get the idea that we tarred and feathered Jim and Kirk over these concerns. The comments were sincere but civil. The grumble session concluded with the wish that Apple could set a better example on announced release dates vs. actual release dates. Apple has missed on several of the software promises for the Mac. Really, this has got to seem like a no-win dilemma to Apple. Not hinting about software products in the works (as if that were possible) casts doubt on the credibility of the machine. And beating their gums over things that are way off only makes the consumer press harder for the end product and cry "Where is it?". No, I don't envy Apple on this one. An honest effort should be made to hold to target dates, but you and I don't want to see buggy stuff just for the sake of a date on the calendar. And don't forget, the 512K showed earlier than the announced date! Somebody's trying!

Jim reminded the MacGroup that Apple is a unique company, besides the cutoffs and sandals image. Apple has about 5000 employees worldwide and will post sales for this year close to \$1.5 billion. The ratio of employees to sales is low, compared to other big board players in this league. (OK, Triviaites. How about squeezing some numbers out for us on this?). His point was that Apple has to focus on one task in an area. The resources (read people) can't be spread over a bunch of projects, work them out to a decision point, and then pick and choose the best. Apple can't afford to ascan something, because there probably isn't a backup.

For those that feel very strongly about something Apple related, good or bad, we were reminded that Apple can be reached by mail. Those that take the time to write should get a response from a real, live Cupertinoite. Use the address above, but drop the mail stop and change the department name to suit your missive.

Deserved thanks were expressed by the MacGroup to our speakers as the exchange was cut off at about 8:30 to cover other business. The usual round of introductions was skipped as the hour was getting late.

Mike Carlson reminded those present that

the next meeting would be December 17 at the same Southdale library location. The program will be short reviews of as many Mac data base programs as possible. Volunteers immediately came forth for DB Master, FileVision and Overview. Other reviewers should coordinate with Mike so we get as many peeks as possible. There must be 20 products available by now.

Some quick announcements were made in the flurry prior to adjournment.

- There is a PC board development system available for Mac that can get you a sample board returned for \$10.
- Buchler is coordinating a Mac disk buy which should be history by the time you get this. See **Rumors**, below.
- Ramsey Smith is starting up a U of M SIG for Mac, looking for the more advanced user, familiar with Fortran, Pascal, and inner workings.

Once again, MacSIG scores with a dynamite meeting for this very active and growing segment. If you want to see something particular, make your wishes known to Mike Carlson (866-3441). Every effort will be made to offer a balanced program with something of interest to most everyone, regardless of your level of MacKnowledge. It may not be long before the size and scope of the MacSIG can offer subgroups on its own, as this pace of growth continues.

Once again, enjoy your Mac and pass the word along.

GOTO 23

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MacPlace continued from page 22

- Look for other integrated software products, too. Microsoft has something in the works, and Apple/Haba (not sure who will market it yet) is readying a Mac version of AppleWorks that will run on 128K... Hooray for the little guys! This is a "soon" product, too!
- One other major piece to the bigtime puzzle is the subject of office communications, LAN, shared peripherals or what ever tag you wish to hang on it...try "AppleTalk" as the current buzzword instead of "Bus", "Line" or whatever. This phantom product has had its specs downgraded in some eyes. The focus now is to let Macs in a department zone share major peripherals like a laser printer or mass storage and offer a "gateway" to the EtherNet (sic). Since Apple is coming from behind in this area, the approach does make some sense... Apple would be hard pressed to do anything "right" tied hard to any current system. This should also cut the lag time considerably, and reportably will let you latch another Mac into the system for a \$50 pittance (once you've bought the big piece).
- Also mentioned as available or very close, were: MacRamdisk (512K Mac, from Assimilation Process), MacWrite revised (upgrades from dealers, maybe December), Alice (game from Apple).
- The long rumored color Mac appears to be just that...rumored. Yes, such a creature does exist, but cost and size mean an unrealistic product in the current timeframe. In an informal poll, the MacGroup leaned to the software alternative of being able to assign B/W patterns on the screen to colors that can be output to a printer or similar device. Most did not want to give up resolution (in fact, some asked for even more pixels) or part with the family jewels to see color on the screen.
- Somewhere in the future, the Mac should get double sided drives (800K). Sony is currently getting the blame for the hold-up. The outboard drive will probably be first, but there appears to be no significant reason that prevents the inboard from growing, too.
- Efficient work with a hard drive requires some rework to the Finder. Apple appears to know what, but just is not popping that up as a priority. Would you suppose that they are working on a hard drive a la Apple before making the rev? (See how easy it is? I just started my own rumor!)
- For those of you still thinking about a Mac, has Apple got a deal for you! They are running a "Test Drive" promo where you can take one home for a day and try it out. Apple has a package of "Guided

Tour" software that goes with it... but check around. Sounds like some of the dealers were playing with a short deck on this part of the deal... there may be some differences from one garage to another.

- Mac will make further inroads in the education area, but don't hold your breath. The Minnesota base of // series in educational facilities alone is 14,000 machines. It will take some time for Mac to filter into the lower grades against that much inertia. However, the Apple college program is pretty heavily oriented to Mac and may be a different story.

Lest you think that we pulled our punches on the Apple reps, we did register a few concerns that hopefully will wend their way back to corporate. Price was a concern on two fronts. Those initial pioneers that paid "full bore" to make the 100 day dream come true, get a bit steamed when they see current prices about a third lower than their receipt shows. All are aware of the price trend of hardware, but gee, the Mac hasn't even had its first birthday yet!

GOTO 24

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MacPlace continued from page 23

Late Newsflash (from your Editor):

The January meeting will be at the Edina Library, not Southdale. See Announcements. The February MacSIG meeting topic will probably be a review of 3 more database programs: PFS, Disk Cataloger (on the DOM) and Helix. We hope to make March a **Swap Meet** - public domain only, please!

New MacStuff and Rumors
by Dan Buchler

- **Bulk disk purchases:** The situation at the moment is as follows: Club members may buy Maxell MF1-DD disks from Dan Patch Systems at \$33 (including tax), or Apple Diskettes at \$36.04 (including tax) from Hagen Office Systems. Both of these dealers have kindly offered this "deal" as a service to the club. Other dealers who wish to participate may call me. There is a minimum quantity of 100 disks (10 boxes) for the club on the Apple disks, but no minimum on Maxell disks. I am willing to act as an intermediary on either the Apple or the Maxell diskettes. If you want Maxell diskettes, send a check to me, made out to Dan Patch Systems, covering \$33 per box. If you want Apple diskettes, call

first, unless your order is for more than 10 boxes. The checks will go straight to the dealer. So, if there are any errors on the check, you won't get your disks. The disks will be delivered at the meeting. Checks must be in my hands at least one week in front of meeting. Since we are not allowed to sell at the Hennepin County Library, **the money must be mailed in advance.**

- There is a good **new magazine** which is attempting to replace St Mac. In fact, they will give you an extra 4 issues, if you send them your St Mac mailing label. The **MACazine** is available for \$18 through January 1, 1985 (after which it is \$24). However, the publisher, Iconcepts, will extend the special charter rate of \$18 through January, if you mention you are a member of Mini'app'les. Write to:
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- With respect to "Inside Macintosh", you will all be happy to know that, according to the December edition of MACazine (See above), this information

GOTO 25



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MacPlace concluded from page 24

will be published in a book called "Within Mac" by Thom Hogan through Robert J. Brady Company, a subsidiary of Prentice Hall. Anyone interested in a bulk purchase of this book?

- Regarding "C" languages, again, MACazine comes to the rescue. Their Jan. 1985, edition, is supposed to feature 6 different "C" compilers. - Ed.

Talking about magazines, you all probably know by now that A+ has taken over old subscribers of **Softalk**. It is also worthy of note that A+ runs a significant section on the Mac. The coverage of Mac, including ads, was as follows:

Issue Month	Total Pages	Mac Pages	% Mac
November	223	55	25%
December	254	66	26%
January	207	49	24%

You may notice how consistant that Mac percentage is for each month! January contains a good review of "Word" and an article on porting Basic programs from the Apple][or //e to the Mac. A tip in the November edition tells one to type Command Key A followed by Command Key E to quckly Eject disks from both drives!

One current problem associated with the plethora of Mac magazines, is a lot of repetition. For example, I have seen both Pascal and Forth language reviews in at least 3 different magazines.

Still talking about magazines, I also read "Apple User", which is a British Publication. They reviewed two books: "Understanding the Macintosh" by Rick Dayton, Prentice/Hall, and "Presenting the Macintosh" by Miller & Myers, Dilithium Press. They suggest that the Rick Dayton book is not worth getting and that the Dilithium book might be useful to someone contemplating buying a Mac, but little use afterwards.

An old favorite, "Dr Dobb's Journal", in the January, 1985 edition, details how to upgrade from 128K to 512K, for about \$300 in parts. Caution: "Club MAC" advises against anyone doing this as the Mac's mother board is of the multi-layer variety, and it is very difficult to

solder to this type of board.

Several club members have recently bought 1200 baud modems. I acquired a Prometheus with PROCOM M software. The software is still in a Beta test stage, but you can download the latest version from the Prometheus bulletin board in California and the company provides excellent support. I'd like to run a modem potpourri in the newsletter soon, so I am soliciting input fro you Mac-Modem-ers.

Latest date for MacDraw is January 15th!

New MacWrite is supposedly shipping, but we havn't talked to anyone who has gotten a released copy! Rumor is that the Hayden Speller won't work with the new 'Write either. Prerelease has to convert file formats from old to new, and won't work in reverse. Final version supposedly has that problem licked.

This article is my first attempt at printing with the Assimilation company's "Mac Daisy Wheel Connection" software using the Apple LQP. The product is much more solid than the ProPrint, reported on last month. However, it too has some defects. Will report on these in due course. By the way, "Word" supports daisy wheel printers in it's print menu!



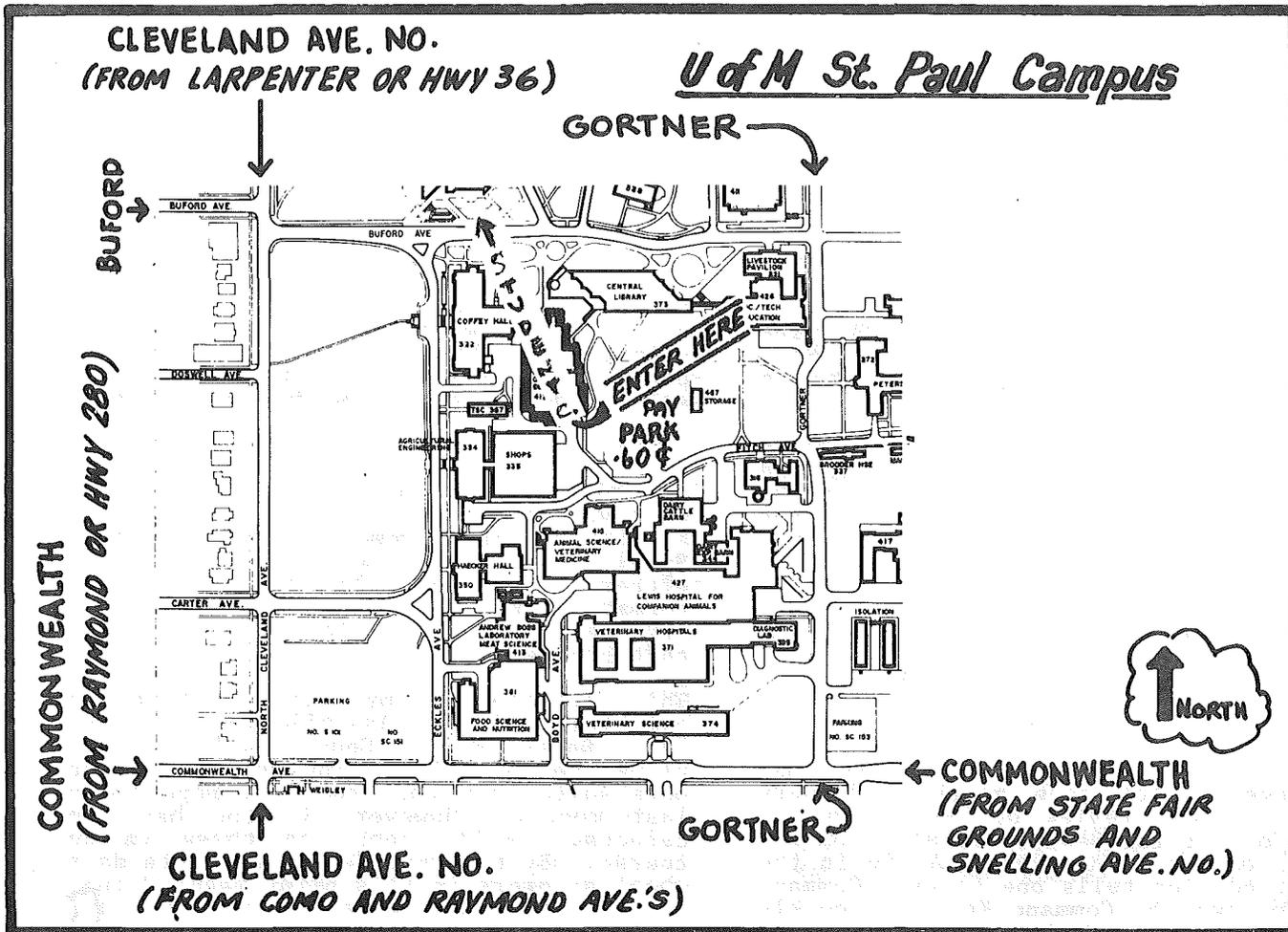
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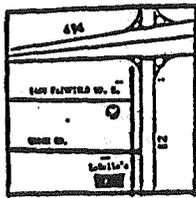


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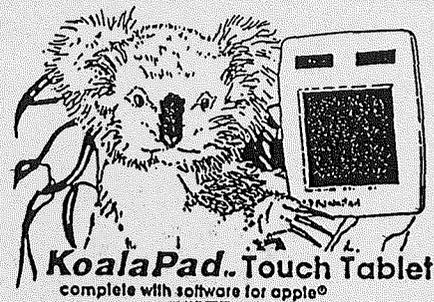
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