mini'app'les

apple computer user group newsletter

VOLUME VI No 3 MARCH 1983

CALENDAR WHICH	CALENDAR WHEN	CALENDAR WHERE	CALENDAR WHAT
Pascal Note 1	Wed Mar 2 7:30pm	Minnesota Federal 9th Ave S Hopkins	Regular **Pascal** Special Interest Group Meeting.
Dakota County Branch	Tue Mar 8 7pm-10pm	St. John Neumann Chch Pilot Knob Rd, Eagan	Demo of Plato for Apple Note 7
Board Meeting Note 5.	Wed Mar 9 7:30 pm	First Devine Science Ch. 4401 Upton South	General club business. Meeting is open to all members.
Business Note 10	Thu Mar 10 7.00pm	Minnesota Sch of Bus's 11 S 5th, Mpls	Storage Devices
St. Paul Branch - Note 3	Tue Mar 15 7pm-10pm	Minnesota Federal White Bear Lk Shp Ctr	**Woody Woodward** on The Graphics Magician and other Penquin sftw.
REGULAR MINI'APP'LES Note 2 Map inside	**WEDNESDAY Mar 16th** Prgm-7:00pm SIGs-8:00pm+	UNIVERSITY MINNESOTA ST. PAUL Room B45 Bldg 412 Near State Fair	**Dr John Tilleli** on using the Apple to monitor intensive care patients in a hospital.
Investment Note 4	Thu Mar 17 7.00pm	Minnesota Sch of Bus's 11 S 5th, Mpls	Compu Trac
VisiCalc Note 9	Tue Mar 22 7.00pm	PBS 4306 Upton Ave S.	
Minnetonka Branch	Wed Mar 23 7pm-10pm	Minnetonka High Sch Cafeteria	Apple IIE Note 8
St. Paul Branch - Note 3	Tue Apr 5 7pm-10pm	Minnesota Federal White Bear Lk Shp Ctr	**Earl Keyser** on Apple Pilot
Pascal Note 1	Wed Apr 6 7:30pm	Minnesota Federal 9th Ave S Hopkins	Regular **Pascal** Special Interest Group Meeting.
Dakota County Branch	Tue Apr 12 7pm-10pm	St. John Neumann Chch Pilot Knob Rd, Eagan	Pete on 3M Diskettes. Note 7
Business Note 10	Thu Apr 14 7:00pm	Minnesota Sch of Bus's 11 S. 5th St., Mpls	Visifile is main topic.
REGULAR MINI'APP'LES Note 2 Map Inside	**WEDNESDAY Apr 20th** Prgm-7:00pm SIGs-8:00pm+	PENN COMMUNITY CENTER 84th & Penn Bloomington	Annual election of officers and review of club Bylaws.
Investment Note 4	Thu Apr 21 7.00pm	Minnesota Sch of Bus's 11 S 5th, Mpls	Market Maverick and DJ Market Analyzer
VisiCalc Note 9	Tue Apr 25 7.00pm	PBS 4306 Upton Ave S.	

Notes:

(See page 2 for telephone numbers.)

1. John Schoeppner
2. Ron Androff
3. Pete Halden
4. Eric Holterman
5. Ron Androff
6. Dan Buchler
7. Bob Pfaff
8. Martin Thames
9. Mike Carlson
10. Subir Chatterjee
11. Bill DeCoursey

MINI'APP'LES

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

MINI'APP'LES OFFICERS

President	Ron Androff 1725 Crest Ridge Lane, Eagan, Minnesota, 55122	452-5230
Past President	Stephen K.Johnson 6053 Wentworth Ave S. Minneapolis, Minnesota, 55419	869-3447
Vice President	Ron Androff (Acting)	452-5230
Treasurer	John L. Hansen 38 Birnamwood Drive, Burnsville, Minnesota, 55337	890-3769
Secretary and Newsletter Mailer	Hugh Kurtzman 11622 Live Oak Dr., Minnetonka, Minnesota, 55343	544-7303

BOARD MEMBERS

Membership Co-ordinator	Ann Bell 8325 39th Avenue N. New Hope, Minnesota, 55427	544-4505
Newsletter Editor	Daniel B.Buchler 13516 Grand Avenue S. Burnsville, Minnesota, 55337	890-5051
Software Distr. - Mail and Software Sales	Terry Schoeppner Box 241 Inver Grove Heights Mn., 55075	455-8613
Bibliographer	Chuck Boody	933-5290
Blank Disk Bulk Purchases Co'tor	Peter Gilles	475-3916
Education Co'tor	Chuck Thiesfeld	831-0009
MECC Librarian	Dave Nordvall	724-9174 (after 5pm)
Program Editor	Al Peterman	721-3295
Publicity Co'tor	A. Michael Young	884-2841
Spcl Int. - Apple ///	Keith Madonna	474-3876
Spcl Int. - Business	Subir Chatterjee	330-7347
Spcl Int. - Education	Janelle Norris	920-1430
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Spcl Int. - Pascal	John Schoeppner	455-8613
Spcl Int. - Visicalc	Mike Carlson	929-4120
Spcl Int. - Z80/CPM & Meeting Hdw Support	Rick Gates	735-0373
Assistant NL Editor	Jo Hornung	922-7665
Contributing Editors	Arsen Darnay	933-0399
	Rita Wetzel	474-5725
Board members at large:	Ken Slingsby	507/263-3715
	Larry Larson	788-0728
	Marilyn Thomas	872-7669
	Chase Allen	432-6245
Branch Co-ordinators:		
Dakota County	Bob Pfaff	452-2541
Minnetonka	Martin Thames	934-3517
St.Paul	Pete Halden	770-6624
Technical Advisers:	Dave Laden	489-8321
	Jim White	636-4865

INFORMATION

This is the Newsletter of Mini'app'les, the Minnesota Apple Computer Users' Group, Inc., a 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 any officer. Technical questions should be directed to one of the Technical Advisers listed here.

Membership
Applications for membership should be directed to the Membership Co-ordinator. $12 buys membership for one year. Members receive a subscription to this newsletter and all club benefits.

DOMs
The 3 most recent DOMs (Disk of the Month) are available at meetings for $5/disk or any DOM may be ordered by mail for $7.50/disk. Contact Software Sales coord'r.

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:
19S 1st St., B1704
Minneapolis, MN, 55401
612-332-8460

Circulation this issue: 1800

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Note Most of this newsletter was prepared on an Apple LQP (Qume Sprint 11) printer using an Elite (12 pitch) daisy wheel but with the pitch reset to 9/120ths inch. Line feed increment is set to 7/48". Pie Writer was used as the word processor outputting text in incremental mode.

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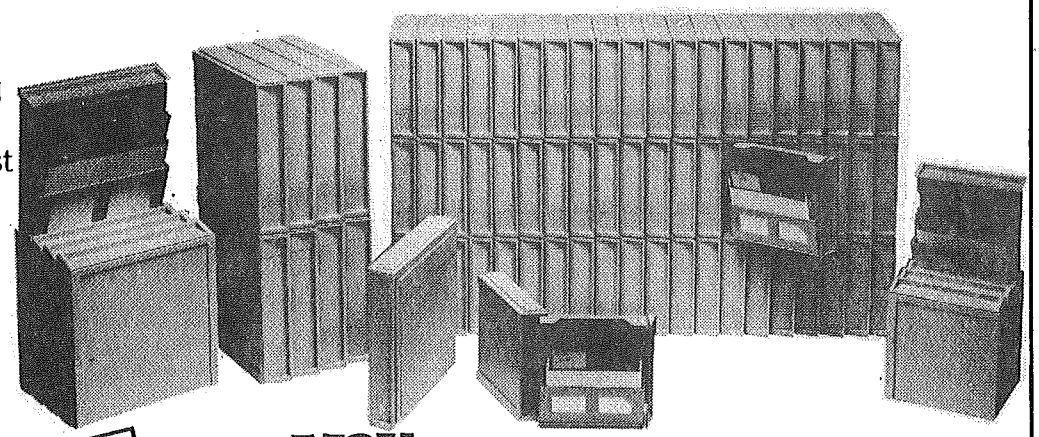

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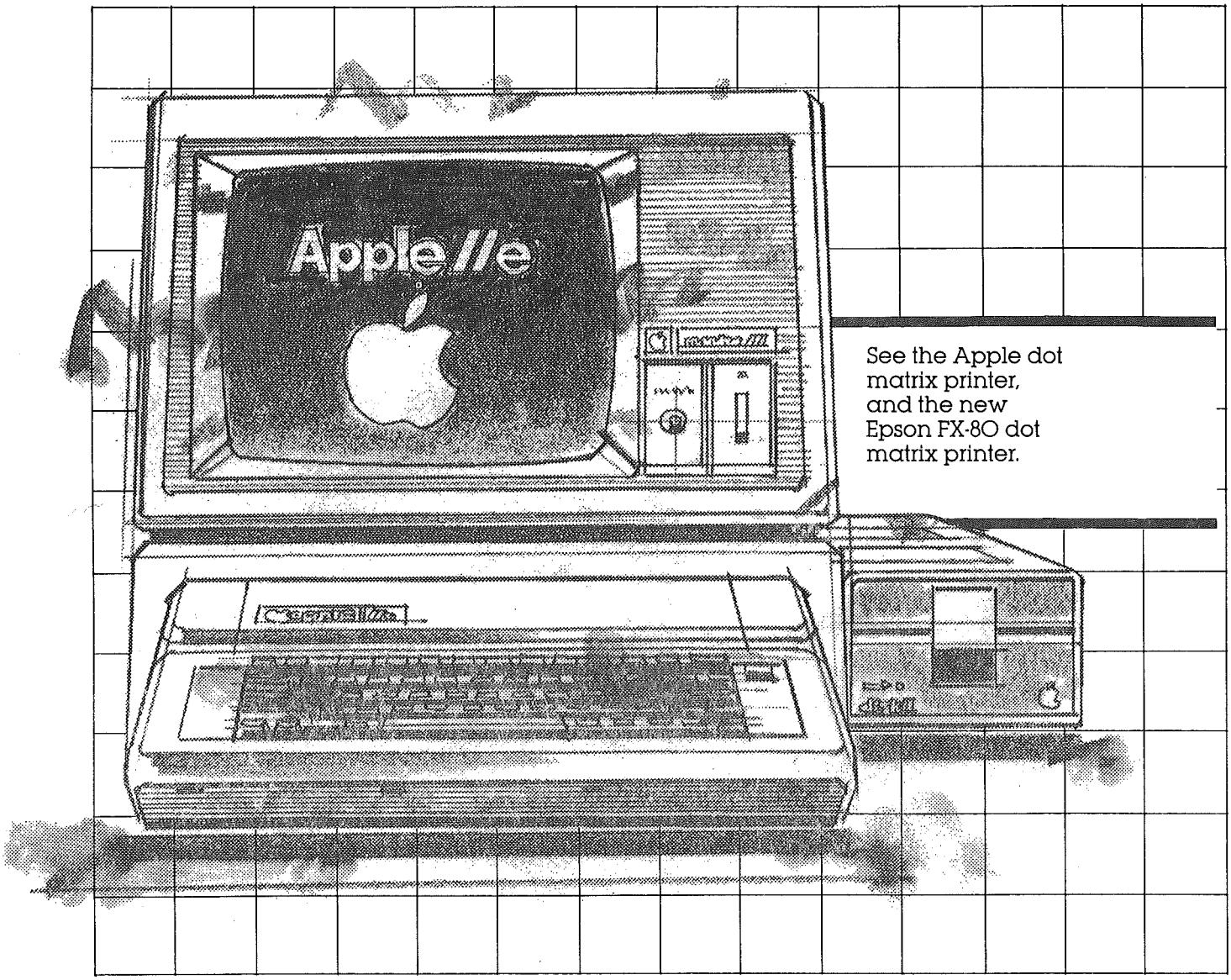

See the Apple dot matrix printer, and the new Epson FX-80 dot matrix printer.

Dayton's Electronics

Minneapolis 375-2008, St. Paul 292-5041, Ridgedale 375-5554, Burnsville 435-3466, Southdale 375-4178, Rosedale 375-6373.

DAYTON'S

ANNOUNCEMENTS

BUSINESS SIG
By Subir Chatterjee

The Business SIG met on Thursday, Feb 10, 1983 when Income Tax packages were reviewed. Our thanks to ComputerLand for making availible a copy of HowartdSoft's Tax Preparer for the meeting.

Alan Peterman demonstrated the tax program on DOM 22(!) - that is right, a pre-release review - written by Sam Fine. This program reflects 1982 Tax tables, and will also evaluate Income Averaging (Schedule G). The program is designed for those who do not have Business Schedules to complete: a key feature of it is that it evaluates the benefit of Income Averaging.

Owing to Ron Androff's absence, Subir Chatterjee demonstrated Tax Preparer, by HowardSoft. Dan Buchler reviewed the package in last month's newsletter: my observations were similar to his except that I concluded that the program does what it sets out to do, however, it is slow. (Dan's main gripe related to HowardSoft's update pricing policy - Ed.) At the same time, I remind myself of the fact that I spent 15 hours the past month completing my 1982 taxes. The Tax Preparer would have reduced that time considerably! In addition, for those of us who do not have a perfect tax record keeping system, the Tax Preparer also provides a way for maintaining a database of expenses by tax category. The data can be transferred to the next years' tax program. I estimate this would reduce tax preparation time to about 5 hours each year!! In short, the program is slow, but only in a relative sense. One unfortunate aspect about the documentation was that the key instructions for using the program efficiently was in an appendix, and I never got to it!! Moral, read the manual.

The next month's meeting is on March 10th. at the Minnesota School of Business. The topic is "Storage Systems" - we will be reviewing some alternatives to the ubiquitious Apple floppy drive. We plan to include some larger capacity storage devices (> 1 Meg), and if possible, to include a hard disk.

The following month's meeting will be on April 14th. and the topic will be 'Visifile'.

As an experiment, the Business SIG will be demonstrating DOM's from the next meeting - if there is sufficient demand, we will also make DOM's availible for sale.

THANK YOU

by Dan Buchler

We have had two excellent presentations at the last two main club meetings. **Mike Carlson** of PBS in January was fantastic in his presentation of the Apple //e. Besides bringing two of the new machines along on this product announcement day, he provided alot of insight into the differences between the //e and the II +. A channel 11 TV crew was also there!

And in February, **Mark DeVries** of Bi-Comm systems gave a very interesting presentation on that company's bi-directional power line controller. The product consists of an interface board that plugs into your Apple. It will communicate with up to 256 BSR/Leviton remote control devices. These are the same remotely controlled light/appliance switches which you can buy in Sears, Knox lumber and other places for $13 to $20 each. The board also contains a battery backed-up clock compatible with the Mountain Computer clock. What is really unique, is that one can also receive from appropriate devices with the board. Leviton make a Burglar Alarm device which senses switch closures or openings and transmits the signal over the house power line wiring.

Bi-Comm provides some excellent software to make all these things work together and allows you to run other programs while the Apple is doing all this controlling. What this all means is that you can use your Apple as a central control system without having to wire the house. Though not cheap at $295, it is a quality product. Bi-Comm will give a 25% discount for a bulk purchase of 25 cards. Anyone interested in organizing such an operation?

Computer Insurance

by Dan Buchler

International Apple Corps is passing on information to its members about:

Personal Computer Insurance (PCI)
PO Box 4297
Santa Clara, CA 95054-0297

PCI offers a basic package for $50 per year with a $7500 limit which covers business use, full replacement cost and insurance against most hazards. Write PCI or pick up a flyer at a meeting.

GOTO 7

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Announcements Concluded from page 5

DOMS by MAIL

New Service for Mini'app'les members.

by Chuck Thiesfeld

Now members can order DOM's 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. Return postage. (same as sending postage)
4. Self addressed return label.
5. $1.00 copying fee.
6. A note indicating which DOM's 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 21 are currently available.

INVESTMENT SIG

by Eric Holterman

At our January meeting, Tim Kochuba of Portware, Inc., demonstrated three of the five modules that together make up the set of portfolio management programs called Portware. Each module can operate as a standalone program or with one or more of the other modules. Portrac, Portrate and Portrend were demonstrated and Portcom and Portaids were discussed.

Portrac provides a portfolio accounting system. While an unlimited number of portfolios are allowed, each portfolio is limited to 50 open positions. Tim indicated that the number of open positions may be increased in the future. There is no limit on the number of closed positions other than disk space, which should be ample. Securities included are: common and preferred stocks, bonds, options, rights, warrants, T-bills, mutual funds, unit trusts and cash balances. Long and short positions are both accomodated. Portrate provides information about the portfolio with respect to quality, yield, cash flow, risk, diversification and liquidity. Portrend shows how the portfolio has performed. Portcom provides for quotes retriveval and the updating of portfolios from Dow Jones. It includes a software clock for unattended operation. Portaids provides for an income record for investor records and the IRS reporting.

A new feature allowing access to portfolio files by VisiCalc is now being worked on and is expected to be made available on April 15, 1983. A new module called MP-Cross (Multiple portfolio cross reference of selected securities) has just been announced and does require Portrac. The price on the complete package of programs is a bit over $500, with the individual modules ranging from $30 to $150. A Trial Pak which includes Portrac-Rate-Trend and Com is available at $19.95 and allows operation of these four modules twelve times so that you can examine the program carefully before buying.

The program is copy protected, but replacement program disks are provided at no charge provided the originals were not damaged by attempts at copying.

The presentation was very well received and we appreciate Tim Kochuba's time. I believe some of our members have purchased the Trail Pak as a result of the meeting to study the programs further. Portware is based in the Twin Cities area and can be reached at 933-3510.

Our March 17 meeting is scheduled at 7:00 PM at the Minnesota School of Business at 11 So. 5th St. in downtown Minneapolis. The subject will be Compu Trac.

EDUCATION SIG

The Education SIG will meet after the main club meeting's guest speaker has concluded.

Call Jane Chatterjee at 888-9447 for more information.

DOOR PRIZES

Nifty Info have been kind enough to donate several copies of the **Word Machine** word processor to our club. 3 copies will be given away as door prizes at the March club meeting. There will also be one copy given away at each of the branches in March. These are Dakota County, Minnetonka and St. Paul.

DOM #22

March Disk of the Month (#22)

by Alan Peterman

Once again a few of our members have gotten publication of their creations (as well as a free DOM) by giving us some nice programs. There are also a large number of programs from the International Apple Corps.

Just in time for taxes we have a current version of Sam Fine's tax program that will calculate federal taxes and form G. Also of general use is a program to calculate loan amortization schedules, and a very nice calendar printer.

Recreational users will find a nice hi-res lunar lander game, a gambling game and a car race simulator. There is also a Morse code program and a card game. Those of you who like to play with BASIC will find a cute little puzzle in the LIST THIS FILE BEFORE IT'S RUN program.

Programmers should have plenty to work with on this disk. There are some utility routines from the IAC and Beagle Brothers to create nice screen effects. Also there are about 15 SOUND files to add strange (and wonderous) noises to your programs. There is a nice screen menu program to aid in selecting options from a list and a PRETTYPRINT system for program listings. Also, the machine language programmers will find a utility to help them in their arcane avocation.

I suspect that the April DOM may well be the BUSINESS DOM that has been threatened for so long. It will probably be the first of what may prove to be a new format, namely disks that are aimed at a specific need. Up to now the DOM's have tried to be general, i.e. with something for everone on each disk. If the members do not mind, or do not respond negatively, the disks may start to be more specialized. Please feel free to communicate your feelings on the format for the DOM's to me, or any of the officers. Anyhow, here's the breakdown on the programs/systems on DOM #22:

MINI'APP'LES

A new hello program by Steve George. It has some information about the club, and will display the new DOM logo.

DOM DISPLAYER

A program to display the DOM logo. By Steve George.

CALENDAR MODIFIED

A program to print monthly or yearly calendars. It will also calculate the number of days between two dates, as well as the day of the week for any date. This program was donated by Ken Slingsby and modified for the PROWRITER by Al Peterman. For information on exactly how to use it there is a program called 'MX-80 CALENDARS/DATES INFO' to help the user.

TAX.82/SCHED'G'**

The latest and most powerful form 'G' preparing program from Sam Fine. It has the correct data for 1982 tax forms. It uses the 'READAT' routine for the tax table data, and has a screen dump for the MX-80.

GAMBLER

A gambling (what else) program that was keyed in from 'SOFTSIDE' magazine by Ron Newquist. The program simulates many different games of chance and, in my experience, will teach you how to lose!

GRAPHING FUNCTIONS IN HI-RES

A program from the International Apple Corps that will graph functions on the hi-res page with options on scale size. It allows inputting of various functions.

TWIRLING CURSOR

A little routine to create a cursor that appears to twirl. It is similar to the cursor that the Hayes Terminal Package uses. From the IAC and Beagle Brothers.

LIST THIS FILE BEFORE IT'S RUN

A cute little exercise in strangeness. List this file then run it - or vice versa. I have not figured out exactly what is happening, and maybe when someone does they can give us a hint on how it is done. From the IAC.

TRICK FILE NAME UTILITY

A way to name a file so it cannot be easily changed. We use a similar scheme in the header files for the DOM. The trick is starting the name with a bunch of Control H to backspace some of the info out of the Catalog window. From the IAC.

HI-RES SOLAR SYSTEM SIMULATOR

Astronomy buffs may like this program as it will plot the positions of the planets in actual positions, and can plot their motions for a period of time. From the IAC.

GOTO 9

DOM #22 Concluded from page 8

FILE ARRANGER UTILITY

A little routine to rearrange the order of files on a disk. DO NOT run this on this disk or any disk of importance without reading the instructions. From Beagle Brothers and the IAC.

LOAN AMORTIZATION TABLE

A program to print out loan amortization schedules. From the IAC.

255 HI-RES COLORS DEMO

A neat demo of all the colors that can be put onto a screen. Use a color display to see all the shades that this will create by mixing the primary colors. From the IAC and Beagle Brothers.

PAUSE (WORKING) ROUTINE

For those of you who want a pause that refreshes - this will give a cute 'time out' in a program. From Beagle Bros. and the IAC.

BILLBOARD DISPLAY DEMO

A scrolling billboard type display routine from Beagle Bros. and the IAC.

SOUND1(CALL2921)

The first of many SOUND files that can be loaded and then 'CALL'ed up or 'BRUN' By themselves. The sounds are not just simple tones but rather complex creations that will definately draw attention to themselves. These may be quite good for imbedding into a program to call attention to some process. From the IAC.

MENU MAGIC

A routine to create nice SCREEN MENUS that can select options by the arrow keys and the 'RETURN' key. From the IAC.

MOONLANDING

A nice hi-res moon landing game. It uses the paddles (or joystick) to control a lunar lander coming in for a landing. The animation is quite good. From the IAC.

ERROR HANDLER

A routine to add to your programs that will add error handling routines. It is well done and can be 'EXEC'ed into a program under construction. From the IAC.

ADDRESS SEARCH SYSTEM

This system is designed to help machine language programmers find bits of code in long routines. It searches a range of adresses for certain hex codes. There is an INSTRUCTION PROGRAM to give specific details on the use of the machine language program, the SOURCE file, a relocatible object file, and a standard binary object file. From the IAC.

DISK FREE SPACE

A nice program to show how much free space is on a dos 3.3 disk. It also gives a graphic display of which sectors are in use. From the IAC.

MORSE CODE

A program to test your ability to receive Morse code. It can also be used to help you practice receiving the code. It has variable speed and length of messages. From the IAC.

PRETTYPRINT

A nice - but slow - program to print APPLESOFT program listings with indents for subroutines and loops. There is 'TEXT' file called APPRINT that will create a LISTING file that PRETTYPRINT works from. Run the 'PRETTYPRINT' program to get the instructions on using the system. From the IAC.

SHUFFLE

A card game from the IAC in which the object is to arrange 4 rows of cards into ascending order in the least possible moves.

SPACE CANYON

Another game from the IAC that uses a paddle to manuever a car in a twisty channel. The car is a little hard to turn accurately - but one learns how soon. From the IAC.

We solve the problems of the problem-solvers.

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The APPLE //e IS HERE

by Tom Edwards

So, you've been waiting to see what Apple has in store for the next generation of Apples! If you are really the affectionado that you think you are, then you have already been to your nearby Apple dealer to see for yourself...they were made public on January 19. And of course the club was able to get a first look at the January 19 general meeting. (A very excellent presentation by Mike Carlson of PBS - Ed.)

To help those of you that couldn't get to the meeting, or just haven't made it to a store for a personal peek, here's a summary of some of the main features of the Apple //e.

- This is a new model (e = enhanced) of the Apple][+. Although the Apple //e will replace the Apple][+ as Apple's mainline personal computer as of January 19, the Apple][+ will be actively supported by Apple until 1990.

- The Apple //e is designed for maximum compatibility with the hardware and software that already exists for the Apple][+. Many of the major vendors have had the Apple //e for as long as a year, to help insure this compatibility. Most things work on either machine equally well. Apple had existing software tested independently, and they report that 80% needs no changes to run and an additional 15% needs only some changes in instruction to be fully useable.

- The Apple //e has 64K as it comes right out of the box. There is no "slot #0", so things that used that slot are part of the FEW things that won't transport from the Apple][+.

- The CPU is the tried and true 6502, in an "A" revision. Although many Apple buffs might be sorely disappointed in not seeing a 68000 in this machine, it was an almost automatic decision in maintaining one of the primary design precepts: compatibility with the huge base of software and hardware of the Apple][+. It appears that machine language entry points have been religiously maintained to that of the][+. Those of you wishing to make the transition should find it easy.

- The Apple //e benefits from many "state of the art" innovations. The Apple][+ chip count of 128 is now only 31 for the Apple //e. This uses only a fraction of the power of the Apple][+ and creates much less heat for longer chip life. Outwardly there is little apparent difference between the two, but under the hood...!!!, wow.

- Speaking of hood...the new one can be secured in place (schools take note), and has some tabs for a better grip when you do need to get inside.

- The keyboard is new. Each key can be individually replaced, and there is a full 128 ASCII character set (four arrows, too!). This gives upper/lowercase for word processing and communication enhancements. There are also open-Apple/solid-Apple keys that are programmable. They tie into the buttons on game paddles, no less. A reboot can now be done directly from the keyboard, even with "protected" software (long live the power switch!). All keys are now auto-repeat.

- The keyboard cable attachment is now where you can get at it, and offers the possibility of adding a detached keyboard (IBM beware) or other devices.

- There is a major change in the bottom and back panel. The concept here is to let you plug in cards (seven slots) with short cables ending at the back panel. You then plug your peripherals in without the need to open the case up. There is also much less radio interference with this scheme, and you should hear less about your neighbors watching you play Taxman on THEIR TV set.

- The operating system is DOS 3.3 (sniff, sniff). There have been some changes to the system master disk, one real nice thing being the "fast load" of integer into the "internal Language Card". You get two disks now, one with the utilities and the other with the program examples.

- There is a new "auxilary slot" that holds some fascinating possibilities for things to come. This slot will accept a new 80 column card from Apple. A second version of this card can add 64K of RAM for those that need more elbow room. New versions of Apple Writer, Quick File and other programs will take advantage of this RAM too. This slot is a logical slot #3, so all of you Pascalites take note. More importantly, it is a 60 pin connector, and as such, gets more stuff trucked up to it. Some of the future lies with what can be done here. There is the opportunity for interactive video, RGB color, and much more sophisticated graphics using the signals present here. Dealers will even have a diagnostic card that plugs in to check the system out.

GOTO 12

Apple //e Concluded from page 11

- The Apple //e is anticipated to have a 5 to 10 year "mean time between failure" mark. This is the result of the basic electronic design changes that are not readily apparent to the untrained eye. There is even a self-diagnostic program that you can run directly from the keyboard, just to let you know if there is any trouble at hand.

- Price? An Apple //e "bundle" is very comparable in price to that of the Apple][+. With all of the new features, the value certainly looks to be even better than that of the Apple][+.

That's a summary of my first glimpse of the Apple //e. There's more, too, such as new manuals that can be understood by Joe Average (although the Reference Manual for you hackers will not be ready for a while yet). There will be a lot more information available by the time that you read this. And you can expect to have much more in-depth reviews of the Apple //e as the real Apple buffs worm their way into the core of this new machine. I like what I've seen, and I think that you will, too. It seems to say that Apple is here to stay, but not content to stay put. Stop in at your nearby Apple dealer and see the new Apple

EAMON FIX

Fix a bug in EAMON on DOM #20

By John Schoeppner

The October product catalog of the Apple Avocation Alliance, Cheyenne, Wyoming, has an article correcting a bug they found in the Eamon adventure. They called the bug a minor error that effects the Wizard's spells.

The correction must be made to two of the programs on DOM #20. The programs are:

THE BEGINNERS CAVE
and
BIGINNERS CAVE--48K.

Type NEW and load one of the programs. Then type **LIST 7520.** The line should read like this:
7520 RL = RND (100 * RND (1)...etc.
Change it to read:
7520 RL = INT (100 * RND (1)...etc.
Save the program and correct the other one the same way.

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PRODUCT OVERVIEW

Word Machine simulates two very long sheets of paper on your monitor screen. Each sheet, or page as its called, consists of 250 (40 column wide) lines. The screen displays 24 lines at a time. Any part of either page can be rapidly accessed by swapping pages, jumping to the top, middle or bottom of a page, or by fast scrolling in either direction. The cursor is easily moved up, down, left, right, to top or bottom of screen, to prior or next word, to start of next or end of last line. The editor allows you to change, insert or delete individual characters or whole lines. The editor also allows you to move blocks of text, as well as find any word in your text and then replace, edit, or delete it. Printed lines can be from 40 to 132 columns wide. There are far to many more features to mention here, but if you have questions, give us a call.

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TURNING the PAGES

with DAVID E. LADEN

Curious about the new Apple Computers? Maybe some of these articles will help satisfy that itch!

APPLE ORCHARD — FEBRUARY 1983

The New Apple //e Inside and Out — a first look by Morgan P. Caffrey. Pages 12-28.

TANSTAAFL or, Compatibility and the //e by Joe Budge and Penny Gallant. Pages 30-33.

The Back of the //e Bus (The Auxiliary Connector) by Frank Curtin. Pages 50-56.

BYTE — FEBRUARY 1983

Product Description: The Lisa Computer System by Gregg Williams. Pages 33-50.

Hardware Review: Apple's Enhanced Computer, the Apple IIe by Robin Moore. Pages 68-86.

BYTE Interview: An Interview with Wayne Rosing, Bruce Daniels, and Larry Tesler by Chris Morgan, Gregg Williams, and Phil Lemmons. Pages 90-114. These three people were "most responsible for its (Lisa's) final form."

IN CIDER — MARCH 1983

Review: Apple IIe ... Worth the Wait? by Hartley G. Lesser. Pages 58-69.

PERSONAL COMPUTING — FEBRUARY 1983

A New Generation Arrives by Jeffrey Rothfeder. Pages 48-53.

The Birth Of LISA by Michael Rogers. Pages 88-94.

Apple's New Computers: A Major Breakthrough. Pages 181-182.

POPULAR COMPUTING — MARCH 1983

New from Apple: LISA and the IIe. This five part look at the new computers from Apple begins on page 82.

Part One: A First Look At LISA by George Stewart. Pages 84-93 and 174-184.

Part Two: LISA's Design by Rachael Wrege. Pages 96-101 and 184-186.

Part Three: Meet The Mouse by Phil Lopiccola. Pages 102-105.

Part Four: Apple IIe by John Edwards. Pages 108-110 and 187-190.

Part Five: Core of a New Apple by Phil Lopiccola. Pages 114-117.

SOFTALK — FEBRUARY 1983

Apple //e The Difference. Pages 118-127 and 142.

Lisa's Debut. Page 143.

TWIN CITIES COMPUTER USER FEBRUARY 1983

Apple //e Unveiled. Pages 1-2.

Well, I think that should satisfy your appetite for the time being. I'm sure that this is only the beginning of articles about Apple's new computers.

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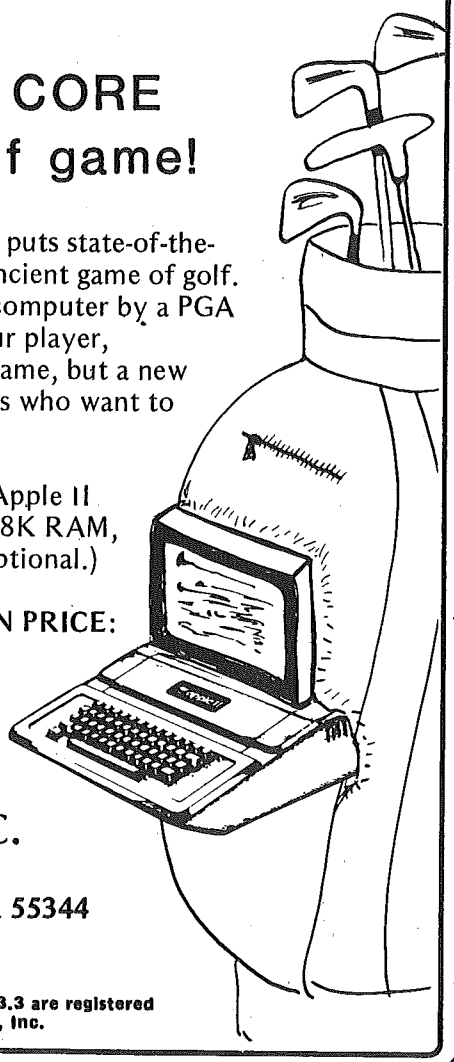

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The DATA REPORTER

by
Thomas E. Militello, M.D.
6932 Crest Road
Rancho Palos Verdes, California, 90274
(213) 541-2766

Part 1: Last issue An Overview
Part 2: This issue Some Helpful Hints
Part 3: (Planned The Report Generator
Part 4: for Data Plotter
Part 5: future) Some Advanced Hints

Part 2: Some Helpful Hints

This will not be a step-by-step tutorial. For the most part, the manual is very good. Instead, I will list some of the notes and tips that I have added to my copy of the manual.

A. BEFORE STARTING

1. Put one of the PROGRAM DISKS that you purchased away in a safe place and never use it again.

2. Use COPYA on the System Master disk to make two or three copies of the other PROGRAM DISK. Do not worry about the error message at the end - It is OK! These copies will be converted into APPLICATION DISKS (one for each data base you are going to set up). Keep the PROGRAM DISK in a handy place.

3. Next, initialize two or three disks with some informative greeting (HELLO) program. These will be used as DATA DISKS (one or more for each data base you set up).

4. The next step is not necessary, but it is something I do. I use Locksmith to make one copy of the PROGRAM DISK for each data base I set up. This copy has only one purpose: It is used as a BOOT DISK. Now, whenever I want to work on a particular data base (Magazine Articles, for example), off the shelf I pull the box labeled "Magazine Articles", and in that box is:

   a) The BOOT DISK from Locksmith which is used to boot the system
   b) The APPLICATION DISK for "Magazine Articles" which was developed from one of the COPYA copies
   c) The DATA DISK (or disks) for "Magazine Articles", which has on it a greeting program describing the nature of this particular data base.

   Thus, I need to pull only one box off the shelf which contains all the disks I will need for a complete work session on "Magazine Articles". With this scenario, I never need to use the PROGRAM DISK for anything but to make copies for use as application disks or boot disks and it should last a very long time.

   The copies from Locksmith do not work properly for making application disks. The parameters for Locksmith to copy Data Reporter are available from Omega to registered owners of Locksmith. I would like to add parenthetically here that it should be obvious that there are many legitimate uses for copies of protected software and that not all (and probably not even most) Nibble Copier users are pirates.

B. USING THE PROGRAM

1. Insert the PROGRAM DISK (original or Locksmith copy) in the Drive and Boot.

2. To start a new data base, Press Option #1.

3. Insert your copy from COPYA. This will become your new APPLICATION DISK. Now turn directly to Section 2.3 (Page 11) in the manual and follow directions, which are quite clear.

4. Give your data base a general name, such as "Magazine Articles". Later on, each file name will be more specific, such as "Magazine Articles - Mini'app'les".

5. Remember, if you request a horizontal total, the program will automatically reserve the last field for the horizontal total. You must allow for this when planning your fields.

6. The note at the bottom of Page 14 in the manual is wrong! After the program has modified your copy from COPYA into an APPLICATION DISK, you must remove it and re-insert the PROGRAM DISK (original or Locksmith copy) and press any key (the screen will give you the correct instructions). When the Main Menu returns, select Option #2, insert your APPLICATION DISK, and you are on your way.

7. If you have two Drives, put a DATA DISK into Drive #2.

8. When entering data, press <ESC> as the first character of the first field to return to the menu. Pressing <ESC> during the entry of data into a record will cause THAT record to be lost and you will be returned to the menu.

The **Data Reporter** Concluded from page 14

9. After entering data into your data base and returning to the menu, remember to use Option #7 to ACCESS THE DISK and save your records. **Data Reporter** does not automatically save your data, as does **Data Factory** (See Manual, Section 3.9, Page 20). If you have two Drives, the DATA DISK should be in Drive #2. After pressing Option #7 from the menu, press 2 twice to change to Drive #2. Then press <RETURN> and press 2 again to 'Save' your data. Now is the time to give this file a more specific name. Make the name meaningful; brevity is not necessary, since for the most part, files are loaded and saved and otherwise called by pressing a number on a menu, and not by typing the file name.

10. The instructions in the manual for manipulating data in a single file are clear and correct. However, **THE FOLLOWING ADVICE CANNOT BE OVER-STRESSED:** Before doing any search or sort, and especially before doing a seach or sort on multiple files, exit the program (Menu Option #9) and use COPYA to make back-up copies of your DATA DISKS which now contain your valuable data. Then re-boot and do your manipulation. If a mistake is made, you still have 'good' copies set aside.

11. The paragraph on Sort/Merge on Page 27 of the Manual is just a note. Section 6 (Page 61) gives the instruction in detail.

12. The search and save option may be a little confusing. The records which are 'found' are saved to a text file called TEMP. When the search is complete, you are returned to the menu. The 'found' records are at this time not yet accessible. Now press Option #7 and select Convert Text.

13. The Reformat Records function is one of the great features of The Data Reporter. The information on Reformatting Records is really in two places and requires two processes.

    The first process is discussed on Page 15 of the Manual. This involves changing the set-up of an APPLICATION DISK you have been using for a while. This part is easy. BEFORE modifying an APPLICATION DISK, I go through all the options without making any changes. When, at the end, the menu gives the opportunity for a printout summary of the entries, I get a printout. Then I go back again to the start of the modification process and now make the changes. At the end, I get another printout of the new entries. Only then do I go ahead and modify the APPLICATION DISK. This does two things:

    a) If the new APPLICATION DISK is not as I thought it would be, I have enough information to start over with a brand-new COPYA copy and do it over.
    b) More importantly, the two printouts allow side-by-side comparison of fields, which is very helpful during the data reformatting process (Page 64).

    The second process is discussed on Page 63-65 of the Manual. This process re-fits the data to the newly changed APPLICATION DISK. Again, if you are working with copies of your data, all you will lose in case of a mistake is time, and not data.

14. It is a good idea to have one or two initialized disks always available, in case you fill a disk with data still in memory.

    I believe these notes are accurate and I hope they will be helpful. I will be happy to do additional articles on **The Data Reporter** if there is any interest. (Mini'app'les members, let's hear your reaction! Since the good doctor lives 'Out West', call me if you want to see more on this subject. - Ed.)

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PROTECTION of COMPUTER SOFTWARE

by Kurt Oelschlager
and
condensed by Alan Peterman

PART 2 of 3 Parts

One of the most important challenges confronting the computer industry is how to define and protect ownership interests in software.

Recent legislation 18 U.S.C. #2319, enacted May 1982, and Minnesota Statute 609.87-.89, approved March 1982, impose harsher criminal penalties for the piracy and counterfeiting of computer software and data bases. Under federal jurisdiction the maximum penalty would be five years and/or $250,000, limited by the exclusions of 17 U.S.C. (see part 1 of this article). The Minnesota statute sets lesser sentencing guidelines but sets legal definitions for computer software, programs, systems, networks, access and property.

The protection of a software developer's investment can be accomplished by three traditional types of "intellectual property" laws: PATENT, COPYRIGHT and TRADE SECRET.

Last month we talked about PATENTSs. This month, we will talk about COPYRIGHTS. TRADE SECRETs will be covered in a future issue (probably next month).

COPYRIGHT

A second major area of protection available to computer software is provided by copyright law. The COMPUTER SOFTWARE COPYRIGHT ACT of 1980 (17 U.S.C. #101,117) specifically includes computer programs within the scope of works protected. This legislation and recent rulings (TANDY COBP. v. PERSONAL MICROCOMPUTERS 1981,524 F.Supp.171) have erased all doubts about whether computer programs were appropriate material for copyright protection and have specified certain limitations on the exclusive rights of computer program copyright proprietors.

The precise application of the exclusive rights created is less certain. And the nature of the protection, its limits and its interaction with other modes of legal protection present questions that cannot be answered until the 1980 Act is further construed in the courts.

A fundamental principle of copyright law is that copyright protects forms of expression and not the ideas that are expressed (BAKER v.SELDON 101 U.S.99 1879). This principle is now specifically recognized in the current copyright law which provides: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work" (17 U.S.C.#102).

A copyright will not protect the algorithm or underlying process upon which the program is based; that is taken care of by patents and trade secrets.

The standard for determining whether a work is eligible for copyright is sufficient authorship. The work need not represent an advance in the state-of-the-art or an invention; neither must it be a secret. This simple test is fundamentally different from patent standards -- it merely calls for independent creation.

It would appear that virtually any computer program could be copyrighted, but there are two limitations. First, there must have been sufficient intellectual labor involved in the work's creation. Second, the expression must be separable from the idea.

The lack of sufficient intellectual labor is the principle that denies copyrights to blank forms, standard charts, and routine representations of data. Thus, protection would not be available for computer programs comprising only a small number of steps or instructions.

The idea-expression test is more difficult. Unless the program has some identity separate from the idea, process, or algorithm that it implements, protection will be denied (MORRISSEY v. PROCTER & GAMBLE 1967 ,379F.2nd 675). This, known as the Morrissey test, makes it clear that copyright will protect, as far as possible, the expression adopted by the author, while still allowing free usage of the underlying idea, process, or algorithm.

The applicability of these criteria were discussed in the first reported cases involving copyrights and computer programs. In SYNERCOM TECHNOLOGY v. UNIVERSITY COMPUTING (462 F.Supp.1003 1978), the plaintiff had developed a computer program that was a

GOTO 18

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SOFTWARE

Copyright Concluded from page 16

commercial success due to the way in which it accepted data and the clear, organinzed manner in which the calculations were presented to the user. The defendant obtained copies of the user manuals, identified the input formats, and developed his own program to do the same thing. The plaintiff sued, claiming the defendant's program infringed on copyrights of the input formats as well as on copyrights on the user manuals that described the formats.

The Synercom court reasoned that the formats for data input were no more than ideas, and the defendant had copied only the idea by copying the formats. The analysis in this case clearly indicates that copyright was appropriate for computer programs but the traditional tests of idea-expression would be applied.

The copyright owner's privilege to control the reproduction of substantially similar, unauthorized derivative works provides even more protection. 17 U.S.C.#101 defines a derivative work as a "work based upon one or more pre-existing works, such as a translation, ...abridgment, condensation, or any other form in which the work may be recast, transformed or adapted." The vending of a derivatve work without permission of the owner infringes the author's copyright (L&L WHITE METAL CASTING v. JOSEPH,387 F.Supp.1349). Also, in SYNERCOM, is a principal in which the conversion of a program from one computer language to another (i.e., BASIC to FORTRAN) may be considered analogous to the translation of a work from one human language to another.

Under copyright law, copyright subsists in a work of authorship from the moment it is first created and fixed in a tangible medium of expression, regardless of whether steps are taken to register the work with the Copyright Office.

However, the copyright law contains potential traps that may result in invalidating copyright protection when copyright notices have been omitted from publicly distributed copies and the work is not registered with the Copyright Office.

Before registering any software for copyright, a copyright owner should consider the impact registration may have on his or her ability to claim other forms of proprietary rights protection and should determine the appropriate means of accomplishing the registration. However, failing to register software with the Copyright Office may result in forfeiting copyright protection forever if more than five years expire following a publication of that software without copyright notice. (Computerworld, pg. 115-124, Nov 8, 1982)

Some mention must be made of the special problem of "object" programs. The object program in a data processing system refers to the mechanical counterpart of the high level language program written in Basic, Fortran, etc. Object code is directly usable in a machine and is not written at all, but is embodied in magnetic tape, disk or semiconductor chip, such as a read-only-memory (ROM). Object code is superficially unintelligible, because it appears as a meaningless sequence of electronic signals of "0" and "1" value. An object program is a collection of object code which directly enables the computer to execute the corresponding high level program.

Current copyright law has yet to deal with this new entity. A work is within the copyright law's protection when its intended use is as a medium for communication. Object code is a medium for storing data or operating a machine, and not intelligible, communicable data. It is therefore, not copyrightable. (What happens when an author writes in machine code and creates object code directly without using an intermediate higher level language - Ed.?)

To be Continued.

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PEPPERONI

IBM Computer Users Prefer Bytes of Pepperoni

by Paul Maccabee (228-1419)
Kamstra Communications, Inc.

St. Paul, MN -- Should IBM, Apple and other home computer salespeople be staking out the doorways of pizza parlors across America?

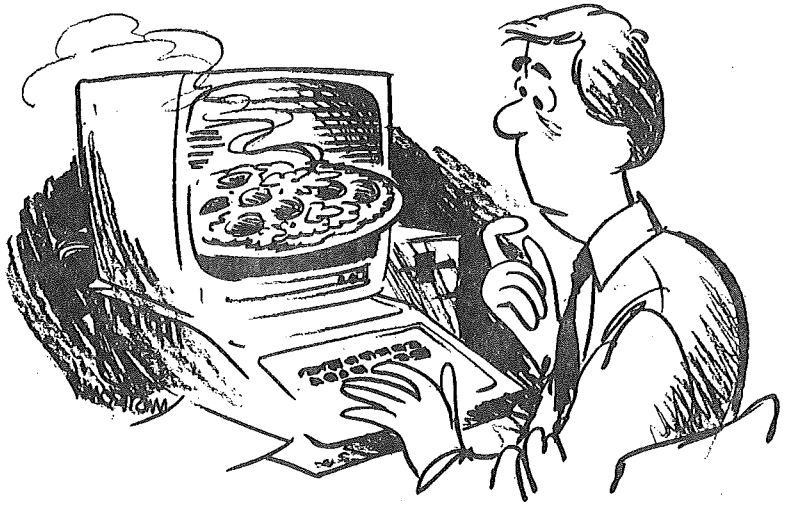
That might be the wisest reaction to the Kamstra Communications marketing survey which discovered that 75 percent of IBM personal computer owners are pepperoni pizza fans.

The novel person-on-the-street survey was conducted at Minneapolis' Applefest computer fair last fall by Kamstra Communications, a St Paul advertising and public relations firm.

The survey, part of Kamstra's on-going market research for its data processing clientele, concluded with an unexpected question. What type of pizza did home computer owners crave?

Three out of four Applefest visitors who owned an IBM home computer preferred pepperoni. But, fewer than 50% of Apple computer owners shared that passion for pepperoni.

"The survey offers two intriguing sides," explains Kamstra Marketing Reserach Director Dan Burke. "Either IBM computer salespeople should seek out pepperoni lovers as potential clients. Or pizza parlas should exploit a vast, untapped market for pepperoni pizza by luring IBM computer users to within sniffing distance of the product."



Why, though, would Apple computer owners not join IBM owners in their enthusiasm for pepperoni?

22-year-old Jeff Lundbladd of Domino's Pizza in Minneapolis offered this explanation: "We consider pepperoni to be a plain pizza. It's good tasting, but basically straightlaced. Pepperoni is not a flamboyant pizza."

Kamstra won't say whether the Applefest survey proves that pepperoni-eating IBM owners are more straightlaced than flamboyant Apple owners. But Kamsta's Burke does note the strong resemblance between pizza pies and today's floppy disks.....

(The question is: "can he tell the difference? - Ed.)

The GROT SHOP

Bargains from the Surplus Dealers

by Dick Marchiafava

Are any of you Reginald Perrin fans? If so, you will understand where I got my inspiration for the title of this piece.

For those looking for a buy in printer paper, the following item is outstanding, if it suits your needs.

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If you have ever felt a need for a small light fixture on your computer stand, the Astro lamp may interest you. It is a small lamp fixture of an European design. The weighted base of the Astro fits nicely on top of my disk drive. It swivels, raises, lowers and stretchs. The lamp uses a minature 40 watt 120 volt American made bulb to give soft and even light. There is no transformer. Price is $12.95 at Crazy Louies Surplus City on University Avenue at Victoria in St. Paul.

The ARITHMETIC CLASSROOM

An educational program review

by George Klosinski

"The Arithmetic Classroom," by Sterling Swift, (Sterling Software) contains eight arithmetic programs (four for whole numbers, three for fractions and one for decimals) plus a three game reinforcement disk. The cost of each arithmetic classroom disk is approximately $50.00, while the cost of the game disk is $30.00.

"The Arithmetic Classroom," available in both Spanish and English versions, is primarily recommended for home use, but it may be used in a classroom setting.

The program made available for review was **"The Arithmetic Classroom - Decimals"** (English version). Hardware/Software requirements are as follows:

Apple II Plus with 48K
One disk drive
DOS 3.3

or

Apple II with 48K
Applesoft in ROM or Language Card,
Autostart ROM
One disk drive
DOS 3.3

The program comes in a small three-ring binder called a learning packet. It contains the lesson diskettes, a practice workbook and achievement record forms, which are to be used by the student to keep track of learning progress.

Getting started is simple and straightforward; the instructions are easy to follow.

The student selects from a menu of five lessons, simply by typing in the number of the lesson. It should be cautioned that the lessons are designed to be learned in sequence; hence, the student should have mastered the first lesson before going on to the second.

Each lesson deals with a particular objective, which is further broken down into two or three sub-objectives. Examples are given for each sub-objective, followed by a practice exercise. Problems in the practice exercise are randomly selected. The student has two chances to do the problem correctly. After two erroneous answers the correct solution is given. Every lesson concludes with one to three tests that are intended to determine whether a student has achieved mastery of a particular objective. Mastery tests contain five to nine problems.

This program has several shortcomings. The most basic of these is that the problems the student is asked to do are not always demonstrated in the examples. A specific case in point: Lesson 5 deals with multiplication and division of decimals. One part of this lesson deals with converting fractions to decimals. The two examples that were given only required division out to the hundredths place. The problems that the student is asked to do require division out to the thousandths place.

In another lesson, called "A Short Way to Multiply Decimals," the student is asked to multiply .24 by .2. The example that is shown in this lesson does not address what to do if the student comes up with a two digit answer but there are three decimal places to deal with.

In the lesson "Comparing and Rounding Decimals," a major problem appears. Students are shown how to round hundredths to the nearest tenths. The program does an admirable job with its examples by using a number line to show where a particular decimal falls. But the program fails to show what happens if the decimal falls at the midway point (i.e., .35, .55). Are these decimals to be rounded up or down to the nearest tenth?

Besides some of these problems, the formating of the program is less than desirable. Many of the lessons have sub-objectives contained in them, but there is no direct accessibility to them. For example, should the student be working on the third sub-objective of Lesson I and decide to turn off the computer, there is no way to get back to that point without working through the other parts of the lesson first.

The same problem occurs with the mastery test at the end of each lesson. Should the student decide not to do the third test of a particular lesson and shut down the computer, accessibility to that test can only be gained by working through the complete lesson again. It would be very easy to remedy this problem by expanding the menu to include the sub-objectives as well as the tests.

At present, this program would be more appropriately used as a reinforcement program. Until changes are made in both program and format, "The Arithmetic Classroom-Decimals" is not a swift idea as a tutorial program.

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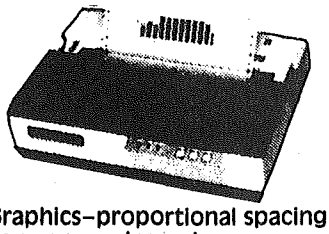

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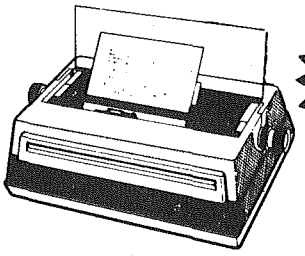

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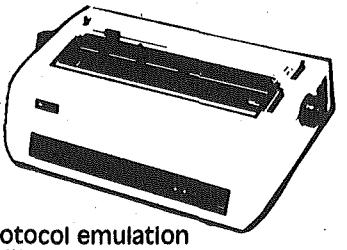

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Qty

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BYLAWS

This is a reprint of the bylaws as published on January 13, 1982

NAME

1. The name of the organization is Minnesota Apple Computer Users' Group, hereafter refered to as 'Mini'app'les'.

PURPOSE

2. The purpose of the organization is to promote the dissemination of information concerning the Apple computer and products related thereto, and to share the knowledge of members at large concerning their talents and information pertaining to computers and the Apple computer specifically.

LEADERSHIP

3. The officers of Mini'app'les are:

   President
   Past President
   Vice President
   Secretary
   Treasurer

4. Except for the Past President, officers are elected for a term of one year. The term runs from May 1st to April 30th. The office of Past President will be automatically offered to the retiring President. If a President is elected for a second or subsequent term, the incumbant Past President will remain in office.

5. All officers are members of the **"Board"**. In addition to the officers, other board members will be nominated by the President and approved by the elected officers. Board positions will be created by the President as the need arises and the duties of said board positions defined by the President and approved by the elected officers. Subsequent to the election of officers, the President will present the roster of board members and their intended duties to the membership at a regular meeting. The President will ask for suggestions and comments which must be considered by the officers before final acceptance of a new board position and/or candidate.

6. Board members are appointed to a term ending April 30th, and must be paid up members of the club.

7. If an officer or board member resigns or relinquishes office, the President may appoint a replacement subject to board approval.

8. If the President resigns or is unable to perform the duties; the Vice President shall assume those duties.

9. Board members may be removed from office by a two-thirds majority vote of the board.
   A recall election shall be held within 60 days of presentation of an impeachment petition bearing the verified signatures of at least five percent of the membership.

10. Changes to bylaws will be discussed at a board meeting and presented to the membership at regular meeting for ratification by simple majority.

11. The duties of the elected officers are in general:

    - To administer the bylaws of the club.
    - To assure the financial well-being of the club
    - Perform the prescribed duties of the officers as follows:

President
- Presides over officers and other board members.
- Nominates board members.
- Chairs Mini'app'les meetings.
- Resolves club problems.

Vice President
- Organizes program for regular club meetings.
- Ensures that meetings are supported by appropriate hardware.
- Organizes extraordinary events such as displays, symposiums, etc.
- Stands in for President in his/her absence.

Treasurer
- Maintains the club's financial records.
- Produces a financial report at all board meetings.
- Produces an annual budget. (This will be used to set dues for subsequent calendar year.)
- Is cognizant of and acts upon requirements of the IRS.

Secretary
- Writes the minutes of regular and board meetings.
- Assists the President in correspondence as required.

FINANCIAL

12. The club will maintain an interest bearing account at a local bank.

    All officers are signatories of the club bank account.

    Two signatures will be required to disburse funds from the account. Payments

GOTO 25

MINUTES

Officers Meeting
Dec. 8, 1982

by Hugh Kurtzman, Secretary

Progress report by Ron Androff:

Telephone answering machine - Radio Shack is best, so far.

Wilson Learning Center - possible for Feb meeting.

Renewal notices - Ann has cards; will send out soon.

Treasurers Report:
Income for Nov. $3390.98
Expenses for Nov. $2749.81
Closing Balance $11914.52

John is working with the state to solve our "sales tax" problem (We must pay sales tax on sales of DOMs, etc.). At this time the sales tax is included in the price of a DOM.

Approval of the letter quality printer was given - Dan Buchler has it on order.

Steve and Ron showed off the new "goodie" box that will be brought to each meeting. It contains most of the adapters, cord, tools, etc., that may be needed to get a system operational at a meeting.

100 Business cards for each officer will be printed, using art work supplied by Steve Johnson.

Pascal "notebook" project by Chase has been dropped due to lack of material.

Board Meeting
Jan. 12,1983

The minutes of the Dec. Officers' meeting were read and approved.

The treasurer reported a balance of $9985.50. The sales tax permit has been applied for and we are now collecting sales tax on the DOMS.

OLD BUSINESS:

There are still 300 who have not renewed their membership for 1983.

The software project is on hold. All Branches, SIG's, etc., are requested to submit a budget.

Several ways to make the newsletter better were discussed. Dan needs articles,pictures,cartoons,etc. He also wants small filler items, tips, etc.

BRANCH REPORTS:

Minnetonka reported a list of 73 members with an average attendance of 33. There are 4 sub groups including Business, Graphics, and Education. The major problems seem to be the number of phone calls for help (Members are encouraged to look inside to cover of the newsletter for names of people with special talents; this list needs expanding) and making sure there are disks and DOMS at their meetings. The last meeting had a demo of the Apple ///.

St.Paul reported 25 to 35 at each meeting. No problems.

Dakota Co. is a small group. They learned all about the Timex and Sinclar at their last meeting.

CPM SIG now has enough material to publish a DOM.

NEW BUSINESS:

Phone answering machine will cost about $400 the first year and $150 per year after that to operate. This machine could be used for announcements, questions (Leave your question, somebody will get back to you), meeting changes, etc. Having the number in the phone book is a good idea, but will add $30 per month to the cost.

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HOME PROJECTS(6)

Adjustable Delay Key Repeater

By Roger Flint (771-2868)

I have had so many people ask about the key board project that I have decided to help anyone interested in building one. If you come to the main meetings, when the group divides into subgroups, anyone who is interested may join us, and I'll get you going on the right track. Also if we get enough people together we can get a discount on buying parts.

As with all of my projects, this is not intended to be a complete construction article. It simply provides a starting point for constructing an item in conjunction with others doing the same thing. You are encouraged to call me before and during the construction period.

This month's project was born out of the many people who wanted to have the repeat function on the keypad project. Well, this will be almost as good, because the keypad and the Apple keyboard will both have the repeat function. It will let you adjust the time delay after pressing the key before it starts to repeat. In fact, I am using it right now to correct all (most of - Ed.) the spelling errors I usually make typing. It can be mounted on the right side of the keyboard in the Apple for rev 7 (because I have one).

Jumper wires hook resistor R8 on the lower board to pins 4-19-20-23.

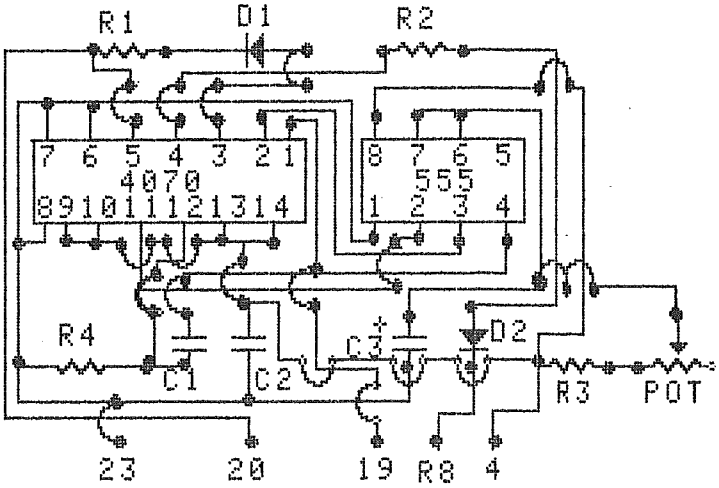
Parts List

1meg ohm pot		$1.60.
R1 = 8.2k }		Resistors and capacitors are
R2 = 8.2k }		about 20 cents a package.
D1=IN914 diode }	(276-1122)	Pkg of 10 for
D2=IN914 diode }		99cents
R3=180k		
R4=10k		
C1= .047 µfd capacitor		
C2= .068 µfd capacitor		
C3=1.0 µfd electrolitic capacitor		
555 IC timer	(276-1723)	$0.99
4070 cmos IC.	(276-2470)	$0.89
Micro test clips	(270-370)	pkg of 2 for $1.49; you will need 5 clips.
PC board	(276-158)	$1.95
Wire wrap sockets:		
8 pins	(276-1988)	$1.19
14 pins	(276-1993)	$1.29

Remember, you can buy many of these parts cheaper from mailorder if you are not in a hurry.

As you know HOME-PROJECTS needs help from time to time and now is one of those times. I need programs that control the disk drive (testing type). I also need a schematic of the disk drive (Apple) repair manuals and people with knowledge of such to work with me on the next project.

As anyone who has been to one of the last two meetings can attest to, Roger does beautiful work - Ed.



"REPEATER" HOME-PROJECTS by Roger Flint 771-2868

Minutes Continued from page 23

DOMS:

Al Peterman still has lots of old material to work with. Business Sig will be publishing a DOM. The Dallas group has a DOM of Visicalc templates.

Chuck Thiesfeld offered to make copies of any DOM on a blank disk sent to him with a stamped self-addressed return mailer for a charge of 50 cents. This was moved by Chuck Boody and seconded by John Hansen. An amendment by Subri Chatterjee to add a $1 charge for the club was defeated. An amendment to add a 50 cent club charge was passed. The motion to have Chuck Thiesfeld offer his copy service was passed.

Chuck Boody will investigate starting a limited bulletin board at his office.

GOTO 25

Bylaws Concluded from page 22

for items in excess of $99.99 require a majority approval of the officers. Purchase of items over $999.99 will require a majority approval of the board.

MEMBERSHIP

13. Members of Mini'app'les are required to pay annual dues, which will be due on the aniversary of the month they joined. The actual amount will be set by the board. Members are expected to abide by the bylaws.

14. Membership will not be denied on account of race, creed, color or sex.

15. Benefits of membership shall include:

—subscription to the club newsletter
—eligibility to purchase Disks of the Month
—eligibility to participate in club activities such as bulk purchase plans.

MISCELLANEOUS

16. The club will make every effort to support the copyright laws.

17. Regular monthly meetings will be held.

18. The minutes of regular and board meetings will be published in the club newsletter not later than 90 days following that

19. The business of the club will be conducted at the board meetings, which will be convened at least twice per year (one between Jan 1st and June 30th, one between July 1st and Dec 31st).

20. In the event of dissolution of the club, any assets shall be disbursed in a manner aggreable to a majority of board members at a specially convened meeting.

Minutes Concluded from page 24

Business Sig reported its next meeting will be on Tax Programs.

Subir Chatterjee, leader of the Business Sig, presented a request for $25 per month through April. Approved.

Chuch Boody moved, David E Laden seconded, that the officers bring to the board some needed changes in the by-laws. Passed.

Chase Allen anounced his resignation as Vice President. Chase says he is spreading himself too thin. Subir Chatterjee moved, Chuck Boody seconded, that we thank Chase for all the work getting programs and organizing the meetings. Passed.

President will appoint a V.P. to fill out the year.

Dan Buchler moved we adjourn. Time was 11 PM.

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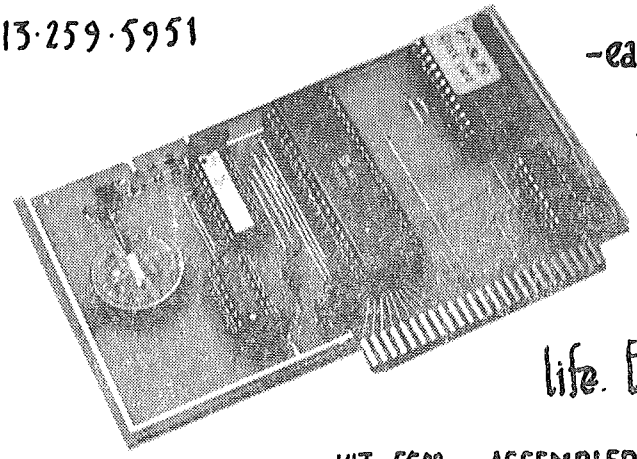

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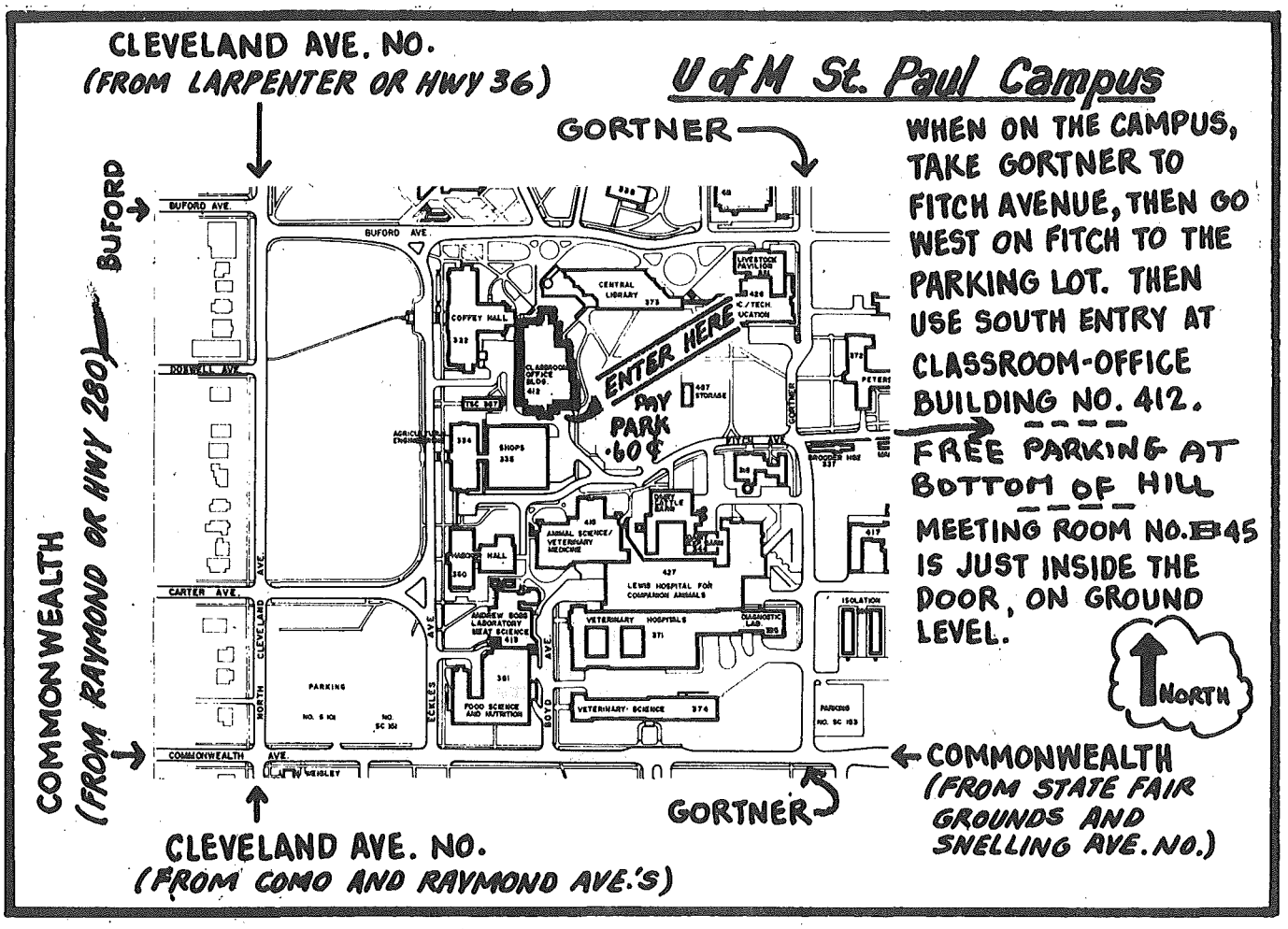

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These ads are provided free to members for non commercial use, and are limited to 10 lines. Commercial ads will be charged at 20 cents/word for members or 40 cents/word for non-members. Contact the Adverstising coordinator. Ads will be repeated on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

Apple II, 48k + Apple Language Card, including original Apple Pascal software, Lazer Systems Lower Case Plus.
Pete 227-4777

Apple II+, 48K, Monitor, 2 Disk Drives, Controller & Software. Reasonable.
Steve 474-4356 (after 6PM)

Apple II+, 64K, Amdek Monitor, 1 Disk Drive & Huge amount of software. $1400.
941-1179 (home)
887-4448 (work)

Paper Tiger 440 Printer and Apple Parallel Interface card - $350.
John Schoeppner 455-8613

Wanted, low-cost used **dot-matrix printer,** with or without parallel controller.
Tom Dewey 927-0342

ORDERING DOMs

A reminder that **DOMs** are available by mail at $7.50 each. Send your order to:

MINI'APP'LES DOM's
Box 241
Inver Grove Heights
Mn., 55075

Usually the latest three DOM's 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 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!

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We refer non-residents to MECC Publications 612/376-1118.

Quan.	No.	Title	Vol.	Special Emphasis
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_____	714	Business	1	
_____	721	Business	3	Accounting 132 col.printer req'd.
_____	702	Elementary	1	Mathematics
_____	704	Elementary	3	Social Studies
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_____	731	Elementary	7	K-2
_____	733	Elementary	9	Geometry
_____	735	Elementary	11	Phonetics
_____	743	Elementary	13	Nutrition
_____	751	Health Maint.	2	
_____	753	Nutrition	2	
_____	706	Mathematics	1	Graphing
_____	737	Mathematics	2	Measurement
_____	744	Mathematics	4	Higher Ed
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_____	707	Science	3	Earth/Life
_____	710	Social Studies	1	
_____	718	Drivers Ed	1	
_____	726	Spelling	1	Elementary
_____	739	Art	1	Prespective Drw
_____	720	Program Aid	1	
_____	724	Shape Tables	1	HGR Utilies
_____	740	Teacher Util.	2	
_____	742	Teacher Util.	4	
_____	749	School Util.	2	Readability
_____	748	Pascal		Learning Aid
_____	641	Files On Apple		
_____	670	Adv. Applesoft		

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_____	717	Agriculture	1	
_____	713	bussiness	2	Payroll
_____	703	Elementary	2	Language Arts
_____	705	Elementary	4	Science
_____	725	Elementary	6	History
_____	732	Elementary	8	Geometry
_____	734	Elementary	10	Geometry
_____	736	Elementary	12	SIM
_____	750	Health Maint.	1	
_____	752	Nutrition	1	
_____	756	Food Facts	1	
_____	716	Aestheometry	1	Curves
_____	738	Mathematics	3	Geometry
_____	757	Computer Mathematic	1	Prob. Solv.
_____	709	Science	2	Biol/Phys
_____	745	Science	4	Phys/Chem
_____	711	Social Studies	2	
_____	727	Special Needs	1	Handicapped Spelling
_____	728	Spelling	2	Adult Words
_____	746	English	1	Parts Speech
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Some of these Disks will require the support booklets to be of use. Call MECC for a order form and Prices.

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Disketts	$5.00	_____
Mailing	$2.50 ea.	_____
		_____
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