



# mini'app'les

apple computer user group newsletter

VOLUME VII No 4

APRIL 1984

## CALENDAR

### WHICH

### WHEN

### WHERE

### WHAT

St. Paul Branch - Note 3  
 Tue Apr 3 7pm-10pm

Pascal & Apple /// Note 1  
 Wed Apr 4 7:30pm

Dakota County Branch  
 Tue Apr 10 7pm-10pm

Board Meeting Note 2  
 Wed Apr 11 7:30 pm

Business Note 10  
 Thu Apr 12 7:00pm

St Cloud Branch Note 15  
 Thu Apr 12 7:30pm

REGULAR MINI'APPLES Note 2  
 Map Inside  
 WEDNESDAY April 18th  
 Prgm-7:30pm  
 SIGs-8:00pm+

Educational SIG  
 Wed Apr 18

Investment SIG Note 4  
 Thu Apr 19 7-9:30pm

New Hope Branch Note 16  
 Tue Apr 24 7:00pm

CP/M SIG Note 5  
 Wed Apr 25 7:00pm

Minnetonka Branch Note 8  
 Wed Apr 25 7:30pm

St. Paul Branch - Note 3  
 Tue May 1 7:30-10pm

Pascal & Apple ///  
 Wed May 2

Dakota County Branch  
 Tue May 8

Medical SIG Note 13  
 Wed May 9 7:00pm

Education SIG Note 12  
 Wed May 9 7:30pm

Business Note 10  
 Thu May 10 7:00pm

St Cloud Branch  
 Thur May 10

Computer Faire  
 Sat May 12 9:30am-8:00pm

REGULAR MINI'APPLES Note 2  
 Map next month  
 WEDNESDAY May 16th  
 Prgm-7:30pm  
 SIGS-8:30pm+

Educational SIG  
 Wed May 16

Investment SIG  
 Thu May 17

New Hope Branch  
 Tue May 22

CP/M SIG  
 Wed May 23

Minnetonka Branch  
 Wed May 23

St. Paul Branch  
 Tue Jun 5

## CALENDAR

Mahtomedi Fire House Hallam & Stillwater.

Minnesota Federal 9th Ave S Hopkins

St. John Neumann Church 4030 Pilot Knob Rd, Eagan

Norwest Bank S 1st St., Hopkins

Edina Community Center 5701 Normandale Road Room 103

Walte Park City Hall 1401 S. 11th Ave

Lincoln Center (old Lincoln High) 88th & Sheridan Ave. Bloomington

After Regular Mtg.

Henn Cty Lib at Southdale 7001 York Avenue S.

Rockford Rd Library County Road 9

Minn Fed Bank Hopkins MN

Glen Lake Community Ctr 14300 Excelsior Blvd room. E

Mahtomedi Fire House Hallam & Stillwater.

Minnesota Federal, Hopkins

St. John Neumann Church, Eagan

Health Associates Ctr. 2221 University SE, Rm 115

St Paul VoTech. 235 Marshall, St Paul

Edina Community Center 5701 Normandale Road Room 103

Walte Park City Hall

Science Museum of MN 30 E 10th, St Paul

UNIVERSITY MINNESOTA ST. PAUL  
 Room B45 Bldg 412  
 Near State Fair Ground

After Regular Mtg.

Henn Cty Lib at Southdale

Rockford Rd Library

Minn Fed Bank, Hopkins

Glen Lake Community Ctr

Mahtomedi Fire House

## CALENDAR

CP/M by Scott Ueland

Pascal & Apple /// Special Interest Group Meeting.

Note 7  
 General club business. Meeting is open to all members.  
 Demo Appewriter II & Think Tank by Al Peterman and Gene Kasper

Election night & TENTATIVE: Bob Bittinger, Money Tree Sftw on Consumer Financial Planning  
**NOTICE NEW MEETING SITE!**

Note 12 - Educational Software  
 Family Financial Planning & Money Matter\$ Demo  
 Printer discussions

Election of Branch Leaders

C Programming by John Collins

Note 1  
 Note 7

Hands-on lab

Demo BPI General Ledger by H.Lewis & Discussion of Spreadsheets

Adm:\$2 Members of Club/Museum \$3 All others

Tentative:  
 Apple //c Demo!!!

Note 12 - Educational Software  
 Note 4 - Investment Software Demo  
 Note 16  
 Note 5  
 Note 8  
 Note 3 - UNIX by Len Munson

### Notes:

(See page 2 for telephone numbers)

- |                    |                    |                      |                     |                        |
|--------------------|--------------------|----------------------|---------------------|------------------------|
| 1. John Schoeppner | 5. W. Scott Ueland | 8. Martin Thames     | 11. Bill DeCoursey  | 14. Steve George       |
| 2. Chuck Thiesfeld | 6. Dan Buchler     | 9. Mike Carlson      | 12. Jane Chatterjee | 15. Frank M. Ringsmuth |
| 3. Fred Woodward   | 7. Bob Pfaff       | 10. Subir Chatterjee | 13. Stewart Haight  | 16. Jere Kauffman      |
| 4. Eric Holterman  |                    |                      |                     |                        |



# Mini'app'les

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

## MINI'APP'LES OFFICERS

President	Chase Allen	431-7278
	15718 Hayes Trail, Apple Valley, MN 55124	
Past President	Ron Androff	452-5230
	1725 Crest Ridge Lane, Eagan, MN 55122	
Vice President	Chuck Thiesfeld	831-0009
	8416 Xerxes Avenue S., Bloomington, MN 55431	
Treasurer	John L. Hansen	890-3769
	38 Birnamwood Drive, Burnsville, MN 55337	
Secretary	Hugh Kurtzman	544-7303
	11622 Live Oak Dr., Minnetonka, MN 55343	

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Education Co'tor	Al Peterman	721-3295
MECC Disk Purchases	Arthur English	824-4131
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Spcl Int. - Education	Jay Warrior	489-8694
Spcl Int. - FORTH	Jane Chatterjee	888-9447
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Spcl Int. - Handicaps	Bill Decoursey	574-9062
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Spcl Int. - Medical	Eric Holterman	454-5628
Spcl Int. - Pascal	Stewart Haight	644-1838
Spcl Int. - Visualc	John Schoeppner	455-8613
Spcl Int. - CP/M & Hardware Coordinator	Mike Carlson	929-4120
Tech. Advisers (sftw)	Scott Ueland	623-3749
	Dave Laden	489-8321
	Roger Flint	771-2868
Branch Coordinators:		
Dakota County	Bob Pfaff	452-2541
Minnetonka	Martin Thames	934-3517
Northwest	Jere Kauffman	535-6745
St. Cloud	Frank Ringsmuth	253-6032
St. Paul/Mahtomedi	Fred Woodward	426-4060
	Jim Schenz	429-4931

## NEWSLETTER PUBLICATION STAFF

Director & NL Editor	Daniel B. Buchler	890-5051
	13516 Grand Avenue S. Burnsville, MN 55337	
Assistant NL Editor	Jo Hornung	922-7665
Contributing Editors	Arsen Darnay	933-0399
	Steve George	
Composition	Joan Kistner	
Advertising layout	Eric Holterman	454-5628
Mailing Coordinator	Hugh Kurtzman	

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## 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 officer. Technical questions should be directed to the Technical Coordinator.

### 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

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. MSDs are \$15/disk at meetings or \$17.50/disk by mail. Contact

Terry Schoeppner,  
Box 241, Inver Grove Heights  
MN, 55075 (455-8613)

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 21-425  
Eagan, MN, 55121 612-454-5628



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# ANNOUNCEMENTS

## BUSINESS SIG MEETING NEWS

by Dick Marchiafava

### MEETINGS MOVE FROM DOWNTOWN

#### APRIL MEETING:

APPLEWRITER ][ AND THINK TANK

#### MAY MEETING: BOOKKEEPING WITH

BPI GENERAL LEDGER AND SPREADSHEETS

**B**usiness SIG has moved! The Business SIG meetings will be moved from downtown to Edina for April and May. The meetings for April 12th, and May 10th will be held at the Edina Community Center 5701 Normandale Road (the cross street is Southview Lane). Directions: Hiway 100, exit at 50th Street. Turn east, then turn south on the frontage road which is east of Perkins.

The meetings are in Room 103, which is on the first floor, west. Meetings start at 7:00 PM with RANDOM ACCESS, the question and answer session where members seek solutions and share experience. The program starts at 7:30 PM.

April's program will feature APPLEWRITER ][, the ever popular word processor! This will be presented by Al Peterman. Perhaps he can tell us what a WPL is, and when you've caught one, what to do with it.

Part two of the program is presented by Gene Kasper and will be about THINK TANK, described as a complicated Word Processor that is also an Idea Processor, which is designed to help organize ideas using an outline format.

The May program is about Bookkeeping and Accounting. A demo of the BPI GENERAL LEDGER, the most popular accounting package for the Apple computer will be presented by Henry Lewis, of Henry T. Lewis & Associates, an accounting professional. The second part of the program will be about accounting applications on spreadsheets. If you are having difficulty with a spreadsheet application, bring it along. There will be help available at the meeting.

Everyone is welcome, and bring your questions!

I have moved since the most recent phone list was published by the Club. My new phone number is 522-5051. Please make a note of it. (Dick - You must tell us when you move! - Ed.)

Thanks! Dick

## April Mini'app'les Meeting Place

Mini'app'les and the chiropractors have not gotten together, so we have changed our meeting place for April and probably June to the Bloomington Lincoln school. Note, however, that this facility has just been sold (even after our reservations were made) to Control Data Corporation. We may have to move again!

The parking lot is off Queen Avenue between 88th and 90th Streets in Bloomington. Take 90th Street West exit off 35W. The place has a very large auditorium, so there's plenty of room. Thanks to Ron Androff for the legwork!

## Computer Fair

The Science Museum of Minnesota is sponsoring a computer fair at the museum on Saturday, May 12. You will be able to see a bulletin board functioning, a variety of PCs and other related items. Mini'app'les will be there too!

GOTO 6

# SOFTWARE FOR

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\* Specify II or //e

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Pie Writer	149.95	122.95
Fontrix	75.00	61.95
Fontpak Vol 1,2, or 3	20.00	16.95

MN Residents add sales tax. Include \$3 per order for shipping. Whatever your software needs, you can get it here!

# MICRO MAIL

Dept. M7, P. O. Box 1451, Burnsville, MN 55337



Announcements Continued from page 5

**Minnetonka Branch**  
by Steven E. Baker

The April meeting will be the election of branch officers. Call Loren Richards, Minnetonka Branch President, for nominations.

**Club Election**

The election of a new Mini'app'les board will take place during the April general meeting. Voting rights, proxy information, etc., were described in the March newsletter by David Laden. A proxy form showing nominees is included in this newsletter. You are the club, so exercise your right to vote.

Platform statements by candidates running for election are published in this newsletter.

**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!

**Duluth Apple fans!**

If you live in the Duluth area, be advised that you have a choice of clubs. You can join Mini'app'les, and/or the

Lake Superior Apple User Group  
16 West 1st Street  
Duluth, MN, 55802

Call Harry Davis for information at:  
218-727-5742

Don Granholm is the President of the organization. There's also an Apple based bulletin board in Duluth: the North East Minnesota Net - Call: 218-727-2184

**New Hope Branch**  
by Jere Kauffman

The newly formed New Hope Branch meets the fourth Tuesday of the month at 7:00 p.m. in the Rockford Road Library, County Road 9 in Crystal. All interested Apple users are welcome to attend and take part in our discussions. (They might even let in IBM PC users - Ed.) Branch officers are: Pres., Jere Kauffman; Assistant coordinators, George Ham and John Pawlick; and Secretary, Stevie Johnson. The April 24 meeting will consist of discussions on printers.

**GOTO 7**



# AMATEUR FAIR '84

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**When?**

**Saturday, June 2, 1984 — 6:00 a.m. to 5:00 p.m**  
**Outside Market Starts at 6:00 a.m.**  
**Inside Activities Start at 8:00 a.m.**

**Where?**

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Announcements Continued from page 6

**Investment SIG**  
by Eric Holterman

The next meeting of the Investment SIG will be on **Thursday, April 19**, at the Hennepin County Library at Southdale. The topic for April is **Family Financial Planning**. We plan to spend part of the meeting looking at financial planning for families like yours and mine. We will leave the exotic stuff like \$200,000 per unit tax shelters that make money while losing money for another time. The other part of the meeting will be a presentation of the program **MONEY MATTER\$** by its author, Steve Flister, who is also a club member. The program is a financial planning tool. Part of the program is reviewed elsewhere in this newsletter.

This meeting will be a little different from many of our meetings in that it is not focused directly on investment activities such as the selection of particular stocks. Instead, it will cover some of the ground work to be done before specific investments are made. The discussion will include establishing investment goals and the relationship of those goals to the nature of different investments.

We will be in the Ethel Berry Room. Doors open at 7 PM and the meeting starts at 7:15 PM, adjourning by 9:15 PM. The library is located at 7001 York Avenue South. It is on the east side of the street, across from Target. Plenty of free parking.

**Education Sig**  
by Jane Chatterjee

The April meeting will be a discussion and presentation on the topic: **Software Acquisition and Evaluation**. Home and school applications will be addressed.

There will be an extra meeting on Wednesday, 9th May, 7:30 to 9:30 p.m., in Room 408,

St Paul Technical Vocational Institute  
235 Marshall Avenue, St Paul.

That is near the St Paul cathedral. It will be a **hands-on** session, using software in a lab setting. Our thanks to Daryl Dewar, math instructor at the college, for making the facility available. See you there!

**GOTO 8**

**THE QUESTION:**

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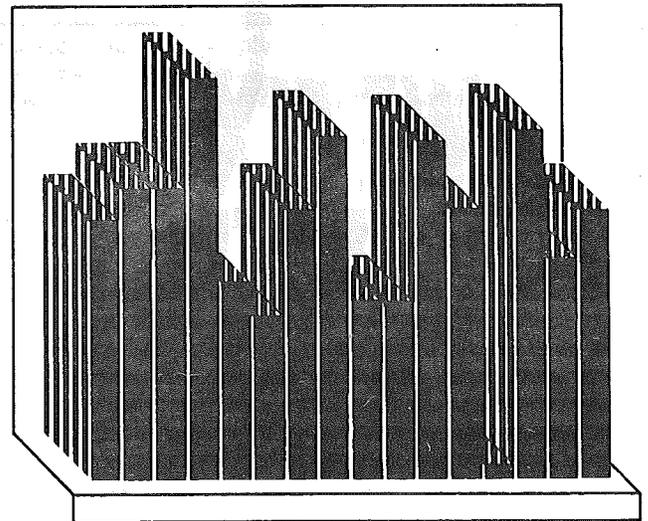
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721-1234

**Computers of Woodbury**  
731-1499

**Computer Exercise World**  
920-7500



Announcements Concluded from page 7

Dealer Discounts

Every so often a local dealer will make available some special deal to our members. Software Centre is in the process of setting up some sort of a deal. Details will be published when available. The following letter has been sent to Software Centre —

To: Software Centre

From: Mini'app'les

Re: User group benefits

Thanks for your offer of services to our club. We discussed them at a board meeting and would like to offer the following suggestions:

- 1) Your offer to do periodic demonstrations of software sounds great. You will be hearing from our program director.
- 2) The one discount purchase is something all of us could use. We would like you to administrate this yourselves, perhaps using our membership card to identify our members.

3) We request you buy an ad in our newsletter explaining your Software Club, and the discount offer. We can make an announcement in the newsletter calling attention to your ad.

It has always been club policy not to endorse any one business. But we do like to see our members get the best deal possible and will make announcements of them when we hear about them.

DOMs by Mail

Continuing Service for Mini'app'les Members

by Chuck Thiesfeld

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

Make up a package containing the following:

- 1. Blank diskette (or diskettes if more than one is desired).
- 2. Mailer. Diskettes will be returned in same protective device used to send the diskettes, provided such will fit in the mailer.
- 3. Send correct postage in stamps - do not send money in lieu of stamps.
- 4. Self-addressed return label.
- 5. \$1.00 copying fee per DOM or disk.
- 6. A note indicating which DOMs are desired.

Send to:

C. Thiesfeld  
8416 Xerxes Avenue S.  
Bloomington, MN 55431

Please allow 60 days for delivery in USA. Incomplete packages will not be returned. DOMs 1 thru 26, except 18, EAMON #3, and 8 Pascal disks are currently available. Mini'app'les Software disks (MSD) are not available! General questions about DOMs should be addressed to Terry Schoepfner. Questions on DOM content should be addressed to Al Peterman, our DOM editor.

Please note that DOMs may also be purchased on club-supplied media by sending \$7.50 to the software sales coordinator. See back of membership list. 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 Terry for \$17.50. Or, the latest DOMs are available at regular meetings, and at some Branch meetings, for sale to members at \$5 each, and the MSDs for \$15 each.



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# MONEY MATTER\$

A Review  
by Eric Holterman

**A**ds in Mini'app'les for a new program called MONEY MATTER\$ promise a lot at a reasonable price of \$50. To top it off, a money-back guarantee, seldom seen in the software business, is included. This being tax season, tax aspects are emphasized, but the program is not primarily for tax preparation. I do not have much desire for a program to do my taxes; I suspect I can do them faster than I can learn the program. However, one that helps on my taxes as a sideline to other things like budget planning, investment record keeping and evaluation, asset management and estate planning sounds worthwhile to me.

The introduction to the manual states that "MONEY MATTER\$ is a financial planning tool which utilizes current financial information, goal setting, investment tracking and forecasting to make realistic personal decisions about money/asset management." The tax work sheets are there because they are "a logical outcome of the data collected while using MONEY MATTER\$." From my point of view, this puts the tax functions in the proper relationship with the rest of the program. There is a lot to this package. I will cover the Finances part of the program this month and the Investments part next month.

The package consists of a manual that is over 50 pages long, Finances and Investments disks. Data is maintained on two separate data disks provided by the user, one each for the Finances and Investments sections. The program is copy protected and does not include back-up disks, which are available for \$5 each. I would prefer to see this up-front in the ad; however, the money-back guarantee makes up for this. If you want back-ups, the price becomes \$60. Replacements for defective disks are made at no charge for the first 30 days and at \$5 thereafter, a reasonable policy. The program requires an Apple II+ or IIe with 48K, 1 or 2 disk drives (I definitely prefer 2) and a printer that can deliver 132 columns. The compressed mode on an 80 column printer such as Epson is fine. Upper and lower case and 80 column cards are not supported. Installation and setup are straightforward and the program initializes and formats your data disks. User support is available by phone or mail.

The program is menu driven and includes an on screen help function. The Finances disk includes planning functions (establishing a budget, net worth and investment goals), actual income/expense activity (record keeping) and tax functions. A calculations

section includes compound interest, present value and amortization functions. Virtually all the output goes to the printer. It is text and tables, no graphs, and is in an easy to follow format. There are samples of most reports in the manual, along with samples of the menu screens.

Establishing a budget starts off with entering an income and expense plan. You select the categories you want, such as salaries, dividends or rents for income and categories like car payments, charitable contributions and shelter for expenses. A combined total of 45 categories for income and expenses with up to 18 items within each category should be ample for most applications. Each item within a category is allowed a brief description, amount, frequency per year, an optional reminder of date due, the tax status (subject to, or deductible from, federal and/or state tax), who it is attributable to (mainly for tax purposes) and how the value can change over time. The change attribute can be a fixed dollar amount on a yearly or monthly basis and/or an annual percentage amount. Certain tax information needs to be entered twice, as an expense and as a tax payment. Generally I don't like duplicate entries. However, they can be minimized and there is a great deal of flexibility inherent in the system.

The change attribute of each item is particularly useful and powerful in making projections and looking at what-if situations. Different things in a family's finances change in different ways over time. One wage earner may have a stable income while another's may be rapidly rising. On the expense side, medical costs may rise rapidly while food costs change at a moderate rate. Thus, the program helps you set up a budget for today, comparing income and expenses and showing you what's left for investment and it shows how things look in six months, a year, five years or whenever you choose.

Establishing net worth provides for the entry of assets, liabilities and securities. Each is allowed a brief description, original date and value, current date and value, amount and/or rate of change in the future, identification such as account or serial number, location and owner. Securities may be entered individually or in groups as portfolios. One thing I did not like was that the net worth statement did not pick up securities data from the Investments portion

**Money Matter\$** Concluded from page 9

of the program. While this is not a major drawback, you would not normally run your net worth statement on a weekly or monthly basis. It would be nice to see the two parts work together. The change attribute works here as it does in the income/expense section. Thus, the effect is shown of different changes on each asset (appreciation on a house, depreciation on a car) and on each liability (payoff on a car loan) at any time you choose. Additionally, you now have a complete inventory of assets and liabilities for many needs from estate planning to credit applications.

**Establishing investment goals** is approached by setting specific future cash needs for each goal like a college education, home, retirement, etc. You determine the existing assets or the cash flow required in the calculations area for each goal, then move to the establishing goals area. A maximum of 20 goals can be handled together. If the combined cash flow in and out can be represented by the change function, then you can set that (as you did in the income/expense/net worth sections) and produce a report showing where you need to be to meet your goal schedule at any time. If the combined cash flow cannot be represented by the change function, you need to manually determine when the cash flow changes and enter those points before producing a monthly or annual report.

**Actual income/expense activity** is where your real financial events are entered. Up to this point the program has been used for planning only. While this area has the capacity for up to 600 entries, I felt that it would be awkward to handle day to day expenses since the complete description of each event must be entered. A 'fill in the amount' format would be easier. The best way to work with this area is to fill in monthly totals from another system such as a spreadsheet, checkbook manager or notes scribbled on scraps of paper. It is not necessary to enter any level recurring expenses more than once since the number of times it occurs during the year is part of your original entry. The categories used here match those in the planning sections and the reports follow the same format. While the program does not calculate the difference between your actual results and your plan, the comparison is easy to make.

**Tax functions** work from either your plan or actual activity. This is not a tax preparation program, but a tax work sheet to be used to see the current year tax implications of various changes in your plan, or how your tax withholding and estimated payments compare with your actual liability,

during or at the end of the year. It will complete the equivalent of Form 1040 and schedules A and B of the federal return. Schedules like C and E are not calculated but provision for entry of results from these and other schedules is provided for. Both federal and Minnesota state tax work sheets are provided. When I ran the federal work sheet on my income/expense plan, the exact tax amount was calculated. The state tax work sheet looked good although I didn't verify that separately.

I hope you have the impression that I like MONEY MATTER\$, because I do. It is not perfect. It is possible to make some meaningless or inappropriate entries and not be caught until you see the corresponding meaningless or inappropriate results on your print out. While I rate the manual as good, there are some areas which are ambiguous to me. I suspect the manual will improve as the author gets more feedback from users.

I went through the Finances disk thoroughly and did find two minor bugs for which the author provided fixes over the phone within a few hours. I can't guarantee that there isn't another one crawling around in there somewhere but I am not too concerned with this - rumor has it that even the biggest and bestest of software houses release programs with bugs...the difference is theirs are harder to fix. The program requires confirmation of all commands that erase or delete data so it is hard to do it by accident. Also, it patiently informed me when I tried to use the wrong disk. MONEY MATTER\$ is written entirely in basic. It doesn't set any speed records, and while the current speed is OK, I wish it were faster. It is published locally by POST Software. Steve Flister is the author and for the past four years has been working with small businesses using Apples. He develops, installs and customizes general ledger systems for his clients. MONEY MATTER\$ is his first venture into retail software.

The bottom line on the Finances part of the program is it fulfills its promises well, providing many useful tools to meet a variety of needs. I am impressed with the response and cooperation to my questions on this program and feel confident of future support. The price/performance ratio is excellent and so far the Investments disk (to be reported on next month) looks the same. If you have been looking for a comprehensive program of this type at a reasonable price, I suggest you try this one.

The Investment SIG will be looking at family financial planning at the April 19 meeting. This program will be part of that presentation. See the announcements section for more information.





# Apple /// Notes

by Bob Rosenberg



etailed supporting documentation pertaining to these notes have been given to the Apple /// SIG.

1. A new release of Pascal (1.1) is available. Current owners of Pascal 1.0 for the /// can get the upgrade. Write to:  
Apple /// Pascal Upgrade  
Post Office Box 306  
Half Moon Bay, CA 94019
2. A new release of Apple Writer /// (2.0) is available. Current owners should send the title page of the Apple Writer /// manual to Apple Writer /// Upgrade at the same address (above) used for the Pascal upgrade. The new Apple Writer will retail at \$275, but the upgrade is only \$100. This offer expires on April 15.
3. Dealers have an official /// clock with battery backup for \$50. It is easy to install yourself if you are out of warranty or dare the "voids all warranty" language.

4. New pricing is being announced on the 256K upgrade of older ///'s that cannot be upgraded by the simple addition of 64K chips to the memory board. The upgrade of the machines with pre-100,000 serial numbers used to be around six to seven hundred dollars. It will now be about \$300, which seems reasonable in that the more modern chip installation upgrade can run \$130-\$180 just for the parts.
5. Through the end of February Apple made its telephone Apple Serve service available free to registered Apple /// owners. Owners on the mailing list were sent information on the service in December, but only one out of every five or 10 ///'s are registered. If people haven't sent in their cards, it's probably too late to do so for the free Apple Serve offer, but they really should send the cards in (or write and give Apple the serial number even if the warranty has expired). Apple has greatly improved communications to owners of the ///.



## TIME FOR A TAX SEASON TUNE-UP

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Like the ability to lock on-screen messages into your Apple's RAM, and then move the information onto a disk for easy reference and review. A terminal program that turns your computer into a communications command center, with on-screen "help" menus, continuous updates of memory usage, carrier presence, and communication status.

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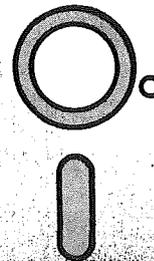
But **Netmaster's** not stuffy. It will talk to those other communications packages, but they don't work as fast and they don't check errors like **Netmaster**. And **Netmaster** doesn't only work with the **Networker** modem. Even if you already have another modem for your Apple, **Netmaster** is an outstanding value in communications software, so we sell **Netmaster** by itself for \$79. **Netmaster** requires 48k of RAM, one disk drive, and the **Networker** or another modem. It can also be used without a modem when two Apples are hard-wired together.

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# DaisyWheeling

Speed  
by Arsen Darnay

I got to thinking about speed when, last month, I used THE Spreadsheet™, Version 2, to give you a Tax Model. Concerning that model, versions of it on Spreadsheet.1, Spreadsheet.2, and VisiCalc™ have been issued as DOM#29 — and those versions have a Minnesota Tax Module as part of the total package, so that those of you who don't need to use accountants will have something to play with.

But back to the topic of speed. THE Spreadsheet, Version 2, runs very slowly whereas THE Spreadsheet, Version 1 (no longer available on the market), is an extremely, pleasingly, exhilaratingly fast software system. Wozniak (Apple's cofounder and hardware/software wizzard) had something to do with it, which may be the reason why. It also uses a modified DOS, I think, because it loads and saves in record time. I'd bought the Version 2, hoping to get an 80-column capability. But the system worked so slowly that I switched back to Version 1 after a while, and Version 2 just sits there.

Speed also comes to mind where printers are concerned. My first printer was the Smith-Corona TP-1. I loved it because it was my first one and because it gave me letter-quality printing and did it much, much, much faster than my own fastest typing — but speed is such a relative thing. After I got a Prowriter dot matrix, I learned the pleasure of getting printouts lightning-fast. And the Smith-Corona now only gets used when something formal must be sent.

My first programs, written in BASIC, were and remain slow, especially when formatting numerical values for printing on screen — because Applesoft does not provide a so-called PRINT USING command which allows you to specify that you want output in dollar format. My Print Using routines are cumbersome, especially where many numbers are printed — but since these are utility programs that I use only once a month for a couple of hours, I don't mind.

Applesoft, generally, is a slow language, but it takes experience with computers to reach that conclusion. At first the speed amazed and thrilled me; then I got used to it; later, yet, I learned to program in 6502 code, and the difference in speed surprised me — so much so that I am now a 'picky' user and dreaming of the power of the 68000 processor (in Macintosh and Lisa) which can do things so much faster than the humble (but dear) 6502.

Once you get inside the computer and learn how it does its work, you find out that even the simplest of operations — typing a single letter when using a wordprocessor, for instance — require many, many cycles of machine time.

The Apple, running at a million cycles per second, can do an awful lot of things in the fraction of a second. But it takes real speed to simulate dozens of spaceships moving across the Cosmic Vault, flashing in different colors, exploding their missiles, and shattering against barriers. The feeling of simultaneous action is illusion. Each dot on the screen is put there in sequence. But our sense of time is slow compared with the speed of the machine, so that the very rapid sequencing of events appears to us to be instantaneous. It's much like frames of film, each a static picture, flashing by before our eyes.

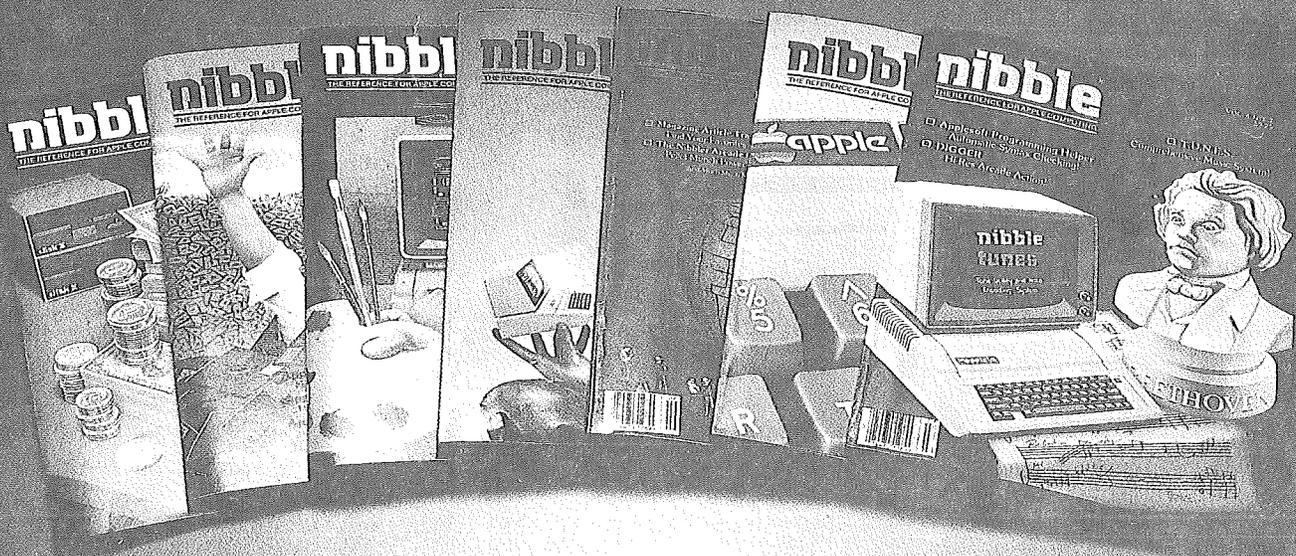
Since Einstein, we say that things are relative, and it is true. As we get accustomed to the speed of the computer, our tolerance for slower models disappears. Use a spreadsheet programs for a month, and what at first was great and amazing — its power to recalculate every value 'instantly' — becomes annoying . . . because on larger models the recalc time can stretch into seconds (shriek, cackle!!!). Yet the guy who is annoyed used to spend the better part of an afternoon, back in the good-old-days, recalculating a spreadsheet by hand to test a single variant assumption. We are so easily spoiled.

And what do we do with all the time that, supposedly, we've saved by speeding up our lives through computerization, first, and then by getting ever faster computers? If my experience is typical, we spend it playing with computers rather than, as we should, redoing the children's bedroom. Others of you, I am sure, have more sense. God speed . . .



A new version of HIGHER PRINT called HLQP (Higher Print for Letter Quality Printer) is being used to print the article headings and paragraph lead in. This printing process is in fact integrated into Pie Writer so that no paste-up is required. The program should work with most Qumes, Diablos and NEC letter quality printers.

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## Apple //c

**R**umors abound that the Apple //c (or is it ][c?) will be announced in San Francisco on April 24th. Not known at time of writing is the degree of compatibility with the ][+ or //e. Also not known is whether the computer includes a display. However, later this year you can expect a flat screen monitor for the //c!

Details:

- 128k of memory
- Weighs 8 lbs.
- 80 column
- Color
- No expansion slots but has many built in features
- CMOS technology for low chip count including 65C02 microprocessor
- Price \$800 or \$1300 depending on which rumor you believe

Maybe Apple will rename it 'Walnut'?



### 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.

## Mac Users

How about forming a MAC SIG? Call an officer. Mini'app'les can provide an excellent umbrella for a MAC Special Interest group: organizational support, newsletter, distribution system, IAC support, etc.



## Videocassette

A review of  
**Your Apple Computer: A user's Guide**  
by Eric Holterman

**V**HS format videocassette make effective training tools. I stumbled across this new one (to me at least) at the main Dakota County Library in Eagan. It's titled "Your Apple Computer: A user's Guide" and is put out by The Center for Humanities, Inc., located at Mount Kisco, NY 10549. I wasn't familiar with either the tape or the outfit that put it out so I couldn't resist checking it out to take a look. It is part of the library's CORE collection, so there is no charge for it. However, it must be picked up at the Eagan location and can be kept out for only two days. Other libraries in the area may also have it. I have not tried to check its general availability.

The tape is an introduction to the Apple //e and appears oriented toward classroom and first time computer user use. It includes a Teacher's Guide that has the complete script in it. The tape is based on a sound filmstrip or sound-slide show which may also be available locally. It runs about an hour and is divided into six parts: a general introduction to computers and what they do; The Keyboard; Using Diskettes; More about Diskettes; Application Programs; and Programming Languages. The Teacher's Guide includes discussion questions after each section. The program also comments on some of the differences between the //e and the ][+.

The tape provides a good, concise introduction to the Apple for the beginner. It does not get technical or replace **reading the manual**, it just gets someone one started with a good frame of reference as to what all the new stuff he has is for and why the darn thing keeps beeping at him. It is for the beginner, so don't expect it to help much if you have been using an Apple for more than a few days unless you have been doing so with blinders on and one application program. On the other hand, it would be very useful for the first time user or someone thinking about getting an Apple who wants some idea of how it works.





# Applewriter Glossaries

by Steve George

**I**t seems that two of the best kept secrets in the world of AppleWriter ][ are its Glossary and WPL functions. The latter is Word Processing Language and is a very powerful tool for automating functions. WPL is the basis for cranking out form-letters with the proper name and address inserted from another file. You can even have it "conditionally print", dependent on the recipient's name, etc. That way a single letter can be written to a variety of people, each to receive a 'copy' which contains information relative to him/her. But, that's another article.

I confess that I pretty well skipped reading about the Glossary in the manual... after all, when would I need a listing of the words I'd used in a document? Well, anyway, that's what I had learned glossary meant. But, NOOOoooo....

The Glossary function of AppleWriter ][ was a mystery until Tom Supel of the Minnetonka Branch provided me with the information I needed. As used within the context of AppleWriter ][, Glossary has an entirely different meaning or at least implementation.

[After reading through the next section I, the author, was terribly confused. 'Oh, Great', I can hear you saying... The confusion may arise because there are so many different 'configurations' of Apples out there (vanilla, lower case, shift-key mods, 80-column displays, etc.) that what follows and how you would implement it depends upon your setup. Once you've entered CTRL-V you're allowed to enter characters not normally available. For example (with lower case and the shift-key mod) I would type ESC (hit the ESC key once) to enter the character representing ESC. However, without the shift-key mod, you'd type ESC ESC to get the proper character onto the screen. At any rate, I've written the following verbage with my system in mind (I know how IT works!) so please take that into account when determining what YOU must type...]

The Glossary allows you to define single keystroke entries to have special meanings. Two immediately recognizable possibilities are for replacement of 1) an often-typed or difficult-to-type phrase and 2) the printer control commands. Tom and I have placed in a file called EPSON1 the special keystrokes needed to select condensed, double strike, double wide, super-, subscript, etc. EPSON1 is included as part of DOM#29 - see elsewhere in this newsletter. The same DOM includes a C. Itoh version also. Normally to implement

Double Width printing, it would require memorizing the proper character sequence or digging out the (Epson MX Graftrax Plus) manual to learn that I must type CTRL-V ESC SHIFT-W CTRL-A CTRL-V to turn on Double Wide and CTRL-K CTRL-V ESC W SHIFT-CTRL-P CTRL-V CTRL-K to turn it off! {The CTRL-K's are to get into shift-lock -- one of the ways I can get the @ symbol. See page 53 of your AppleWriter ][ manual for entering symbols with your configuration.}

We have replaced these two CONFUSING character strings with w and W in our Glossary on DOM#29. So now to get Double Width mode, we simply type CTRL-g (to get to the Glossary mode) w and away we go. To turn it off: CTRL-g W.

Note that DOM#29 includes much more extensive applications of the glossary concept plus a series of 'help screens' which can be brought up for review at any time without destroying your document. The file 'Epson Help' is written in AppleWriter ]['s WPL. To receive help with the use of the Glossary terms within EPSON1 as we have defined them, BOOT your Applewriter ][ disk, then type: CTRL-P and the prompt line "[P]rint/program :" will appear. In response, type DO EPSON HELP. Ten screens comprise the 'Help' section, which primarily show how we have defined certain keystrokes.

The glossary feature of Applewriter ][ even allows you to define your own characters. As long as what you would like to print will fit within the normal 'footprint' of the print-head, you can create rather interesting symbols. (If it won't fit in one, you could use two keyboard letters to define your special symbol and then print them side by side). Three examples which will probably be part of a future DOM are Sigma, pi, and the "plus or minus" symbol. To print these special symbols we have to enter graphics mode, set the character length, select which pins of the print-head should fire and when, and then exit graphics mode.

Example #1: sigma ( $\Sigma$ )  
`†KL@@@cw]IAC@@@`

Example #2: pi ( $\pi$ )  
`†KL@@@DH0H0HP@@@`

Example #3: "plus or minus" ( $\pm$ )  
`†KL@@@BR:RB@@@`

Where: = a CTRL char  
 † = the ESC char  
 ] = right bracket char



An awful lot of typing for what you get, huh? Well, each of the above examples can be reduced to a keystroke in a Glossary. Don't ask me why, but so far I've defined the keys as follows: S = Sigma, @ = pi, and + = "plus or minus".

I have started to create Glossaries of these types of symbols and they should be available for your use shortly. So far, the general categories include: math, astronomy & zodiac, medicine & pharmacy, electronics, biology & chemistry, monetary, music, physics, religion, and miscellaneous.

#### Glossary limitations:

A maximum of 2048 characters per Glossary. You can have as many Glossaries as you like/need, just not all in the Glossary memory all at once. But that's no problem; you'd only need to load the appropriate one through the Additional Functions Menu. Terms can be defined (as in S @ + above) by any single keystroke character except ? \*). Also, UPPER and lower case definitions are available. (It appears that ctrl characters are also). So, you COULD (Why, though,) define an up-arrow as "A", a down-arrow as "a", and a left-arrow as "CTRL-A"! Lastly, each term of the Glossary is limited to 128 characters each.

To see EXACTLY how we have keyed in each of the definitions, load the Glossary EPSON1 (on DOM#29) into normal text-memory (through CTRL-L) and take a look. If you're interested in seeing WPL in action too, load in one of the 'help' files. (The Main Menu of the 'help screens' might be a good place to start: EPSON HELP).

To create your own Glossary, it is probably best to begin with a clean slate. So, CTRL-N Y will wipe everything out of current memory (but not any already-active Glossary). Then, type a single character which you will use to 'call-up' the term you're about to define, followed by the proper characters to make up your symbol.

For example: The EPSON1 Glossary has the British pound sterling defined as the # character. It is defined in the EPSON1 file as follows: #t>A†=

What this does is: whenever CTRL-G # is typed, the characters which enable the alternate Epson character-set are output, creating the pound sterling symbol. The symbol is created by first setting the eighth bit (alternate Epson character set or "high-res" graphics). A CTRL-A has an ASCII value of 1. This is in addition to the 128 (high bit set) so you'll be printing Epson's ASCII character for 129, the British pound sterling. Finally, the eighth bit is set to 0 and you are returned to the normal character set.

## DOM#29

April, 1984  
by Alan Peterman

This Disk of the Month is designed as a support disk for spreadsheet users who wish to prepare their 1983 income tax return using VisiCalc™, or THE SPREADSHEET™ version 1 or 2. It also contains Applewriter II files to support the two most popular printers in some rather difficult configurations. This DOM has only one program, other than the introductory programs, which will compute many of the 1983 tax results for users who do not have any of the spreadsheets.

The program, TAX.83, written by Sam Fine, represents his latest version of a homegrown and very useful program to calculate taxes due for both the Federal and State returns. It is in Applesoft and uses the files READAT and SCREENDUMP.

The DOM has three files, TAX MODEL.VC, TAX MODEL.SS1, and TAX MODEL.SS2, which are the templates discussed in the January & February 1984 issues of the newsletter. They were created by Arsen Darnay and INCLUDE the State calculations. To use these files it is recommended that you peruse the newsletter articles and test the results against simple problems before betting the IRS that the results are perfect. Neither the club nor the Authors can take any responsibility as to the accuracy of any part of these tax models or programs. John Hansen should be credited with transforming the SPREADSHEET template into VisiCalc format (TAX MODEL.VC) and Dan Buchler did some editing on THE SPREADSHEET version 1 (TAX MODEL.SS1).

The rest of this disk is devoted to Applewriter II files that create and explain the use of glossary files. The two files, EPSON1 and PROWRITER1, are loaded into Applewriter II and allow easy access to printer formatting, type style, etc. Steve George devised this system for the Epson printers and Chuck Boody rewrote the Glossary file and documentation for the Prowriters. To use the information files once Applewriter II is loaded, insert this disk (or preferably a copy) and type "CTRL P" to get to print command, then type "do epon help <c/r>", or if desired "do prowriter help". This use of the WPL execution file will lead you through documentation that should help you to understand how the glossary file can be used to make the printer use easier. (See also Applewriter Glossaries, elsewhere in this newsletter.)



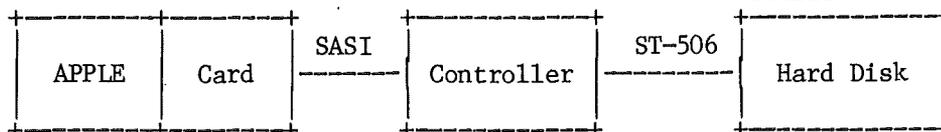
# Doing It The HARD Way

A Low Cost Hard-Disk  
by Scott L. Ksander

I guess, like most every APPLE owner, I have a wish list of items I'd like to have for my computer but know I will never be able to afford. For me, a hard disk was right at the top of the list. Not only was I tired of playing the shuffle game with my collection of floppy disks, but I also longed for the higher transfer rate. For a while I was looking at RAM Disks to solve the transfer rate problem, but they only addressed one dimension of the problem and also seemed over-priced for the benefit. However, hard disks are by no means cheap. The best price I have seen on an APPLE hard disk was about \$1400 for 5 megabytes and this was not a "brand name". The "well known" hard disk units are currently selling for over \$2,000. So, faced with this reality, I just had to keep on dreaming until ....

On a recent business trip to California I visited Halted Specialties Co, Inc. in Sunnyvale, California. Their business is, loosely, "electronic junkyard". They sell used equipment and also new equipment that has been liquidated from the many small electronics businesses that seem to come in and out of business on a daily basis in Silicon Valley. Well, there it was - a brand new, in the original box, Tandon 5 megabyte hard disk and it was on sale for \$300!! Halted claimed it was tested and "guaranteed" good. After a lot of thought about how much risk a guy from Minnesota was taking by buying a hard disk from a "junk yard" in California, I decided that this was my once-in-a-lifetime chance to have the hard disk I had always dreamed of.

Now before you decide I am totally crazy, let me give you some background information. A few months before, I had investigated another "deal" involving a hard disk and had learned what is really required, in terms of controller, adaptor boards, interfaces and software, to connect a hard disk to an APPLE. The disk I bought, a Tandon TM602S, has an industry standard ST-506 interface for which APPLE adaptors and controller are available from XEBEC. The general design for the connection is as follows:



The SASI (Shugart Associates System Interface) connection is also an industry standard interface which means that I will be able to also use the hard disk on another processor if I get rid of the APPLE someday. (Heaven forbid!!) The card uses one slot and effectively "translates" the APPLE interface to SASI. A ROM driver is provided on the card to drive this translation.

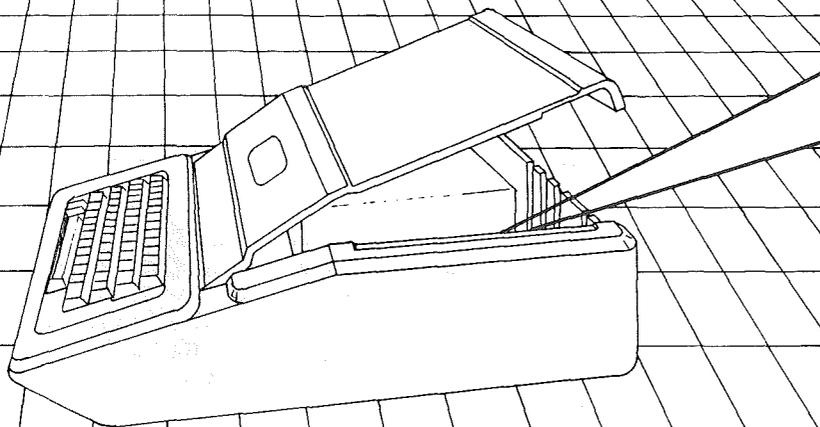
So, armed with this little bit of knowledge, I charged the disk on my VISA card and took my new Tandon TM-602S home to start on a new adventure in computing. (Boy, does that sound corny!!)

Now that I had the disk, the next logical step was to get a controller. I called the XEBEC main office, also in Sunnyvale, to confirm the exact controller I needed. After learning that all their technical folks had moved to another state, I reached the person in charge of XEBEC distribution for the Minnesota area, Ms. Jennifer Cornforth. She was very helpful and confirmed that the standard XEBEC S-1410 controller would drive the Tandon TM-602S. She told me that the Minnesota distributor for XEBEC was Kierulff Electronic in Edina. Right away I thought this might be interesting because I have been an "electronic hobbyist" for some time and I had never heard of these people. If they are such a big distributor, why hadn't I heard of them? Anyway, I called to see about my controller.

The people at Kierulff knew right away what I wanted and told me they had almost 400 in stock. How many did I want? ONLY ONE!! They said they normally didn't sell single units because their business was supplying to computer companies and other manufacturers. I told them I had gotten their name directly from XEBEC and, after some discussion, they agreed to sell it to me on a "cash pick-up" basis if I brought a certified check. I agreed (What choice did I have?) and ordered an S-1410 controller, APPLE Host Adaptor card, and APPLE DOS software per the instructions from XEBEC. The S-1410 was \$295 and the Host Adaptor was \$99. Certified check in hand, I went to Kierulff and picked up the two boards. Everything looked OK but there was

GOTO 20

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## Doing It The HARD Way Concluded

one problem — no documentation with the boards. There was not a single sheet of paper with either board. Kierulff explained that they didn't stock the manuals as their clients already have the documentation and just need the boards. I left Kierulff somewhat depressed as I now had \$694 on the line without any manuals or instructions of any kind. That's an awfully expensive paperweight!

A quick call back to Ms. Cornforth at XEBEC turned a depressing situation into a positive one. I explained the problem to her and she said she would send both the controller manual and the APPLE interface information to me free of charge. I can't say enough about the great help I received from XEBEC. Things were beginning to look up.

The next call was to Tandon to find a disk drive manual. Again, everyone was very helpful. They explained that it was not a current product, but they did have a copy of the preliminary manual that they could send me, again, free of charge.

After a few days of waiting, both manuals arrived and I began to plan my next steps. Only two items remained. First, the cables to connect the drive and controller, and the Host Adaptor and controller. The cables were described in the S-1410 manual and available from DIGI-KEY right here in Minnesota. The cables sold for \$17.37. The second item was the power supply and any mounting enclosure I wanted to have. This was a place I first thought about cutting some cost corners. A home-grown power supply and a mounting "shoe box" would have made a functional unit but I decided that since I had put this much effort into the project I'd like to end up with something that would also look nice. After looking through some magazine ads, I found a place called Microware, Inc., in Canton, MI., that sells an integrated power supply and cabinet, complete with cooling fan, for the hard disk. The styling is much like that of the IBM PC chassis with lighted power switch on the front panel. I called them and they sent a price list complete with a photo of the item I was considering. After a few moments of counting my pennies, I ordered the unit for \$165.

Finally, all the hardware arrived. I plugged it all together, turned it on and, guess what, IT WORKED!!! The software from XEBEC patched DOS 3.3 to drive the disk and included a FORMAT and COPY utility to set up the disk and copy files. The software also allows the disk to be partitioned between DOS, CP/M, and PASCAL, but initially I dedicated the entire disk to DOS. The 5 megabytes must be divided

up because of DOS design into smaller partitions. These partitions are designated using the VOLUME (V) entry on DOS commands. The XEBEC software allows for "small" volumes that are the same size as standard APPLE floppy discs (35 track \* 16 sectors/track \* 256 bytes/sector = 143,360 bytes) or "large" volumes that are the maximum allowed by DOS design (50 tracks \* 32 sectors/track \* 256 bytes/sector = 409,600 bytes). The disk can be divided up between these two types in any way you wish and there is a configuration utility provided to help you decide how best to divide the space for maximum device utilization. After some learning by trial and error, I finally configured my system and began running programs.

My first impression was "THIS IS FAST!!" BLOADs that used to take minutes are now done in seconds. Even with inefficient DOS 3.3 I/O, the speed of the hard disk is still impressive. Even after loading all of my "normal" files onto the hard disk, I still had almost 3 megabytes left over, so space was simply not going to be a problem. Using the V parameter was a little strange at first, but it became very normal after a short time. Any program that wasn't copy protected and used standard DOS 3.3 seemed to work fine. The copy protected packages are another story. They seem to fall into two groups. First, those that have copy protected binaries but use standard DOS I/O. These, such as Magic Window II, have no problem accessing data files on the hard disk but the binary must still reside on the floppy. The second group are those that are both copy protected and use their own version of DOS. These, such as VISICALC, cannot use the hard disk at all. I have contacted the manufacturers of most of my favorite packages and only VISICALC has told me they simply can't help. All others have promised to send me more information. Now I just have to wait and see.

In summary, being your own "sub-contractor" for a hard disk can be both fun and save you money. My final total was about \$875, plus I now have a very good understanding of the device itself. Ads for "surplus" hard disks seem to be becoming more common in publications such as THE COMPUTER SHOPPER and BYTE.

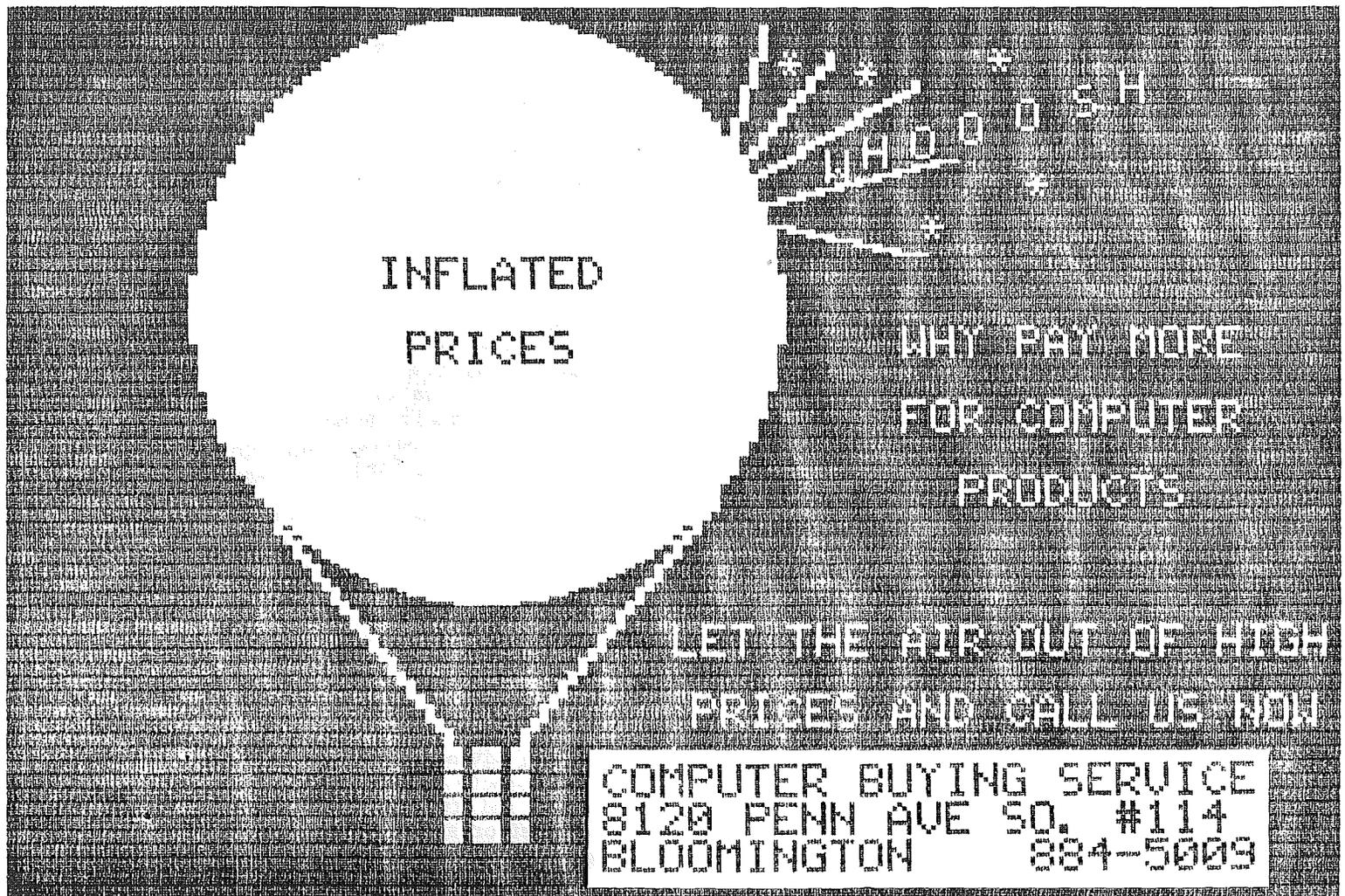
If you have a desire to "do-it-yourself", it can be a very rewarding project. For reference, the following is a list of suppliers and part numbers.

Halted Specialties Co.,  
Inc TM602S  
827 E. Evelyn Avenue  
Sunnyvale, CA 94086  
(408/732-1573)

GOTO 22

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COLUMBIA COMPUTER	\$3170	\$2460
TANDON TM101 DRIVE	\$358	\$299
VERBATIM 5¼" DISKS(10)	\$37.50	\$25.00
SENTINEL 5¼" DISKS(10)	\$45.00	\$22.50
DBASE II SOFTWARE	\$700	\$409
BANK STREET WRITER	\$69.95	\$49.95
PFS: FILE	\$125	\$85

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# To The Editor:

**A** couple of issues back, Dick Marchiafava made the excellent suggestion that a "Letters to the Editor" column would be an appropriate addition to the newsletter. This letter is written to concur as well as to point out that our editor does, indeed, receive letters from club members. The fact is, however, that many of these letters contain such helpful information that they are printed as articles, at least two of which are to be found in this very issue.

My suggestion, therefore, is that club members continue to write to the editor with helpful information to be shared with club members via the newsletter, but, in addition, let's hear from more members with regard to how you feel about the club and about the newsletter.

What do you like? What do you see as areas for improvement? What else would you like to see covered in the newsletter?

I have been a club member for over two years now, and I continue to be overwhelmed by how generously sharing and caring our members are. Frankly, I don't know of any other organization in which so much knowledge and know-how is shared so freely and graciously.

Let's hear from you.

Jo Hornung

XEBEC  
P.O. Box 512  
432 Lakeside Drive  
Sunnyvale, CA 94086  
(408/733-4200)  
(702/265-4000 -  
for tech info)

Kierulff Electronics  
7667 Cahill Road  
Edina, MN  
(612/941-7500)

Microware, Inc.  
41711 Joy Rd.  
Canton, MI 48187

DIGI-KEY Corp.  
Highway 32 South  
P.O. Box 677  
Thief River Falls, MN  
56701 (218/681-6674)

S1410 Contr - #104526  
S1410 Manual - #104524  
APPLE Adpt - #103916  
APPLE Manual - #100409  
APPLE DOS Disk - #100645

Hard Disk Encl. - #910004

R8326-36-ND - Adpt cable  
R8513-6-ND - Drive cable  
R8516-6-ND - Drive cable

**I** have become aware that our organization is not serving and is no longer satisfying the needs of a very important segment of our membership. This segment is the members who are the advanced and experienced computer users, many of whom are the persons who founded this organization, and run it!

These persons have given of their time and experience and have helped many others. However, as time passes, they receive less in the way of satisfaction and returns as a result of their membership. The time comes when these individuals just wander away feeling dissatisfied.

I think that we should not lose these members and the rich stores of experience that they have, and share freely. Therefore, I propose that the advanced computer users get together in ADVANCED SIGS or ADVANCED PROJECTS GROUPS in order that they may continue to remain interested, challenged and involved with our club! There is more to learning about our computers than the elementary.

To you advanced users I say, go ahead and set up projects or SIGs that you can be excited about and fulfilled in. We will all applaud your efforts and be the richer for it. As you grow, we will all benefit!

Dick Marchiafava



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# Increasing Disk Storage (Part 4)

Catalog Directory File Space  
by Steve George

The following is a representation of how info is stored in the CATALOG Directory. Bytes labeled "00" always contain zero. This sample Track is the first Track of a normal-DOS Directory: Track/Sector \$11/F. Each allotted Directory sector has 2 'link' bytes which inform DOS where the rest of the CATALOG is stored. AA/AB is the first link and will usually contain \$11/0E. (The VTOC usually tells DOS to start looking for the Directory at \$11/F but can be changed to look for it just about anywhere.)

The next labeled bytes we encounter begin actual file info: BA/BB is the T/S List pointer which indicates where the T/S List is for this program. And, BC shows the file type: Text (00), Integer (01), A'Soft (02), & Binary (04). Add \$80 to these numbers if the file is locked.

The name given for the file is stored in BD (30 chars padded with spaces, ie: \$A0 = Normal space, if necessary). Lastly, BE & BF contain the HEX length of the file (lo byte first).

Relative Position	Portion of a Directory Sector
00	00 AA AB 00 00 00 00 00
08	00 00 00 00 BA BB BC BD
10	BD BD BD BD BD BD BD BD
18	BD BD BD BD BD BD BD BD
20	BD BD BD BD BD BD BD BD
28	BD BD BD BD BD BE BF CA
30	CB CC CD CD CD CD CD CD
38	CD CD CD CD CD CD CD CD
40	CD CD CD CD CD CD CD CD
48	CD CD CD CD CD CD CD CD
50	CE CF DA DB DC DD DD DD
58	DD DD DD DD DD DD DD DD
60	DD DD DD DD DD DD DD DD
68	DD DD DD DD DD DD DD DD
70	DD DD DD DE DF etc...

When a file is DELETED, the stored info is not erased from the Directory, the T/S List, or the data sectors. However, the VTOC marks the sectors as free for future storage. So, it is possible to recover a DELETED program following the info below provided that an intervening SAVE hasn't over-written your DELETED file's info:

STEP1: The DELETE command moves the Track of the T/S List pointer to the last byte of the file name and places \$FF in its place. \$FF is

DOS's signal that this CATALOG entry has been DELETED and the space is now available for storage. If you simply do the reverse, your Directory entry will re-appear.

STEP2A: You must get the info contained in the T/S List and use it to tell the VTOC which sectors are no longer free, and are now used.

STEP2B: (in place of 2A) B/LOAD the file as appropriate and then B/SAVE the file under the same name and let DOS do the hard part with the VTOC.

That's it! You have Un-DELETED your file.

The above file names (BD BD ... for example) can be ZAPPED with 'any' HEX bytes you choose. If in the range of \$01 to \$3F the entry will be in Inverse and will give your printer migraines (these are control chars). If in the range of \$40 to \$7F they will be Flashing. \$80 to \$9F are again control chars, and \$A0 to DF are Normal Text chars. \$E0 to \$FF are lower-case chars (at least with a l.c. adapter they are).

Now you can ZAP any title into existence you'd like (or blast offending ones!).

The first article "INCREASING DISK STORAGE, Intro: Ways to Save Disk Space", alluded to what's next: the process of ZAPPING titles which waste NO storage space. This is primarily accomplished by directing the T/S List pointer (BA/BB, for example) to within the Directory itself (specifically pointed to T\$11/1 which will in all likelihood contain all zeros just like an empty T/S List would) -- a trick I picked up from examining several disks. Now I regularly start a title within a Directory sector with the following:

BA	BB	BC	BD	BD	BD	BD	BD	BD	BD
11	01	00	88	88	88	88	88	88	88
T/S List pointer			Text file			backspaces			
unlocked									

The \$11 01 "says" the T/S List for this file is located at T\$11/1 (within the Directory). The \$00 "says" it's an unlocked file of type: Text. The seven \$88's (control-H's) backspace across the sector count, file type, and \* of a locked file to position the title at the left. The info which you backspace over still



# Mail Bag

by Arsen Darnay

**E**vidently the micro-world is an exploding industry. The amount of junk mail is astonishing. It gives you rather a sense of power to sift through a couple of months' accumulation and make BIG DECISIONS, i.e. what portion of this stuff to share with you, whose plea for attention I should magnify by putting it into this occasional column. As always, I am guided by unerring good sense, care for my fellow humans, and my well-developed prejudices. So here goes.

Machine Language enthusiasts: as you well know, the amount of material available to help you learn or to improve is rather thin. Here is a package that may interest you, called "Apple II - 6502 Assembly Language Tutor" published by Prentice-Hall, Inc., Book Distribution Center, Route 59 at Brook Hill Drive, West Nyack, NY 10995. Sounds like a good deal. You get a diskette and a book for \$34.95, and the descriptive material suggests you'll get more than your money's worth. My experience: you need all sorts of aids to find tracks through that jungle.

VisiCalc enthusiasts. In case you didn't know, you can join VisiGroup, an international VisiCalc User's Group, and get SpreadSheet, their monthly publication, for \$2.50 (Members) or \$5.00 (Nonmembers). Write VisiGroup, P.O. Box 254, Scarsdale, NY 10583. The publication is full of good ideas, programs, utilities, tips, etc.

Football? Yes. Sterling Swift Publishing Co., 7901 South IH-35, Austin, TX 78744, has published a series of software programs for football training. The last of the series, "50 DEFENSE VS RUN," is now available (for \$99.95). A preview diskette (for \$9.95) will help you decide whether to play this game or not. {Editor's note: This program is being reviewed}

Who's Who . . . in Microcomputing. A 500-page directory is available for \$39.95 from Datapro. Call toll free (800) 257-9406 to learn more about it.

I remember the late 1960's fondly, and the Whole Earth Catalog was a part of that experience. Now there is the Whole Earth Software Review, and if the promotional blurb I have is an indication, this will be something special -- a quarterly magazine with more than the usual value, attention to presentation, history, and such. Charter subscription is \$30 for two years (8 issues). Write to P.O. Box 27956, San Diego, CA 92128.

The Professor puts out a thing called "The Professor's Chronicle," a newspaper-sized advertisement for software of educational bent. Don't know who "The Professor" is; sounds as mysterious as Dr. Who; but the programs offered -- example a French Language Computer Series, a questionnaire/test maker, Applesoft Tutor, and others -- suggests that those with educational responsibilities ought to be looking at this. Send for your copy of "The Professor's Chronicle" by writing to The Professor, P.O. Box 301, Swanton, VT 05488 or call (514) 747-9130.

A couple of FORTH items. I include these because, I've heard, FORTH is a cult with a following, and I'd like to be helpful although I know next to nothing about this computer language. There is a free on-line FORTH data base available by calling the Fig-Tree. How to do that? Dial (415) 538-3580 at any time using a 300-baud modem; then type two carriage returns. Or call the Fig Hot Line (415) 962-8653. Next FORTH item -- and this makes no sense to me, but might to you: apparently you can get several printed listings, including the new 1983 FORTH Standard by the FORTH Standards Team by calling (213) 821-4340 and talking to MicroMotion. You can also write them at 12077 Wilshire Blvd. #506, Los Angeles, CA 90225.

Finally, CLOSING THE GAP is organizing a major national conference on the use of microcomputers and technology to help the handicapped. It will take place in Minneapolis on September 13-16 at the Raddison South Hotel. To learn more and to arrange for participation, contact Paula Barnhart, Closing the Gap, P.O. Box 68, Henderson, MN 56044 or call her at (612) 665-6572.



## DOM #29 Concluded from page 17

For those of you who are interested, this article is also included on the DOM and may be displayed with the program VIEW TEXT. This is the same program that displayed information about the mini-assembler on DOM #25. It can be used to display almost any sequential text file by modifying the names in line 110. Alternately, an input routine could be added to ask for the name of the file to be displayed.





# Screen Dumps

Apple Business Graphics and ZoomGrafix  
by Tom Alexander

**R**ecently, I acquired APPLE BUSINESS GRAPHICS (ABG) to draw graphs and charts on my Apple //e. It's a nice program but will only print the graphs if you have an Apple Silentype printer or a limited number of other output devices, such as the Qume Sprint. Having an Epson MX100, I was out of luck.

After asking around for a while, I finally have a solution. In addition to ABG, one needs the ZOOMGRAFIX (ZGR) program to print the graph.

Here's how the graph is printed:

1. Create a graph using ABG. Save the image to a screen file. Load the screen file to display the graph on the monitor.
2. With the graph displayed on the monitor, remove the ABG Plot:Master disk from drive one and replace it with the ZGR disk.
3. Press CTRL-RESET. (Apple IIe owners - do NOT press Open-Apple.)
4. Zoomgrafix will now boot and the operator can direct instructions to the printer using the questions on the screens that follow:
  - a) Printer Screen - asks which printer is being used. There are 30 printers listed, including Epson MX, Qume, MT80 and others.
  - b) Interface Screen - asks which serial card is installed. 34 are listed, including Apple Serial, Grappler, Tymac, and others.
  - c) Interface Slot Screen - asks which slot the interface is plugged into. Slot 1 is the default answer but can be changed by pressing the correct number.
  - d) Linefeeds Screen - asks if the printer needs linefeeds when printing a graph. If over-printing occurs, the answer is Yes.
  - e) Delay Screen - asks how much of a delay the printer needs. The default answer is 20 or 5 seconds. Printing a graph creates a lot of heat - the delay allows the print head to cool off.
  - f) Set up Screen - asks if the information previously gathered should be made permanent. When in doubt answer No.
  - g) Copyright Screen - no questions. Press Return to continue. h) Picture Screen - asks if the image should be <S> swapped, <F> flipped, or <L> loaded. When ZGR is used in this procedure, just press Return to continue.

- i) Main Menu Screen - lets you vary the printing of the graph in many ways. 9 options are listed and can be changed by selecting the number.
- j) Final Screen - asks if it is OK to print the graph. If the answers to the questions on the Main Menu Screen are correct, press Y to print the graph. Pressing N will take you back to the Main Menu Screen (i) for corrections.

5. Print the graph.



## Dan on Printers

by Dan Buchler

**P**rinter news is as big as ever, but Dan just hasn't got his act together in recent months. Al Peterman tells us that there are two new C. Itoh Prowriters on the market. These are:

**8510SP** This is similar to the regular Model 8510 except it's faster - 180 cps in high speed mode, 120 cps in correspondence mode. It costs about \$100 more than the regular 8510.

**8510BPI** This does everything that the regular 8510 will do plus it contains an extra board which through switch control provides EPSON compatibility! It costs about \$75 more than the regular 8510. Now you can have an Epson and C. Itoh in one case!

Apple recently announced the Imagewriter which normally lists at \$595, but if you buy it with a Mac, you can get it for \$495. It seems that the Imagewriter is simply an update of the Apple DMP. It is made by C. Itoh, has identical mechanics to the Prowriters, but a new case and special firmware. The DMP's firmware was very similar to the Prowriter, but the Imagewriter has significant differences so that it can support the Mac, Lisa and probably new goodies on the //e running under ProDos.

If you are in the market for a Letter Quality Printer, one interesting development is the Diablo 630 ECS. (Extended Character Set) This is a variation on the Diablo 630. A special print wheel containing over 175 characters in two concentric rings provides, in addition to the regular ASCII characters, an almost complete upper and lower case Greek character set and many other special characters.





# Minutes

March Board Meeting, March 14th.

by Hugh Kurtzman

**T**he minutes were read. There were no corrections.

Treasurer's report:

Balance Feb 1, 1984	6443.81
February payments	2485.74
February deposits	3411.70
	<hr/>
Balance March 1, 1984	7369.77
March payments	2385.61
	<hr/>
Balance Mar. 14, 1984	4984.16

Applications	Subir Chatterjee
SIGs	Dick Marchiafava
Branch	Ron Androff

There being no other business, the meeting was adjourned at 9:30 PM.

† The new bylaws were approved by the membership at the April 21st regular Mini'app'les meeting.



Jere Kauffman presented a proposal from Dan Buchler and Jere Kauffman for a P. A. system. The proposal was tabled so the club can try out some systems and search for something less expensive.

Ron Androff reported on the new South meeting location. We will be meeting at Lincoln Center (formally Lincoln School), 88th and Queen South, in Bloomington. This is just a few blocks south of our old meeting place.

We are looking for a board meeting place, a room large enough for 30 and available the second Wednesday of each month. A central location would be helpful.

There was considerable discussion of the club establishing an office. A committee, chaired by Chuck Boody, will look into suitable low cost places.

We have received a proposal from The Software Centre. It was moved that we write a letter to them thanking them and suggesting they buy an ad in our newsletter informing our members of their proposal. We will call attention to the proposal in the announcements section. It is club policy not to endorse any business.

Dave Laden chaired the meeting during the nominations. The following officers were nominated:

President	Dave Laden
Vice Pres	Scott Ueland
	Mark Abbott
Secretary	Ken Slingsby
Treasurer	John Hansen

The following Directors were nominated to be elected if the new bylaws pass: †

Communication	Dan Buchler
Software	Pete Gillis
Technical	Hugh Kurtzman
Tech. SIGs	John Schoeppner
	Jay Warrior

## Disk Storage Concluded from page 23

gets printed, but then it is over-printed with your title. On screen it is clean, but on printer its semi-messy when over-printed. Simply eliminate the use of \$88's to clear this up.

In the remaining bytes of your title (all the remaining 'BD' in our example) you can choose any HEX bytes as listed on page 15 of the Apple ][ Reference Manual. If your title is less than the remaining 23 bytes, you must pad your entry with chars to fill the space to 30 chars.

Finally, place "00 00" in locations BE BF to indicate that the file has zero length.

OR: An alternate method would be to combine the ease of use of a header-maker with the 'savings' of a ZAP. Start by creating titles with the header-maker. Remember that 'legal' file names 'have' to start with an Alpha char which could reduce your usable-title length by 1. Then DELETE the files (to free-up the sectors wasted) and fix up the entries with your ZAP to show "11 01" as the T/S List pointer, "00 00" as the length, and lastly, fix the last byte of the titles. (DELETE has exchanged the first byte of the T/S List pointer with the last byte of your title.)

Oh, did I forget to mention the obvious: DELETE your "Hello" program to save at least 2 sectors, with the non-fatal result that you'll receive a "File Not Found" Error if you try to Boot from this disk. DOS is loaded in just fine, just your "Hello" program is missing!

Refs: Beneath Apple DOS, Quality Software  
Call -A.P.P.L.E. magazine  
Apple ][ Reference Manual





# Platforms

David E. Laden for President

**C**hange is everywhere. Seasons change, technology changes, people change. Over the past four years, I have seen Mini'app'les undergo many changes. The organization has grown from a couple hundred members to 2000 members. In 1980, the club formed its first Special Interest Group; now there are twelve. Branch groups were first recognized in December, 1981. At last count, there are five branches with more on the way. In 1980, the majority of members were interested in hardware and in writing programs. Today, there is a much greater diversity of interests in the club. Many people are not interested in hardware or programming, but just want to use their computer to help them in their business, profession, or personal life.

Each of these and many other changes have brought with them opportunities and problems. I have had the privilege of serving on the board for the past three years. During this time, the board has tried to take advantage of the opportunities and solve the problems. One of my major concerns is the service being provided to members. With an organization of this diversity and size, day to day operation can become unwieldy and productivity of board meetings goes down. Ultimately this leads to a decrease in service to the individual members of the club.

I recently chaired the committee which revised the club's bylaws. The new bylaws restructure the board into an eleven member board. This restructuring will not, however, mean that other volunteers are no longer needed. People will still be needed to coordinate each special interest group and branch, to write, edit and assemble the newsletter, to program, edit and sell DOMs and MSDs, and to serve as technical consultants. Each of these people will be able to concentrate their efforts toward a designated activity yet still maintain a channel into the board through one of the elected directors. I feel that the new bylaws will enable the business of the club to be conducted much more efficiently. This will enable the board to more adequately address some of the broader issues and opportunities that tend to get buried in red tape or tabled for lack of time. This is just one example of how I think the new bylaws will benefit the club. One of my goals is the efficient implementation of these new bylaws and a smooth transition to the new form of organization.

On to a few personal notes: I am a graduate of the University of Minnesota with a degree in Business Administration. I have been

working with and programming the Apple computer for over four years. My interests include Pascal, Data Base Management Systems, Education, Music, and Photography. Oh, by the way, I live in St. Paul, not Mini'app'les (pun intended), but hope that it will not prevent you from voting for me. Thank you for your support.

Dan Buchler for Communication Director

The Communications Director was previously known as Publications Director.

**M**y platform is simple. I have 6 years experience with Mini'app'les, including newsletter direction, production, writing. I put in as much or more time on club activities than nearly anybody. If someone else can say the same, let that person come forward.

Meanwhile I offer my services once again, this time as Communications Director and Newsletter Editor. I feel very strongly that the job of newsletter editor must have the maximum visibility within the club, and therefore the editor and the communications director must be one and the same person.

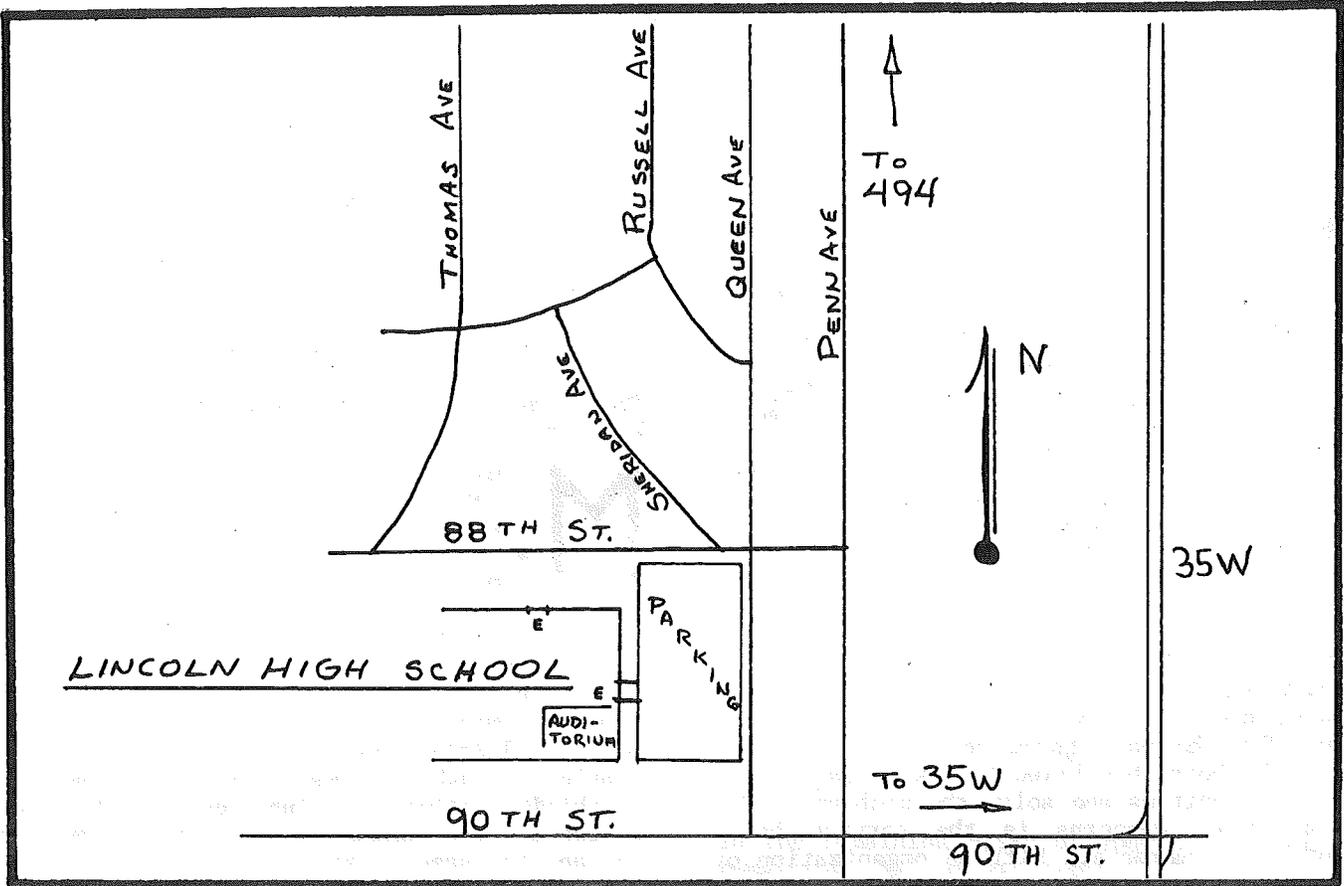
I couldn't have done my job this last club year without the excellent support and long hours contributed by many individuals. However, I want to single out the following members as being absolutely key to the success of the newsletter: Ann Bell, Arsen Darnay, Bill George, Eric Holterman, Jo Hornung, Joan Kistner, Hugh Kurtzman, Hugh's labelling team and my wife. I am hoping this same team will continue to support me in the proposed endeavour!

Peter Gilles for Software Director

**I** have been a member of Mini'app'les for over three years. Shortly after joining Mini'app'les, I became involved in the bulk purchase of disks and thereby became a member of the board of directors. I have attended every board meeting in the last two years and have supported the recent changes in the bylaws to streamline the club operations.

As Software Director, I will attempt to make more public domain software available to members. In addition I will work with the SIG Directors to encourage the members of the SIGs to develop their own software collection, such as that of the Pascal SIG which in turn may be shared with the members at large.





# Classified

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

Want QUALITY? SSDD 3M Scotch Diskettes; \$21.00 Box 10, tax incl., shipping extra. Bob Pfaff 452-2541

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**Okigraph Proms** for Okidata 82A. Half Price. Gordon Gavin, 417 River Hills Lane, Mankato, MN 56001. Gordon (507) 388-7269

**WANTED DISK II CONTROLLER** Card. Please call: Steve 935-5775

**Apple Silentype Printer** with card and 4 extra rolls of paper. An excellent first printer. \$175. Larry 374-9291 (eve)

**SMUGH invites you to a meeting** on using computers at home to make money (Electronic Cottage). All forms of business (secretarial, acctg, word proc, & custom programming) covered. Both those now doing this at home & those who want to start. March 20, 7 p.m. Call to register: 479-2127

### ORDERING DOMs or MSDs

A reminder that **Disks Of the Months (DOMs)** and **Mini'app'les Software Disks (MSDs)** are available by mail: DOMs at \$7.50 each; MSDs at \$17.50 each. Send your order to:

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

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

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





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