

mini'app'les

apple computer user group newsletter

VOLUME VI No 6

JUNE 1983

CALENDAR WHICH	CALENDAR WHEN	CALENDAR WHERE	CALENDAR WHAT	CALENDAR
Pascal Note 1	Wed Jun 1 7:30pm	Minnesota Federal 9th Ave S Hopkins	Regular Pascal Special Interest Group Meeting.	
Amateur Fair	Sat Jun 4	State Fair Grounds	Huge SwapFest	
St. Paul Branch - Note 3	Tue Jun 7 7pm-10pm	Mahtomedi Fire House Hallam & Stillwater.	Chuck Boody on creating Music	
Education SIG Note 12	Mon Jun 6 7:00pm	Central Community Ctr 6300 Walker, St. Louis Pk	Pilsbury EATSMART nutrition ed. program and other sftw.	
Dakota County Branch	Tue Jun 7 7pm-10pm	St. John Neumann Church 4030 Pilot Knob Rd, Eagan	Note 7	
Business Note 10	Thu Jun 9 7:00pm	Minnesota Sch of Bus's 11 S. 5th St., Mpls	Dick Marchiafava on Magic Window II.	
REGULAR MINI'APP'LES Note 2 Map this issue	WEDNESDAY June 15th Prgm-7:00pm SIGs-8:00pm+	PENN COMMUNITY CENTER 84th & Penn Bloomington	Note 2	
Investment Note 4	Thu Jun 16 7:00pm	Central Community Ctr 6300 Walker, St. Louis Pk	Portfolio Record Keeping by SIG members.	
VisiCalc Note 9	Tue Jun 21 7:00pm	PBS 4306 Upton Ave S.	Advanced VisiCalc for the //e	
Minnetonka Branch	Wed Jun 22 7pm-10pm	Minnetonka High Sch Cafeteria, 18301 Hwy 7	Q&A groups - Note 8	
CP/M Note 5	Wed Jun 22 7:00pm	Minnesota Federal 9th Ave S Hopkins	Chris Buck - Introduction to CP/M.	
St. Paul Branch - Note 3	Tue July 5 7pm-10pm	Mahtomedi Fire House Hallam & Stillwater.	John Hansen on spreadsheets and Enhancer II for Videx.	
Pascal Note 1	Wed July 6 7:30pm	Minnesota Federal 9th Ave S Hopkins	Regular Pascal Special Interest Group Meeting.	
Dakota County Branch	Tue July 12 7pm-10pm	St. John Neumann Church 4030 Pilot Knob Rd, Eagan	General branch meeting. Note 7 - Tentative only.	
Board Meeting Note 2	Wed July 13 7:30 pm	Board will be contacted.	General club business. Meeting is open to all members.	
Business Note 10	Thu July 14 7:00pm	Minnesota Sch of Bus's 11 S 5th, Mpls	Scott Ueland on VersaForm	
REGULAR MINI'APP'LES Note 2 Map inside	WEDNESDAY July 20th Prgm-7:00pm SIGs-8:00pm+	UNIVERSITY MINNESOTA ST. PAUL Room B45 Bldg 412 Near State Fair Ground		
Minnetonka Branch	Wed July 27 7pm-10pm	Minnetonka High Sch Cafeteria	Note 8	

Notes: (See page 2 for telephone numbers.)

- | | | | |
|--------------------|--------------------|------------------|----------------------|
| 1. John Schoeppner | 4. Eric Holterman | 7. Bob Pfaff | 10. Subir Chatterjee |
| 2. Chuck Thiesfeld | 5. W. Scott Ueland | 8. Martin Thames | 11. Bill DeCoursey |
| 3. Pete Halden | 6. Dan Buchler | 9. Mike Carlson | 12. Jane Chatterjee |



MINI'APP'LES

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P.O. Box 796
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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. 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

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

Members may have DOMs copied to their own media. Contact the Vice President.

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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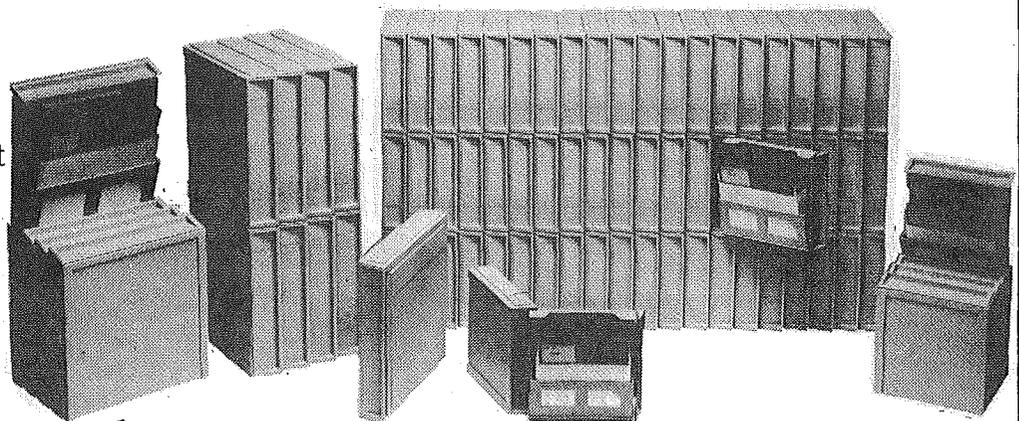
Note A Special Edition of the Mini'app'les newsletter is planned for September in conjunction with the Twin Cities' Computer Show. We are looking for special articles to put in it!



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Recycled Music Systems June Specials

It's been awhile since we have advertised in Mini'app'les and I'd like to thank our clients who have made the last five months the best ever. As they know, our low prices and quality products are the best in town, and we'd like to tell you about some of the GREAT deals we are offering. These special deals are good for the month of June for Mini'app'les members only.

C.ITOH PROWRITER Printer **\$375**

The most popular printer we carry. See the article in this issue on printers and note that the PROWRITER will produce the BEST print quality of any dot matrix printer under \$1000!! We also have the PROWRITER 2 at a special price!!

QUENTIN APPELMATE Drive **\$260**

These quiet drives carry a ONE YEAR warranty and use the reliable Siemens mechanism. They have 40 track capability, a lead screw head positioner (faster and more accurate), and an optical write protect sensor. A track zero switch eliminates the rattle you can get from cheaper (and more expensive) drives. A controller is available for \$60!

TRANSTAR 130P Daisy Wheel **\$785**

This a a high quality 15 inch daisy wheel printer. It features pica, elite and proportional printing and has an auto feed feature that will insert the paper and position it at the selected top of form! It carries a SIX MONTH warranty, and uses standard ribbons and printwheels. We have a RENTAL unit available for short runs, or evaluation!

WIZARD IPI Graphics Interface **\$75**

This interface has the GRAPHICS commands you need for easy use of your graphics printer. It has commands for horizontal position, rotation, inversion and double size all at the price of a standard interface. The card is also available with a 16K BUFFER as a WIZARD BPO for \$155!!

This is just a sample of the equipment we have available so call and inquire about YOUR needs. We will MATCH or BEAT any local pricing from stocking dealers. In addition, we provide comprehensive support and will help solve your application problems.

For more information contact Alan or Nancy at:

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ANNOUNCEMENTS

NEW DOM CATALOGS

We have just reprinted the DOM catalogs. There is now a revised CATALOG for DOMS 1 thru 15, and an addendum covering DOMS 16 thru 22. If you think you want one and can't make it to a meeting, call Terry Schoeppner or Hugh Kurtzman for pricing and our current mailing philosophy.

CP/M SIG

by W. Scott Ueland

The CP/M SIG will be holding its first organized meeting on June 22nd at the Minnesota Federal Savings and Loan in Hopkins, 7:00pm. Chris Buck will give an introduction to CP/M which will include a demonstration of the standard system utilities and the best of the Public Domain.

GRAPPLER+ NOTICE

Orange Micro, in a notice dated 4/8/83, has indicated that there is a chance of bad eproms on some Grappler+ cards with serial numbers from AI000 thru A0599. If you have one of these cards and are experiencing a problem, contact your dealer for a replacement.

INVESTMENT SIG

by Eric Holterman

Amos Roos demonstrated the Dow Jones Market Analyzer at our April meeting. Due to the time taken for 'housekeeping', the May meeting will also spend time on the Market Analyzer and other Dow Jones software, time permitting. I will recap both April & May meetings in the next newsletter. Due to the deadline of the newsletter and the late date in the month of our meeting, I am usually a month behind.

Also discussed at the April meeting were new meeting places. The June 16 meeting will be at the St. Louis Park Community Computer Resource Center at 7:00 PM. The July meeting may or may not be at the same location. Since the club is purchasing some Apples, we will have more flexibility on location. The topic for June will be portfolio recordkeeping, including how to maintain records for long and short term gains, dividends, etc. The June meeting on recordkeeping will also look at how to maintain your records so you can compare your investment performance with various indices, such as the S & P 500. The comparison process will be the subject of the July meeting.

The St. Louis Park Community Computer Resource Center is part of the Central Community Center located at 6300 Walker St. in St. Louis Park. This is a brick building on the Northwest corner of the intersection of Highway 7 and Wooddale. This is the first intersection on HWY 7 west of HWY 100.

I would like to thank Dave St. George and the Minnesota School of Business for providing a meeting place, including equipment, to us for six months. They have certainly helped us get off the ground.

Please note that my phone number and address are changing June 1. The new number is 454-5628 and the address is P.O. Box 21-425, Eagan, MN 55121.

EDUCATION SIG

For more information about the Education SIG, call:

Jane Chatterjee	888-9447
Janelle Norris	920-1430
Jeanne Walsh	753-3204

Note that the Ed. SIG meets on a night different from the main meeting this month. See calendar on cover.

Apple Self-repair

by Dan Buchler

The Apple user group of Dayton, Ohio has initiated a cooperative program with other interested IAC member clubs. In this program, users may purchase low cost kits of replacement ICs and instruction manuals for diagnosing and repairing problems on the Apple II, II+ mother board and on the disk drive controller card. Copyrighted ROM chips and the 6502 are not included.

This is a bulk purchase plan which requires that the kits be procured in lots of 10. Alternatively, kits may be purchased at a higher price directly from Apple Dayton.

Preliminary bulk rates are as follows:

Motherboard Kit Mk-2-1 (41 ICs)	\$44
Disk Drive/Ctl Dk-2-1 (15 ICs)	\$30

If anyone is interested, please contact any board member. The board will be appraised of the current status. If there is enough interest, we will try and identify some lead members who might help less experienced users who are willing to enter into this type of endeavour.



Announcements Concluded from page 5

TWIN CITY COMPUTER SHOW
SEMINARS

Apple Programmer

Medical Graphics has a job opening for an Apple programmer. Call 484-4874.

DOMs by MAIL

New Service for Mini'app'les Members

by Chuck Thiesfeld

Now members can order DOMs 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 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 22, except 18, and 8 Pascal disks are currently available.

Please note that DOMs may also be purchased on club-supplied media by sending \$7.50 to the software sales coordinator. See inside front cover. Also, the latest DOMs are available at regular meetings, and at some Branch meetings, for sale to members at \$5 each.

St. Paul Branch

The St. Paul branch of Mini'app'les has until recently been meeting in White Bear Lake. In April we moved to Mahtomedi. One member asked why the St. Paul branch didn't move to St. Paul, a more logical place for that branch to meet.

We are now considering renaming the present branch the Mahtomedi branch and starting a new branch in St. Paul. To do this we need to know whether there are enough members to support meetings in two locations.

The Twin City Computer Show will be held once again in Minneapolis from September 15th thru 18th. We are contacting Northeast Expositions to offer our services in organizing a few seminars at this show. For example, a presentation on "What is a user group" would seem to be appropriate. If anybody has any ideas or wants to participate, please contact Dan Buchler at 890-5051.



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TID BITS

By Dan Buchler

New Hardware Goodies

Legend Industries have just announced the S' Card - 1 Megabyte for the II, II+, //e or ///. And you can add memory to a total of 8 Megabytes. Software which works with the current 64KC and 128KDE Legend cards will work with the 1 Megabyte card.

Videx is advertising a 132 column board which will also work in 160 column by 24 line mode. Price is \$379.

DIVERSI-DOS's pay-when-you-use-it philosophy is working. They claim to have sold 1200 copies.



DOM #23 and EAMON #3

by Alan Peterman

After waiting impatiently for the latest submissions from our members and for the Business DOM, I have finally compiled enough material to release Disk Of the Month #23. It features some local programs, a few dregs from the IAC disk #20 and a few 'goodies' from the 'old' library. As there is only one file in Integer Basic, everyone can access most of the programs.

I have put a couple of general use programs on the disk including a nice scheduling program by Gareth Tobler. It will print charts of weekly schedules and allows saving, editing and loading of data files. Also, Gareth gave us a nice menu driven program to place the C. Itoh PROWRITER, and other command compatible printers such as the Apple DMP, into the most often desired print modes.

For those of you who are into games and educational software, there is a program to teach making change and two simulation games.

Programmers may find the GRPRINT system useful to do graphic screen dumps on IDS and EPSON printers. Also, the GETFILE/GETSECT utility from the IAC may prove useful in some arcane application.

If you use THE Spreadsheet Version I program, you may find the SSORT useful. It will sort Spreadsheet text files of up to 238 columns or a total of 250 rows and columns on two sort fields. It is not quite finished as it does not deal with negative numbers, but an update is probably forthcoming. It requires a 64K Apple (RAM or IIe).

We are going to start releasing the EAMON disks in a more regular manner with numbering unique to them. Therefore, the newest Eamon is going to be called E-3 and is titled 'The Lair of the Minotaur'. It is quite a bit more tricky than the Beginner's Cave, but a lot more fun.

As always, I am desperately pleading for PROGRAMS, ROUTINES or WHATEVER for the DOMs. While we did get in some new IAC stuff this month, there are many better programs that the Mini'app'les members have written. You do get a FREE DOM, recognition and publication. Even if your program seems trivial, submit it as it may be unique and useful in part, if not in its entirety. Also, if you'd like to see certain kinds of programs on the DOMs, contact me and TELL ME! At the moment, I select programs based on my perverted ideas of what our members like!

PRINTER

An example of a menu driven program to set up your PROWRITER or Apple DMP printer into some of the different fonts available. It puts together a string of commands into a concatenated string and puts the printer into the desired mode. It will then do a test print and set the printer at the top of forms, if requested. By Gareth Tobler.

WEEKLY SCHEDULE

A rather comprehensive program to generate weekly schedules and print out charts of the appointments and commitments you have made. The program is in 24 hour clock mode for the hours of 0800 to 2300. It was written and submitted by Gareth Tobler.

MAKING CHANGE.2

A simple educational game of making proper change by Bob Paff. It is probably most suitable for ages 5-9.

GRPRINT SYSTEM

There are four files that make up the 'GRPRINT' utility. It is a graphic dump that has been modified from ideas in BYTE (12/82) and works for the EPSON MX-80 and IDS-445 printers. The first two files are assembly language source code in standard text file format. Contained therein is documentation on configuring the system by POKEing certain locations with the required parameters. There are choices as to the starting line of the hi-res page to print and the ending line as well as choice of screen 1 or 2. This information is reprinted below. The two binary files are the actual machine language programs. To use them 'BLOAD' the appropriate one and then issue the following POKES and CALLs:

For the EPSON print

```
POKE 768,S for the starting line
POKE 769,E for the ending line
POKE 772,P (1 or 2) for screen
                    number
CALL 781 to start printing.
```

For the IDS-445 printer

```
POKE 768,S the starting line

POKE 769,F the ending line
POKE 771,C size of dump C=28-30
POKE 772,P screen page
CALL 779 to initiate the routine.
```



DOM #23 and EAMON #3 Concluded from page 7

PASSWORD

A nice little program that shows one way to use password protection for data entry. The password is part of our club name and also the name of an Austin sports sedan. If all else fails check the ASCII codes in the program to find the small password! By Ken Shuck.

SSORT

A program to sort THE Spreadsheet Version I (from A.P.P.L.E) files by Dick Peterson. It will sort THE Spreadsheet textfiles alphabetically and numerically. It requires 64K and does not handle negative numbers. It uses a DOS mover routine as well as a machine language sort. The source code for the machine language sort as well as a text file of REMarks are included to facilitate use of this sort. The DOS mover will not be activated if DOS has already been moved and is compatible with (and much faster) with Diversi DOS.

GETFILE INFO

The information and example program for the GETFILE & GETSECT programs. It will read the disk and tell how the sectors are allocated. The program seems rather redundant but since the IAC published it you get to see it! There is a source code file as well as the machine language routines and an Applesoft demo program.

LAPLACE INVERSION.DOCUMENT & INVERSION

These programs are for those of you who cannot live without doing Laplace transforms and inversions (don't all stand up at once). There is an introduction and explanation of how to use the Laplace inversion program in the Laplace Inversion.Document program and the actual inversion program. The program is powerful but still slow. It features a movable cursor to examine all of the plotted points. You must key in the equation desired (in 'S') as program lines before the program will process it for you. From the IAC.

OREGON TRAIL

A classic simulation program from the 'old' library. It is in Integer Basic and entirely textual so don't expect graphics. (MECC has a Graphic Version. - Ed.) However, do expect to learn how to budget and manage a massive move in primitive times.

ATOM 20

Another simulation from the 'old' library. This is in Applesoft so you all can run it and find out how to survive after the MX's have flown. There is much more luck involved in getting through this program than 'OREGON TRAIL' but it is possible.



PUZZLE

By Ron Androff

A man is twice as old as his wife was when he was as old as she is. Next year their ages will equal 100. How old are they now?

Solution:

1. When he was as old as she is now, she was only half his present age.

2. This year their ages total 98.

let x = husband's present age

let y = wife's present age

then $x + y = 98$ and

if husband was wife's present age k years ago

then $x - k = y$ and

if wife was half her husbands present age k years ago

then $y - k = x/2$

thus

$$x + y = 98 \quad (1)$$

$$x - y = k \quad (2)$$

$$-x/2 + y = k \quad (3)$$

Subtract equation 3 from equation 2 to eliminate k ;

$$3x/2 - 2y = 0 \quad (4)$$

Solve for y ;

$$y = 3x/4 \quad (5)$$

Substitute for y in 1 with the equation in 5;

$$x + 3x/4 = 98 \quad (6)$$

Solve for x ;

$$7x/4 = 98 \quad (7)$$

$$7x = 98(4) = 392 \quad (8)$$

$$x = 392/7 = 56 \text{ years of age.}$$

Solve for y ;

$$56 + y = 98; y = 42 \text{ years of age.}$$

Solve for k ;

$$56 - 42 = 14 \text{ years.}$$

Fourteen years earlier the husband was the same age as the wife is now. The wife was $42 - 14 = 28$ or half as old as the husband is now. Finally, next year the husband will be 57 and the wife will be 43 years of age respectively, and $57 + 43 = 100$.

We will offer a prize, the nature of which is to be determined, to the person who can reduce the solution to this problem to the least number of steps in Applesoft.



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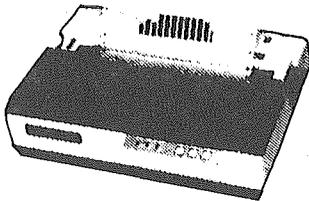
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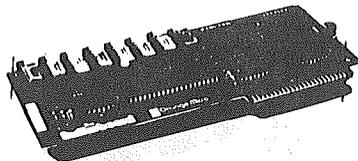
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- Bi-directional logic seeking
- 136 characters per line
- 100 CPS print speed
- Friction and tractor feed
- Adjustable tractors
- 2K Buffer

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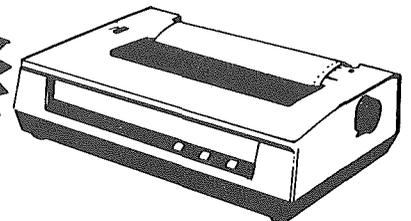


- Plugs into the Apple
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- Automatic memory configuration
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- Friction and tractor feed
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___	OKIDATA Microline 82A P	@ \$ 429.95
___	OKIDATA Microline 84 P	@ \$1,025.95
___	OKIDATA Microline 92 P	@ \$ 539.95
___	OKIDATA Microline 93 P	@ \$ 910.95
___	NEC PC-8023 A P	@ \$ 499.95
___	QUME Sprint II	@ \$1,449.95
Qty		

Some Printers subject to availability

INTERFACE CARDS

___	Grappler +, Graphics Interface	@ \$ 127.00
___	PKASO Graphics interface	@ \$ 135.00
___	The Bufferboard (Printer Buffer)	@ \$ 127.00
Qty		

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___	Rana Elite One Disk Drive	@ \$310.00
___	Videx or Bit 3 80 Column Card	@ \$244.95
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DAISY WHEELING

THE [Magicalc] Spreadsheet 2.0

by Arsen Darnay
with an addendum
by John Hansen

At the Applefest last fall, the Apple Puget Sound Program Library Exchange, better known as A.P.P.L.E., made quite a hit by selling THE Spreadsheet, a VisiCalc look-alike sold for \$30 with a membership to A.P.P.L.E.

THE Spreadsheet (complete with the somewhat pretentious capitalized THE) was issued a bit prematurely, it seems. It had been prepared more or less with Apple-Cupertino's blessings but issued without appropriate clearances. A corporate glitch. Suffice it to say that THE Spreadsheet was yanked from the market almost as soon as it issued, and only a mass of people here and, presumably in Seattle, have these copyable collector's items.

As of April 1, A.P.P.L.E. offers THE Spreadsheet, Version 2.0 to its members. The price is \$60. And THE Spreadsheet 2.0 is a completely different and much more powerful program than its ill-fated predecessor.

I bought Version 1 at the Applefest and Version 2 as soon as offered. I use VisiCalc as well at a client's office on an IBM PC. And a friend of mine uses the Advanced VisiCalc on an Apple III, and we compare notes. So there's the basis for the comparisons that follow.

* * *

But first a brief diversion into the realm of magic. One of our members, John Hansen, another eager buyer and a more careful reader of tutorial instructions than I am -- noticed an interesting error on page 79 of the instruction manual.

It looks as if the authors of the manual forgot to change one (and only one) reference to the 'real' name of the software that, rechristened THE Spreadsheet, Version 2.0, now comes from A.P.P.L.E. The offending paragraph:

"Notice the parentheses in the new formula? MAGICALC will evaluate everything in parentheses before anything else. Here's an example:"

I looked up MACICALC in my trusty Wildcat Computing, Inc. discount catalog and found that it sells at retail for \$149.95 and discounted at \$112.46. At \$60 from A.P.P.L.E., the price is right, especially if

you're already a member and don't have to pay the \$45.00 membership fee (of which the first \$25.00 is a one time, nonrecurring charge, and the other \$20 gets you a year's subscription of the 'Call Apple' magazine.) That's how magic works in commerce. You buy at high prices from dealers, at a lower price from discounters, and at bargain rates from cooperatives who private label. The full service retailer, bless his heart, has a tough go, but the buyer is usually in good shape.

* * *

But let's turn to the software itself. Version 2.0 of THE Spreadsheet has some of the following features:

- Variable column widths.
- Supports 'most popular' 80-column cards (of which more later).
- Supports all language-card compatible RAM cards up to a maximum capacity of 512K.
- Produces a 70-column display without an 80-column card by using the Soft Seventy software package.
- Delivers upper/lowercase output to your screen in the 70-column mode even if you have no lower-case chip.
- Produces lower-case on your printer.
- Has a number of functions not found on the Version 1 or standard VisiCalc. These include logical operators (IF, AND, OR), two log functions (natural and base 10), a ROUNDING routine, and functions which return the column or row number.
- An 'Attribute' command -- but this is not the same as Advanced VisiCalc's which, for instance, allows you to put dollars signs in front of numbers or percent signs behind values. Version 2.0's 'Attribute' command defines a cell's attributes -- whether it is to accept values or labels, protect or hide cell values, etc.
- Capacity to write or to read Data Interchange Format (DIF) files -- standard files introduced by Software Arts, Inc. (DIF is their trademark.) This capacity allows you to read and to write VisiCalc files.
- The unit comes with a single diskette, but it's not protected and can be copied using the DOS copy program.

* * *

GOTO 13

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Daisy Wheeling Continued from page 11

The software works exactly like VisiCalc does on the Apple. Command mode is entered by the slash (/). Functions are introduced by the commercial "at one" symbol (e.g. @SUM(...)). You are always in entry mode unless you've deliberately 'slashed' your way to command. THE Spreadsheet interprets a number, a plus or minus sign, a period, parentheses, and the "at one" as a Value; a letter or the quote mark is interpreted as a Label. Cursor moves are by the arrow keys. To change direction (say from horizontal to vertical) you press the space bar -- unless you own an Apple IIe, in which case each arrow does what it's supposed to.

The command structure, again, is identical to VisiCalc's standard version. The differences:

/A is Version 2.0's Attribute command and is not available on the older VC software.

/L lets you change individual column widths from 0 to 36. Setting the column width to 0 eliminates the column from the screen and also makes it possible to edit a table before printing by "deleting" one or more columns. By returning the column to its original width, the data is once more visible.

Globally (is there such a word?) it is possible to set column widths from 1 to 36 compared to 3 to 37 for "Visicalc".

/V -- which produces the Software Arts, Inc. logo on VisiCalc does not exist on Version 2.0.

The maker's obvious intent was to 'replicate' VisiCalc in all of its operational respects -- which is a nice aspect of the software for people who, like me, use VisiCalc in some settings and don't like to change mental gears (or hear nasty bells) when we go from system to system.

* * *

After the system loads up, you've used up 34K of your precious memory. If you have an Apple with 48K, that leaves you 14K for data. With a 16K RAM card, you'll have 30K to work with, etc. Unless . . .

Unless you want to use the 70-column display mode. The Soft Seventy code takes up another 12K of space (it's loaded on your command). A bare Apple will thus only have 2K for values, which is chewed up in a hurry.

The 70-column mode works by using the HiRes page on which a display is generated. You can usually see nine columns at one time and set the parameters so that you can have upper and lower case on the screen. The letters and numerals are not quite 'regulation' because they're generated by tweaking pixels, but the display is legible and -- if you like the Big Picture -- a lot better than 40 columns. With a RAM card, you'll have 16K of space, which is adequate for humbler models.

* * *

Having learned a thing or two about the dangers of software buying, I called A.P.P.L.E. before I released my VISA number. I wanted 80-column display! Would THE Spreadsheet, Version 2.0, work with my Sup'R'Terminal?

I was assured that it'd work slick as a whistle.

The assurances were WRONG, but by now I didn't even curse. The saga of my warfare with Sup'R'Term is drawing to a close. VIDEX, here I come . . .

GOTO 14

```

*****
*
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```



Version 2.0 works (sort of) on the Sup'R'Term -- provided that you like to work with an invisible cursor. And the display line does not erase. And the column markers don't correspond to the column you're in. And there's probably more wrong yet, but I gave up my research on what is clearly a DOOMED board.

If you have the right board, I'm sure the 80-column display works fine. And you'll have 30K of space with a RAM card in Slot 0. Based on the manual, I'm sure the system works on STB80, WIZARD80, and VINDEX. For the others, best to check with A.P.P.L.E. -- very carefully.

* * *

Now for a few more pluses and minuses.

The @ROUND function is a nice feature. It allows you to determine how a value is to be rounded. The syntax is the following: @ROUND(Value,Number of Decimals). @ROUND(1234.567,2) will produce 1234.57. @ROUND(1234.567,-2) will produce 1200. This function will still not produce an appended zero. Thus @ROUND(100.0,1) will give you 100 rather than 100.0. Purists despair. The @ROUND function can be replicated like any other.

In the 70- and 80-column mode, this software tends to fall behind the cursor's movement and also, possibly, behind a very fast typist. Values and positions are held in buffers and the system catches up with you in due time, but this is a shortcoming of the system that you'll have to get used to.

To save files or to load them, the program takes you to special menus where you can catalog disks, set or reset drives, and select files on disk by number rather than typing the file name. This is more cumbersome than VisiCalc's one-at-a-time scroll of the disk. But it lets you see what's on the disk in screen-ful chunks, which is sometimes more convenient.

An interesting feature of Version 2.0 is the ability to 'print softcopy,' i.e. to print to disk what you would print to paper. The file can then be retrieved and placed into a word processing system from the disk.

And talking of word processing, THE Spreadsheet 2.0 is quite useful for word processing as well, if you don't mind taking a little trouble.

The way to do that is to set columns A and B at, say, 33 characters each in either the 80- or the 70-column mode. Then you start to type. In the middle of the page, you have to shift the cursor from one column to the next. At page end, of course, you have to bring the cursor back and down. What you'll see is what you'll get on paper.

This is a little tedious -- but not if you lack a wordchurning device, don't have upper and lower case, and want to have a facility for writing letters or memos from time to time. A routine lets you format the printed page from a menu, and then the result goes to your printer and produces a respectable document.

* * *

It's a good system. The documentation is clear, well written. If I haven't covered what you want to know, call.

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Daisy Wheeling Concluded from page 14

Hansen's Addendum

The following comments are not intended to be a review of THE Spreadsheet (Arsen has covered it very well above), but summarizes some of the factors I have found using this new spreadsheet.

During the past several years, I have been preparing data tables for the Education Department of the Minnesota Zoological Garden using VISICALC and THE Spreadsheet (Version 1.0). Using the latter, I have tabulated the answers to 16 questions from evaluation forms returned by students attending Spanish, French, and German days at the Zoo. I have set up a table with Yes-Maybe-No columns for each question and, using the ValueStream feature of Version 1, can enter the answers for each student in about 18 seconds. Even with a full table I have just barely outtyped the typeahead buffer. Because I had a large table that would not fit Version 1.0, I decided to try Version 2.0 (62K available). I entered the answers at the same speed as before, but the APPLE starting beeping at me before I entered all 16 questions. It took about 18 seconds to enter the data, but then I had to wait another 21 for the cursor to catch up to find out how many answers I had not been able to enter. For this particular use, I found Version 2.0 to be unsatisfactory. Incidentally, I found that VISICALC (also in 80-column mode using VC-EXPAND/80) was able to keep up to my fastest speed, performing slightly better than THE Spreadsheet Version 1.0. Unfortunately, the inability to set individual cell widths with VISICALC makes it impossible to set up legibly-formatted tables for this project.

One of nicest features of Version 1.0 was the ability to enter streams of text, automatically moving from one cell to the next. As Arsen mentions, Version 2.0 does not have this capability.

When I found Spreadsheet Version 2.0 (SS-V2) would load my VISICALC (VC) files directly from data disks with no conversion necessary, I decided to run a few comparison tests. In the table below, times with colons (:) are minutes and seconds (M:SS). Those with decimal points are seconds and fractions of seconds.

The table used in the test had 35 columns and 116 rows.

	VC	SS-V2
	-----	-----
Load 39K text file	2:57	2:11
Load 39k binary file	0:55	n.a.
Move from A1 to A1116	1.71	2.48
Move from A1116 to A1	1.40	2.17

Scroll off screen-col.	0.29	2.20
Scroll off screen-row	0.32	2.06

Manual recalculation	26.06	26.11
----------------------	-------	-------

When the cursor is on the screen in Version 2.0, it moves similarly to that of VISICALC. However, when you want to scroll a row upward onto the screen with Version 2.0, you spend two seconds watching the rows scroll individually up the screen. In contrast, VISICALC requires only 0.3 second for the same action. A similar effect occurs when you move to the first column off the screen. The delays are frustrating.

I found another interesting difference when I compared the replication features. In both Manual and Automatic Recalculation Modes, replication of a formula through several columns or rows immediately gives the correct answer in each cell. Version 2.0, in Manual Mode, replicates only the value of the initial cell, not the formula. Pressing "!" will cause the formula to be replicated and the correct answer will show up in each cell. In Automatic Mode, Version 2.0 initially only replicates the value, displaying it before replication replication has been completed. Then, after several seconds, the formula is invoked and the correct value is finally displayed. When you are accustomed to VISICALC, Version 2.0 replication can be startling the first time it happens (and perhaps the second and third and ...).

I have not solved one puzzle yet. The Print Subsystem allows entry of commands to the printer (for example, type pitch, number of columns, etc.). I have not been able to change from 10 pitch and 80 cpi to condensed and 132 cpi.

It has been pointed out to me that some of the things I've mentioned are probably hardware (80-column board) problems, rather than software. Most of the testing that I did was with the 80-column board. However, the few times I used 70-column indicated that that mode may be even slower. Since VISICALC runs in a perfectly normal way using VC-EXPAND/80, I think I'll continue to say that Version 2.0 has operating speed deficiencies.

Most spreadsheet users will not be running a tabulating procedure like mine and will probably not notice the delays that I saw. People who have not used VISICALC or THE Spreadsheet Version 1.0 may not be bothered by the slow scrolling or replication quirks or may adapt to them better than some of us "experienced" users. As mentioned in Arsen's review, the price is right, especially when you consider that it is necessary to spend an additional \$80-\$125 to get the memory-expansion and 80-column features for VISICALC that are included with Version 2.0.



DAN ON PRINTERS

By Dan Buchler

Epson v. C. Itoh

I was recently asked to make a presentation on printers to the Apple group at my place of work. Part of that presentation was on the differences between the Epson dot matrix printers, the C. Itoh Prowriters and the Apple Dot Matrix Printer. With much help from Al Peterman, I put together some facts and organized them into tables. I would like to share this information with you.

Before we start, for the benefit of beginners, let us define what a Dot Matrix Printer (DMP) is. A DMP forms characters in exactly the same way as they are displayed on your monitor screen -- out of dots. For example an a looks like:

```

****          . . .          . .
.             or  . . .          or  .
****          . . .          . . .
. .           . . .          . . .
*****        . . .          . . .

```

In the print mechanism, the print-head contains a vertical or near vertical row of pins or wires which are activated by little electro-magnets. The head moves horizontally across the paper, and the magnets are activated whenever a pin or wire lines up on the paper with a position where a dot is desired.

In the early days of such printers, mid 1970s, there were usually 7 wires, and the printers would print characters constructed out of a mesh of 7 dots high and 5 dots wide at rates up to 200 characters/second.

As we entered the '80s, users demanded a better looking character, so most printers started using 9 wires. Most of the improvement in character appearance was achieved by adding descenders and improving the accuracy at which the dots were laid down on the paper. Descenders are the little tails that go below the belt on such characters as g,p,q and y. Now the appearance of characters is even more improved by constructing characters out of a 12 wide matrix of dots or even 24 wide.

Let me begin the comparison by saying that there are a lot of good printers on the market and a lot of possibly good printers. Unfortunately for some of these manufacturers, only four makes have gained significant sales with Apple users. These are Epson, C. Itoh (who make the Apple DMP), Okidata and IDS who make the Paper Tiger and Prism Color printer.

Okidata outsells IDS, but has small sales compared to Epson and C. Itoh.

IDS is a brave company. They should be credited with having been one of the first to come out with an affordable (to a hobblist at any rate) printer with both upper and lower case. They came out with the IDS 120/220 in 1978. This was a 7 wire printer that sold for \$1200. The reliability of that machine was terrible.

At this time MPI were making some inroads into the printer market with their 88G. There were others, such as Centronics who made earlier fame with their all uppercase 779, which sold for \$1400.

In 1980, Epson took the market by storm with the MX-80, with which, within about 18 months, they had captured about 50% of the world market for DMPs. What was it about the Epson that made it sell? Reliability and quality. Before the Epson, printers broke down. Epsons hardly ever did. Letters and dots on the Epson lined up perfectly from line to line.

IDS countered with the Paper Tiger 460. This was a good machine, but was nearly twice the price of the Epson, and though twice the speed, still seemed to have an image of unreliability. And it's image that sells a product!

Then, in late 1981, C. Itoh appeared on the scene with its Prowriter line. C. Itoh is really an importer of a line of printers built by the Japanese company TEC. TEC also makes the NEC DMP printer mechanisms. Subsequently, Apple selected C. Itoh/TEC as its supplier of DMPs. Experience with the C. Itohs seems to indicate a reliability and quality equal to that of the Epson MX-80/100. I'm an old Epson fan, having organized the first bulk purchase of 22 Epson MX-80s during February and March, 1981, of which one became my first real printer. But I will admit that the C. Itoh has a lot to offer.

When Apple first came out with their DMP there were more differences between it and the C. Itoh. After producing about 2000 Apple DMPs, the firmware was changed so that the Apple DMP and C. Itoh Prowriter became very similar. The unique features of each seem to be as follows:

Apple DMP
Citoh Prowriter

- 15 cpi font
- 2 Proportional fonts
- Backspace in logic seeking mode. The logic seeking mode allows the print-head to take the shortest path to the next character. For example, the head does not waste time moving into the margins.
- 1 manual + data card. The manual tells you how to turn on the printer, but not much more. Neither beginners nor advanced users are offered much detail.
- The printer cover does not incorporate a paper tear-off device.

- Has foreign alphabets.
- 1 Proportional font
- Backspace in incremental mode only. What this means is that if you want to underline, using the standard technique of print character, backspace, underscore, you must select incremental mode which is somewhat slower than logic seeking mode.
- There is a new beginner's manual that really teaches you how to use the basic features. However its oriented towards the TRS-80. Also comes with a advanced user's manual.
- Cover has paper tear-off feature.

Now, having defined what an Apple DMP is in comparison with the C. Itoh, lets look at the 3 generic machines which account for most sales.

The C, Itoh includes the Apple DMP. The MX-80 includes the MX-100 (and also the IBM PC printer and a few others who private label the MX-80)

The FX-80 is the new Epson offering which has only recently appeared on the dealers' shelves.

Comparison of 3 DMPs

Item	C. Itoh	MX-80	FX-80
Reliability	Proven	Proven	Note 1
Bi-direction paper motion	Yes	No	Yes
Proportional spacing	Yes	No	Yes
User defined character set	Yes	No	Yes
Graphic Resolution, dots/inch. Note 2	160/ 144	120/ 216	240/ 216
Italics	No	Yes	Yes
Greek characters	Yes	No	No
Block graphics	Yes	Note 3	No
Superscript	Note 4	Yes	Yes
Speed (cps)	120 Note 5	80	160
Standard spacings characters/inch	10,12,17	10,17	10,12,17
Double wide (usable with all spacings)	Yes	Yes	Yes
Buffer size	1 page	1 line	1 line
Tractor	Standard	Standard	Optional
List Price - Note 6	\$495	\$695	\$699?

Notes

1. I've seen at least one example of a graphic printout made with the FX-80 in which the relative alignment of dots from row to row was very poor. Also I heard that one dealer had some problems with several printers. These may only be teething problems, but beware!

GOTO 18

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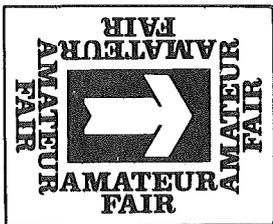


Dan on Printers concluded from page 17

- 2. Horizontal/Vertical. The MX-80 and FX-80 have the ability to vertically move the paper in 1/3rd dot increments. Hence, even though the MX-80 has a 1/72nd dot vertical resolution, careful software can achieve a resolution of 1/216th of an inch as demonstrated in the Gutenberg Word Processing package. The FX-80 has a graphic mode called quadruple density in which dots are put down at 240/inch. The catch is that the time between dots as the head moves across the paper is so short, about 1/2000th of a second, that the print pins can not be energized for 2 consecutive dots. In actual practice, it is the edge resolution which counts, and with appropriate software, this need not be a problem.
- 3. The older MX-80s, before Graftrax Plus, had block graphics, but Epson considered this a not too useful feature and took away the capability.

- 4. Superscript: The MX-80 and FX-80 provide a superscript/subscript print mode in which characters are created in condensed size at half height. (This is achieved by making two passes across the paper and interleaving dots by upspacing 1/2 a dot between passes - a similar technique to double strike). With the C. Itoh, you can upspace or down space the paper to create a sub or superscript but the character printed will be a regular size character.
- 5. Though the C. Itoh prints across the page slower than the FX-80, it moves paper faster, so the effective print speed is about the same.
- 6. Discounts are readily available. The C. Itoh often sells around \$400, and both the FX-80 and Apple will sell with discounts that vary between 5 and 15% (sometimes more).

As was said at the beginning, there are other printers, and one of those may suit you better — but, if you are not sure.....



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PRINTER BUFFER BUY!

by Eric Holterman

A bulk purchase proposal.

A printer buffer has made it to the top of my hardware purchase list. In talking to others, I find that a printer buffer is of interest to some other club members. It may be that a bulk purchase of buffers would aid many of you in obtaining this piece of equipment at an attractive price. So here goes a trial balloon. If you are interested, it is important to respond by June 15 so that a decision as to whether or not to go ahead can be made.

Without a printer buffer your computer can't go faster than your printer. If you don't have a printer, or very seldom use it, this isn't much of a handicap. However, as soon as a printer gets involved, your computer spends much of its time (and therefore your time) 'waiting' for the printer. With a buffer, you and your computer can zip along while the printer does its thing at its pace. In effect, you can 'dump' the printer's work into a buffer and the printer takes from the buffer what it can use without tying up you or your computer.

A printer buffer can take one of many forms. First of all, it can be accomplished thru software, with some programs having a buffer, or 'spooling' capability built in (i.e. Screenwriter), or thru an enhanced DOS such as Diversi DOS (available on DOM #18 & with \$25 license fee). Most sophisticated commercially available programs such as spreadsheets and word-processors will not work with a software buffer. The 'price' is right, but there may be additional costs or drawbacks, such as needing a RAM card, not being able to use other program features at the same time (such as the keyboard buffer with Diversi DOS), or not being able to pass some printer commands thru the software buffer. While a software buffer may be adequate for many purposes, a hardware buffer (with a higher price tag) generally does not have the drawbacks of the software buffer.

The hardware buffer can take many forms.

- a) It can be an additional card in your computer (thus using an additional slot).
- b) It can be built into your printer. Newer printers often come with 1 to 3K built in while we are talking about 8 to 64K, or more, in addition to whatever is already in the printer. Epson MX-80/100s have only a one line buffer.
- c) It can be included on the printer interface card, thus replacing the card you now have. The new card would have full

graphics capabilities and may thus produce an additional benefit not now present.

- d) It can be 'in line' between your computer and printer. While this may be the most flexible option, it is also the most expensive.

Because I have no idea of how much interest there is in this, it is impossible to put a price on the above types of buffers at this time. Suffice to say that they are listed in ascending order, with the lowest-priced option costing a bit over \$100, the combined interface & buffer at \$150 to \$200 and the 'in line' at less than \$300. The bulk purchase price would probably be about 10 to 15% below 'mail order' price levels.

Also, be aware that a bulk purchase arrangement does not bring with it a full service package that you might expect at a retail store. Thus your selection and payment must be made in advance, exchanges and refunds will not be available.

NOTE: At this point, we are trying to decide if there is sufficient interest to justify the work involved, so a response is not a commitment to buy. On the other hand, please don't respond unless you are serious about going ahead (a 50% or better chance). If we go ahead, a complete description of your options, costs, etc., will follow with earliest delivery around the end of July or beginning of August. At this time the following input from you is needed, if you are interested:

- 1) Type of computer - II, II+, IIe, III, Franklin, etc.
- 2) Type of printer
- 3) Type of printer interface card
- 4) Do you use graphics now, and if not, do you want that capability in the future?
- 5) If you are familiar with different buffers, either by brand name or type, what is your preference?
- 6) Is a savings of approximately 10 to 15% over 'mail order' price enough savings for you to go through a bulk purchase plan rather than make the purchase on your own?

You can respond by mail to me at P.O. Box 21-245, Eagan MN 55121, or by phone at 454-5628. If no answer at that number, try 332-8460. In either case, if you get an answering machine, leave your total response on it (you have up to 4 minutes) and request a call back only if you have a special request.

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“The instruction manual describes Quic-N-Easi as “an applications development language that dramatically reduces development time and produces more professional, clearer screen presentations.” ... this is a refreshingly modest and accurate description.”

Byte, August 1982

“The striking features of Quic-N-Easi are ease of editing and logical operation.”

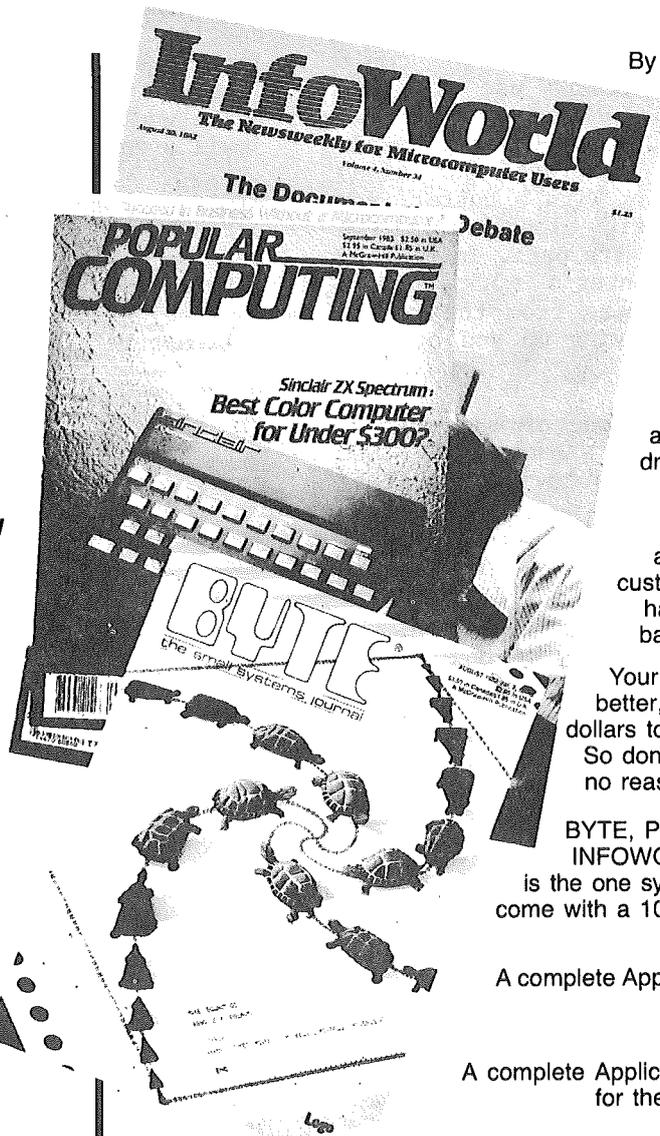
“Quic-N-Easi should help you to generate common business-application programs much faster than could be done using BASIC or other programming languages.”

Popular Computing, Sept. 1982

“... the program will seem to be a lively, “intelligent” version of a paper form—the very best kind of human “interface” for business work.”

“... the mechanical entry of a form design is simple and intuitive.”

InfoWorld, May 17, 1982



By now, everybody knows that Quic-N-Easi is the fast and revolutionary program generator.

It's no coincidence that BYTE, INFOWORLD and POPULAR COMPUTING all reviewed Quic-N-Easi at the same time and all came up with raves. Just when our fan mail hit a new high:

How about you? Can you afford to slog through coding drudgery with BASIC or a so-called data base manager?

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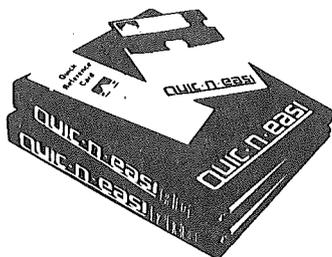
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Home Projects (7)

Cheaperrr Repeaterrr and Shift Key Mod By Roger Flint (771-2868)

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.

As with most of the projects, I get a lot of feedback from the members of the Mini'app'les. This is very good because I really learn different ways to attain the same end. The first repeater project had adjustable time delay, which is nice if you are heavy with the fingers like me. As has happened with other projects, a member showed me a better way. Better, in this case, if you don't mind losing the adjustable feature.

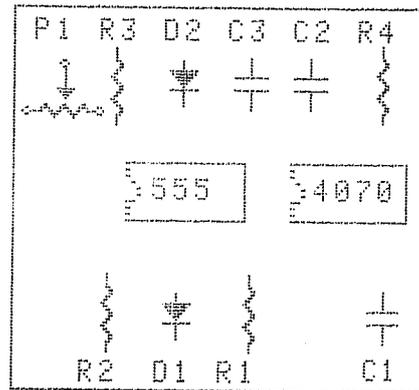
The original idea for this article came from Nibble magazine vol. 2 no. 7. This repeaterrr is only suitable for the version of the Apple that has the new style keyboard and encoder - most Apple II+s.

The parts list goes like this:

10K Resistor, 1/4 watt #271-1335 pkg of 5/ .39
 Silicon diode IN4148 #276-1122 pkg of 10/.99
 220uf capacitor, 16v #272-956 each .79

The project is a lot lower cost than the first one I built, but also is more permanent. To install this project:

- Switch off the computer.
- Unplug the main lead and unclip the lid cover.
- Carefully remove all of your peripheral cards and turn the computer over to allow you to remove the cross-head screws which hold the case to the base plate.
- Turn the computer back over while holding the base on, then slowly lift the case upwards a few inches. You will see the cable connecting the keyboard to the motherboard.
- Unplug this from the motherboard taking care not to damage the dip plug. The top part of the case with the keyboard is now free of the base and motherboard.
- Turn this over and look at the underside of the keyboard. Look at the small encoder panel attached to the larger keyboard panel with 24 pins. Pin #1 is the pin nearest the center of this encoder panel.



- Very carefully solder the following to the pads of these pins.
 - (a) The 10k resistor between pins 19 and 20.
 - (b) The silicon diode between pins 19 and 20. Also the positive (striped) side to pin 20.
 - (c) The 220uf capacitor between pins 20 and 23. The positive side to pin 20.
- Check your work to ensure that there are no shorts of solder splashes, then refit both halves of your computer together taking care when reconnecting the 16 pin dip plug back into the motherboard.

Try the system and you should find that when using the keyboard everything is normal. If you hold down any key for longer than 1/2 second it will start repeating itself. As soon as you let go it will stop. I have talked to two people who have done this modification and they have had no problems.

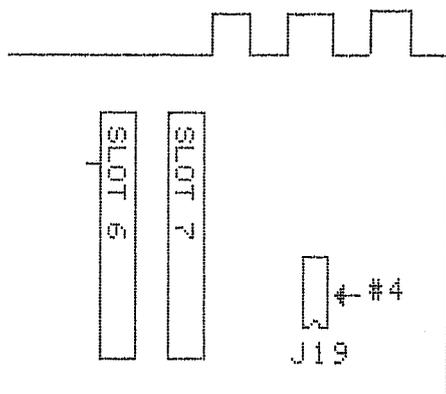
Another modification you might want to make at the same time as long as you're into the computer, is the shift key mod. This mod makes the shift-key work just like on a regular typewriter. For those of you who may not know how to do this, just read on!. You already have the keyboard apart so now find the shift key. The shift key is connected to the keyboard with two solder points. One of these is connected to the ground and the other runs to the keyboard encoder. You will need to connect one end of a wire to the point that runs to the encoder and the other end of the wire to the game port connector pin #4. This can be done in one of two ways.

GOTO 22



Home Projects(7) Concluded from page 21

- (a) You take 13" length of no .22 gauge wire. Strip about a 1/4 inch of insulation off each end. Solder one end of the wire to the shift pin that goes to the keyboard encoder and run the other end back to the game paddle connector, but don't plug or connect that end yet.
- (b) If you have a new model of the Apple II, (rev 7 and later) then there is a piggyback board on the keyboard. On this piggyback board is a 50 pin connector. The second pin from the far right (as viewed from the front of the computer) is the shift-key pin. This pin is located directly above the asterisk key. You can clip a wire to that pin, being careful that it does not touch any other pins. Then run the wire back to the paddle connector, but don't plug it in or connect it yet. As stated above, this method will only work with Rev 7 and later Apples (those manufactured in last 2 years).



SHIFT KEY MODIFICATION

Once you have the wire attached to the keyboard, reassemble the case making sure the cable is connected to the motherboard from the keyboard. Now, with the computer back together, look at the top right rear corner of the motherboard. In the figure below, the three protrusions at the back represent the three female panel connectors for the tape I/O and video.

The gamepaddle port connector is a 16 pin socket. Take the wire you connected to the shift key and insert the other end into the fourth hole on the right side (as you look down with the keyboard toward you). Do not solder this wire. You can now carefully install the game paddles on top of this wire by bending out the fourth pin. (Editor's note: I prefer to solder the game-paddle end to the top part of the leg on pin 4 a 16 pin socket. The socket can then be inserted into the game-socket, and any game equipment can be plugged into that socket without having to bend any pins. - Ed.) As for me I try not to solder anything, so I use micro test clips wherever possible. (Radio Shack part 270-370 pkg of 2/\$1.49).

Good luck and keep building projects! I am waiting for the parts (mailorder) to come in on the clock card, project so it looks like one more month for those of you wanting to see that project.

Postscript: some of you may be interested to know that Roger's last two articles got replicated in BAUD, Big Apple User Group (New York City) newsletter - Ed.



COMWARE

by Eric Holterman

If you are using a Novation Apple-Cat II with Novation's terminal program. Com-Ware II, make sure you have the latest revision which includes several new or improved features. You can obtain the latest revision by returning your original Com-Ware II disk to Novation (make sure you keep a copy). They will send you a Rev 5.0 at no charge and include an expanded and improved operating manual.

With Rev 5.0, you can create and store a directory of 26 phone numbers, each of which can be dialed automatically at the touch of a key. Along with each phone number, it is possible to store a unique terminal configuration that is implemented when that number is called. Other features I have found most useful are simultaneous printing during communication and a non-destructive memory mode. You can also easily set and change the message for the unattended answer mode. Also included are CATPACK routines, which show how to control the Apple-Cat II through machine language and CATREMOTE, a machine language program which allows control of the Apple II from a remote location using a second computer or terminal.



Book Review

by Jim Duprey

"Will Someone Please Tell Me What An Apple Can Do"

"Will Someone Please Tell Me What An Apple Can Do" (WSPTMWAACD) may be an old query from friends (if a question mark is appended), but it's also the title of a new \$12.95 paperback from Sterling Swift Publishing Company. WSPTMWAACD describes common Apple applications and many of the software products that make them possible. Its writing is without jargon, and since it keeps to a minimum the amount of detail provided on the subjects covered, it is not an authoritative source book. Nor is it designed for individuals interested in programming or learning about the technical aspects of computers. It serves, rather, as an introduction to the possibilities of the Apple, an introduction for new and prospective Apple owners as well as veterans who may want to enlarge their field of view without a search through magazine articles.

The subtitle is "Eight Experts Share Their Knowledge." Actually, there are eleven experts and under the editorship of Glenn M. Polin they write on eight topics ranging from accounting to word processing.

In chapter 1, John A. Moss and Dick Shocket of BPI Systems, Inc., a producer of accounting software, discuss the types of accounting a personal computer can do (general ledger, accounts payable and receivable, payroll, and inventory) and the advantages of handling them on a computer rather than manually or by contracting the job out to a service organization. They present several examples of menus and printouts from the BPI accounting system. The emphasis, however, is not on their particular brand of software, but more generally what software can accomplish.

In chapter 2 on agriculture, Neil Clemmons first makes the pitch that a computer can make a farm operation more efficient and productive (without, some of us taxpayers hope, contributing to the farm surplus problem). He then names and briefly discusses a variety of software products for particular problems. The range is indeed wide, everything from a program that helps the farmer estimate the potential profitability of an additional ten acres to one that keeps track of a dairy herd and, in the process, determines when old Bessie's production has trended too low, signaling that she should be culled and sent to appear as a "cutter and canner" in the stockyards of St. Paul.

In chapter 3 on financial planning, Don Williams discusses Desktop/Plan, which he authored, and VisiCalc. He emphasizes their contrasts rather than similarities. VisiCalc, he argues, is a tool for the individual rather than the organization, a tool that is ideally suited to tasks with few printed report requirements and minimal need to consolidate information from one model to another. On the other hand, Desktop/Plan is oriented to organizational planning, particularly those plans (such as budgets and sales forecasts) that are executed on a repetitive basis by different organizational units, then combined into company wide products. This emphasis by Williams may be overdone, but it does seem effective in helping to explain what spreadsheet software can do.

Donald R. Woodwell, the author of chapter 4 on investing, takes up the use of the computer in tax record keeping and report preparation, household budgeting, portfolio management, technical analysis for commodities and financial instruments, and real estate evaluation and management. The text material is considerably enhanced by the inclusion of twenty-six exhibits, including eight printer outputs from Portfolio Master and four charts from Computrac programs.

In the first part of chapter 5, Ted Perry, Geoff Zawolkow, and Lee Berman argue the advantages of microcomputers in education. In the last half they describe software products that provide drills, tutorials, and simulated experiences in math, language, science and other subjects. One of their choices is Earthquake, from MECC. They also devote a page or so to LOGO, giving it an enthusiastic endorsement as a language that teaches a child to think (distinct, presumably, from all those that don't).

In chapter 6 on music, Rosemary Killam states that the Apple has opened up new vistas for musicians. With the right software, it can be used for learning music theory, composing, and playing our Stockhausen-like handiwork on either the Apple speaker or an attached stereo system. The ultimate is apparently the Syntauri system: it permits a piano-type keyboard to be used as an input device to a set of music boards, thus converting the Apple



Book Review Concluded from page 23

into a "full musical instrument," meaning a teaching aid, composition tool, performing instrument, and programmable synthesizer that can create and blend separate voices.

If you're not interested in becoming a composer, perhaps you would like to drive a Formula race car, run a nuclear power plant, prove how good you are as a business manager, or learn how to fly a small plane. It is, of course, quite unlikely that anyone with wits intact will lend you a Porche or nuclear reactor to practice on. But don't give up. As Jim Salmons explains in chapter 7, (simulation) models have been built and programmed that simulate these and other experiences when run on the Apple. He advises, for example, International Grand Prix for racing amateurs and Three Mile Island for power plant buffs. In the final chapter, L. Joyce Arnston explains word processing, first in terms of the hardware and software components and then in terms of the functions performed in word processing. She does not discuss or compare particular software products.

It should be apparent from this cataloging of the contents that some important application areas have been omitted. There is nothing, for example, on online data bases, such as CompuServe, Medline, and Lexis, to name only

three from a long list. (What's needed is something like Dale Archibald's recent two part article "Apple on the Phone" in Softalk.) Nor are there any applications from engineering and the sciences, physical and social. It's true that most software advertised in popular micro magazines is used in gaming and business, but that's not an adequate reason for neglecting science in its many forms.

My second reservation, rather trivial by comparison, has to do with the treatment of software. The authors of the eight chapters name and discuss a multiplicity of products, thus conferring an endorsement that puts the mentioned products one up on the competition. I'm not sure how to handle this problem, but at a minimum a warning to readers seems justified, perhaps one like Louis Rukeyser gives on Wall Street Week. After a guest-expert lists a selection of his or her favorite stocks, Rukeyser usually cautions viewers that there are no guarantees of profit to investors. For WSPITMWAACD, the appropriate caution might be: Not all products mentioned can be guaranteed to perform better than other alternatives on the market.

Despite these reservations, WSPITMWAACD can be recommended as a lightweight introduction to many of the potential uses of the Apple. So the next time someone pops the question, you can now hand it back to them.

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Most of the more expensive word processors on the market today include functions which add to the cost and complexity of the software, but which are relatively useless to the average user. Such functions as proportional spacing, subscripting and superscripting are useless without a printer that supports these special functions, and printer spooling seldom (if ever) works without a language card. Another sophisticated feature being offered is the software generated 70 column display. Unfortunately, the print quality is so poor that many (if not all) of the programs which offer this feature also provide a 40 column display. Why pay for features you can't or won't use?

Word Machine concentrates on speed, ease of use, and the fundamentals. When it comes to accessing text, searching and replacing, inserting and deleting characters and lines, rearranging and moving blocks of text, manipulating files, finding words that need hyphenation, and printing, Word Machine does a better job than programs costing 2 to 10 times as much. What do you get for \$39.95? A powerful word processor for the price of a game. SYSTEM REQUIREMENTS: 48K Apple II, II Plus, or //e with Applesoft in ROM and 1 or 2 DOS 3.3 drives. Works with almost any printer.

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Strictly for Beginners

by Jo Hornung

Evidently, misery does love company. I have received some welcome support in response to the "Strictly for Beginners" column in the May newsletter.

To date, we have not been inundated with offers of clearly written manuals for printers, but we have received the encouraging word that newer manuals are getting better. According to Alan Peterman, the C. Itoh now comes packaged with a better manual for beginners. Only trouble is, it is designed for use with the TRS-80, rather than Apple.

Help is available, however, with this month's DOM, #23. Help for those of us with C. Itohs, that is. (See Alan Peterman's description of the DOM elsewhere in this issue.)

If you use an Epson printer, and you need help, maybe you could find it in a book called "The Other Epson Manual", published by "Cut the Bull Software". [We referenced this manual once before in an edition of this newsletter published during 1982 - Ed.] Tom Alexander asked for assistance in locating it,

and (again with Alan's help) he was able to find it at Computer King, at 71st and France, in Edina.

One person wondered why I was "picking on" just C. Itoh and Epson manuals. Fact is, those are the only ones I had any acquaintance with. I have been assured that there are others which are worse. Does that make us feel any better?

Our offer to try to find help for problems is still open. Remember that if you have a question for which you want a quick answer, call Stephen K. Johnson, at 869-3447. Stephen is the club's Beginners' Consultant. My phone, if you have a problem which you'd like to have addressed in the newsletter, is 922-7665. I will try to get the best available help for you.

Additional cause for optimism is the fact that plans are in the works for the club to start offering classes to help beginners make better use of their Apples. Look for more information on these in future issues.



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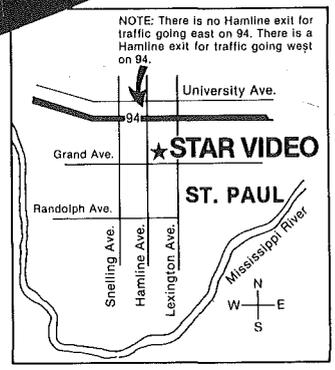
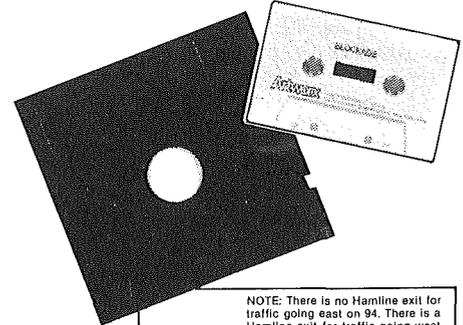
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- . . . and many others





it seems to me . . .

by Barry D. Bayer
 Director, Northern Region,
 International Apple Core, Inc.

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Downloaded from the Source.
 April article

Picking up upon last month's discussion (Sorry Mini'app'les, we didn't get it off the Source in time) of "copy protection"; by July, 1981, the era of the nibble copier, pioneered my Omega Microware's LOCKSMITH™ was well upon us. We could back up Personal Software's VisiCalc, and we could back up Stoneware's DBMaster. And yet if published relative sales figures were to be believed these relatively expensive programs (as well as the non-protected AppleWriter 1.1) continued as best sellers.

But these software manufacturers still didn't understand the problems they presented by "locking" their software. As a vice-president of one well-known manufacturer asked me, "If you buy a Chevrolet and crack it up, you don't expect General Motors to supply you with a new car. Why do you expect me to supply you with a new copy of my program if you spill coffee on the disk?"

And the "protection wars" were escalating. New methods of protection were designed, and new versions of the nibble copiers were sold to combat these new methods of protection. The nibble copier sellers loved it. Raise the price on a first purchase; sell an update at a reduced fee (but without a distributor cut or retailer cut). If no one else had invented new methods of copy protection, it might have been profitable for the nibble copier sellers to do so.

For some reason or other, copy protection was an issue only with Apple programs. A noted CP/M applications producer copyprotected its best selling program, and removed the protection a week later, after strong protests from CP/M users. Were Apple owners more venal than S-100 owners?

This brings us to 1982, the "pirate" bulletin boards and "hardcore magazine", which provided tutorials on how to break a copy protection scheme, and memory dump boards such as Wildcard and Crackshot. Previously, breaking a protection scheme was a lot of work, typically accomplished by high school students bored by the latest "adventure". With the new hardware assistance, the "breaking" of certain types of copy protection became as easy as pressing a switch.

Breaking a disk, of course, did a lot more than the nibble copier "copying" and even before the memory dump card, was easier to do than making a real nibble copy. By breaking a disk, one could develop a copiable, executable "B-File" of the program, complete with a startup menu noting that the breaking had been done by "rip-em-off software" or "The Apple-Cracker". And one of the most prized of the pirated disks, was something called "the Xerox Machine", which contained B-Files of LOCKSMITH, Back-it-up II, Nibbles Away, and several other of the nibble copiers.

But dealing with the "pirates" seemed a bit slimy, and even open to some legal risk if a software author ever decided to attempt to enforce a copyright by filing a lawsuit. And new copy protection methods have at least temporarily halted the ability of the current generation of nibble copiers. Besides, neither the nibble copier nor the code breaker gives the legitimate software purchaser-user the ability to do such simple and unobjectionable things as putting a printer interface card into slot 4, or using a 128K RAM card "pseudo disk" in slot 5, or placing the program onto a "hard" disk.

A lot of people felt that there really has to be a better solution.

(concluded in May Article below)

The Third Annual Meeting of the International Apple Core will be held in connection with the Boston Applefest, which will be held the weekend of May 13 through 15, at the Bayside Exposition Center. Your non-computer-oriented kids (if any) and non-computer-oriented spouse (if any) will enjoy touring old historic monuments (of which there are many) while you can browse through a wonderland of Apple programs and peripherals. If you can make it, I'm sure you'll enjoy it.

May Article

In the last couple of months we've reviewed the brief history of Apple software "protection", why such "protections" are injurious to software purchasers, and why these "protections" don't do very much good for the software seller and author.

GOTO 28



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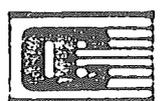
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EPSON FX80	625	MICROSOFT 16K RAM	79	WORD HANDLER	150
EPSON MX100 W/GTX	699	MICROSOFT SOFTCARD	275	LIST HANDLER	50
GEMINI 10	369	KRAFT JOYSTICK	55	MAGIC WINDOW II	125
GEMINI 15	499	QUADRAM MICROFRAZER	185	S.A.M.	89
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BMC 12" GREEN PHOS	99	BASF SS/DD/HR	25	MATH SKILLS	45
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SUPER 5 SLIM DRIVE	319	FLIP 'N' FILE	25	READING SKILL	27
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it seems to me... Concluded from page 26

But as much as I do not like these "protections", the manufacturers and authors who use them do have a point. I don't think there is any question that many of us Apple users copy program files and written documentation without serious fear of retribution, either in this life or the next. Yet, there is no question that it is both morally and legally wrong to steal --- that's really what it is --- someone else's work, without paying for it. Charlie Anderson of Shoestring Software, writing in a manual for a program called Tuesday Night Football that I bought several years ago, appealed both to his purchasers' self interest and sense of justice.

"Sure! Make your backups! . . .
But . . . cue the violins . . . please don't trade or give this program to someone else. I worked literally hundreds of hours on TNF, and it sells for a fair price. Who knows, you may write a really nice program yourself one day that you'll want to market -- and you probably wouldn't want it traded out of profitability."

I've lost track of whatever happened to TNF and Shoestring Software, (is this a case of a software bankruptcy because of lack of copy protection?) but the program was creative, worked, and was sold for a fair price. Similarly Bert Kersey's Beagle Bros. packages and Penguin Software's mostly unprotected stuff. Beagle Bros. and Penguin (both companies named after animals of sorts ..hmmmmmmmm) have stuck to their policies for a while, so I assume that not putting on locks helps more than piracy hurts. It is also important to note that, as with Shoestring, both companies give honest and visible value for the dollar.

Is there anything we can do to persuade more companies to take off the locks? Well the IAC has an official policy against piracy. This applies to the software we distribute on Disks of the Month, and to the activities of our member clubs. While we can't and don't spy on the everyday activities of each of our 450 member clubs (any more than your club can police the activities of all of its members) the encouragement of piracy by permitting copying at meetings, or serving as a facilitator of copying in any way is grounds for a club's termination of IAC membership. For the most part, however, we believe that our member clubs do not assist piracy. And we hope that our member clubs attempt to educate their members that casual copying and trading of commercial software is wrong, and is against their own long-term best interest.

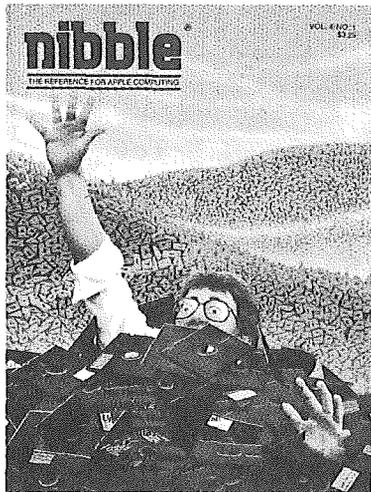
The Apple II family of computers enjoys its popularity, today, not so much because of any intrinsic superiority of design, as because of the wide variety of quality software available for it. Should authors and publishers of many of these programs decide that the Apple market just isn't worth the effort of dealing with piracy, and that new programs should be developed, instead, for other machines, we would all be the worse for it.

Once we organized Apple users (that is, to say, members of IAC member clubs) make sure that our own house is in order, we can approach the software vendors, and enter into a dialog with them, on how to make their programs more usable for us, without subjecting them to substantial losses through casual use piracy. Something of this sort is being done this month at the Boston Applefest, with a public panel discussion entitled "The Great Software Piracy Debate", chaired by Jonathan Rotenberg, President of the Boston Computer Society. The panel includes Dave Alpert, former IAC Treasurer and current President of Omega Microware, the publisher of Locksmith, Fred A. Anderson, Jr. a partner of the Boston law firm of Palmer & Dodge, who has represented VisiCorp, one of the first and most active of the "protectors", George Pollack, Executive Vice President of United Computer, which, I am told, manufactures a "cracking" board of some sort but I think may be a software rental library company, Chris Morgan, formerly Editor in Chief of Byte Magazine and now Communicator-in-Chief for Lotus Development Corporation (a company which has not seen fit to make its leading product, 1-2-3, available for the Apple, by the way), and Steve Wozniak, noted computer/rock-music festival impressario. It should be an interesting afternoon. I hope the participants will not use this opportunity merely to restate frozen positions, but will take the time to listen and perhaps reach some agreements which would help us all. I'll try to report on the meeting, next month.

Most of you know, by now, that Tom Wysoki of the NEO Apple group in the Cleveland, Ohio area is the new director for the Northern US Region of the IAC. My congratulations to Tom. I certainly look forward to working with him. BYE



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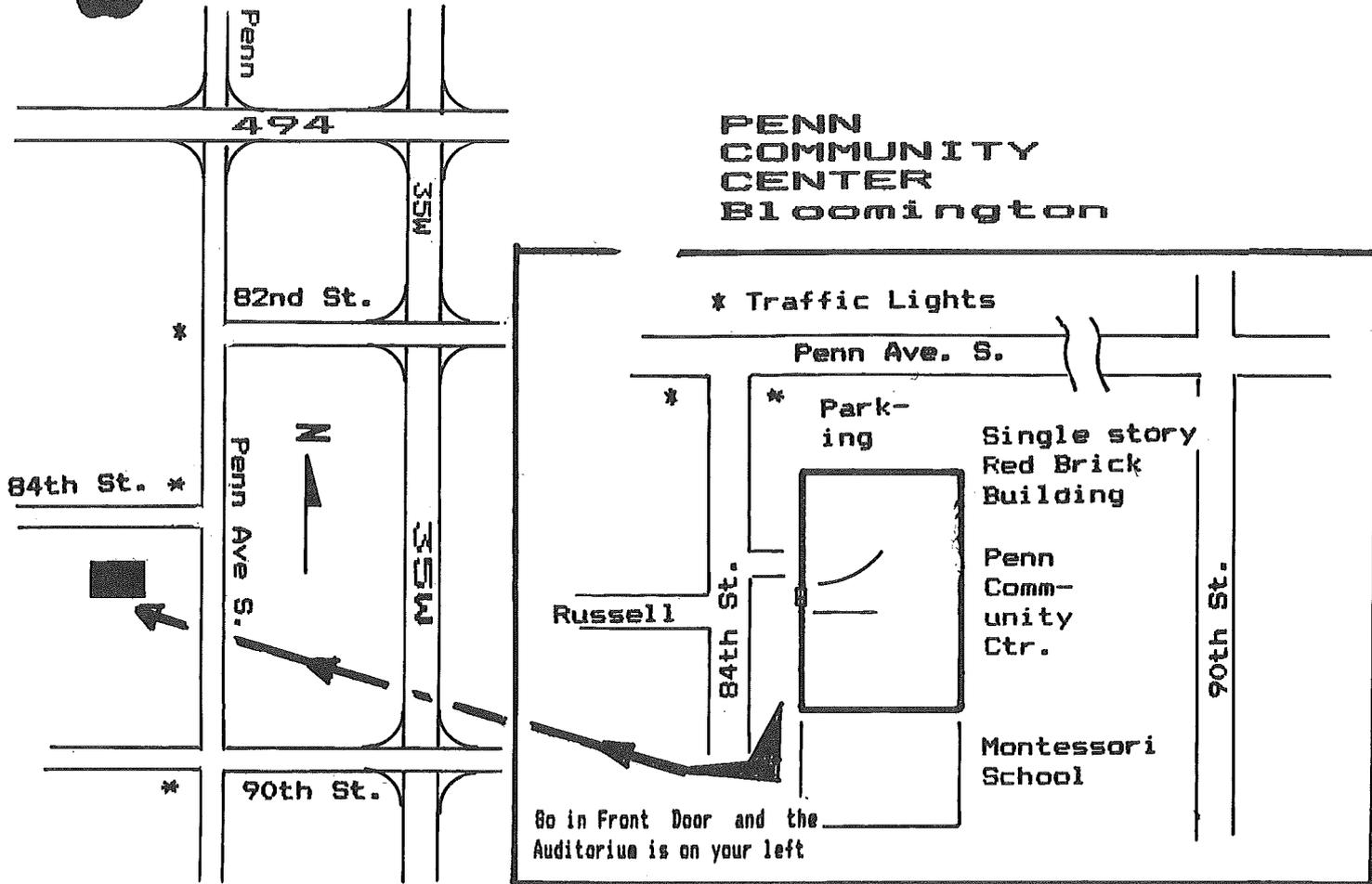
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