



# mini'app'les

apple computer user group newsletter

VOLUME VI No 1

JANUARY 1983

## CALENDAR

### WHICH

### WHEN

### WHERE

### WHAT

*Pascal*  
Note 1

Wed Jan 5  
7:30pm

Minnesota Federal  
9th Ave S Hopkins

Regular *Pascal* Special  
Interest Group Meeting.

*Dakota County*  
Branch

Tue Jan 11  
7pm-10pm

St. John Neumann Chch  
Pilot Knob Rd, Eagan

General meeting  
Note 7

*St. Paul*  
Branch

Tue Jan 11  
7pm-10pm

Minnesota Federal  
White Bear Lk Shp Ctr

*Don Heinke* on  
CP/M - Note 3

*Board Meeting*  
Note 5

Wed Jan 12  
7:30 pm

Ann Bell's Residence

General club business

*Business*  
Note 10

Thu Jan 13  
7.00pm

Minnesota Sch of Bus's  
11 S 5th, Mpls

*Kathleen Leo*  
on Quick and Easy.

Computer Swap

Sat Jan 15

Brown Institute

Trade your software.

**REGULAR**  
MINI'APP'LES  
Note 2

WEDNESDAY  
Jan 19th  
Prgm-7:00pm  
SIGs-8:00pm+  
Map inside

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

Demo of  
Plato for  
the Apple.  
(Tentative)

*Investment*  
Note 4

Thu Jan 20  
7.00pm

Minnesota Sch of Bus's  
11 S 5th, Mpls

Personal Investor  
demo. by PBL Corp.

*VisiCalc*  
Note 9

Tue Jan 25  
7.00pm

PBS  
4306 Upton Ave S.

*Minnetonka*  
Branch  
Note 8

Wed Jan 26  
7pm-10pm

Minnetonka High Sch  
Cafeteria

Subgroups of Beginners,  
Ed't., Bus's, Graphics.

*Pascal*  
Note 1

Wed Feb 2  
7:30pm

Minnesota Federal  
9th Ave S Hopkins

Regular *Pascal* Special  
Interest Group Meeting.

*St. Paul*  
Branch  
Note 3

Tue Feb 8  
7pm-10pm

Minnesota Federal  
White Bear Lk Shp Ctr

*Dan Mayer* on  
DB Master

*Dakota County*  
Branch

Tue Feb 8  
7pm-10pm

St. John Neumann Chch  
Pilot Knob Rd, Eagan

General Meeting  
Note 7

*Business*  
Note 10

Thu Feb 10  
7:00pm

Minnesota Sch of Bus's  
11 S. 5th St., Mpls

*Genealogy*  
Note 11

Sat Feb 13  
2.00pm

Minn Historical Soc.  
690 Cedar St., St. P.

Minn Genealogical Soc  
Computer Interest Group

**REGULAR**  
MINI'APP'LES  
Note 2

WEDNESDAY  
Feb 16th  
Prgm-7:00pm  
SIGs-8:00pm+

**PENN**  
**COMMUNITY**  
**CENTER**  
84th & Penn  
Bloomington

Note 1. Contact- *John Schoeppner*  
2. see pg 2 *Chase Allen*  
3. for tel. *Pete Halden*  
4. nos. *Eric Holterman*  
5. *Ron Androff*

6. *Dan Buchler*  
7. *Bob Pfaff*  
8. *Martin Thames*  
9. *Mike Carlson*  
10. *Subir Chatterjee*  
11. *Bill DeCoursey*



# MINI'APP'LES

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## INFORMATION

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## Questions

Please direct questions to appropriate board member or any officer. Technical questions should be directed to one of the Technical Advisers listed here.

## Membership

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

## DOMs

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

## Dealers

Mini'app'les does not endorse any specific dealers but does promote distribution of information which may help club members to identify the best buys and service. Consequently the club does participate in bulk purchases of media, software, hardware and publications on behalf of its' members.

## Newsletter Contributions

Please send contributions directly to the Newsletter Editor. Hard copy binary or text files are preferred, but any form will be gratefully accepted. Deadline for publication is the 3rd 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:  
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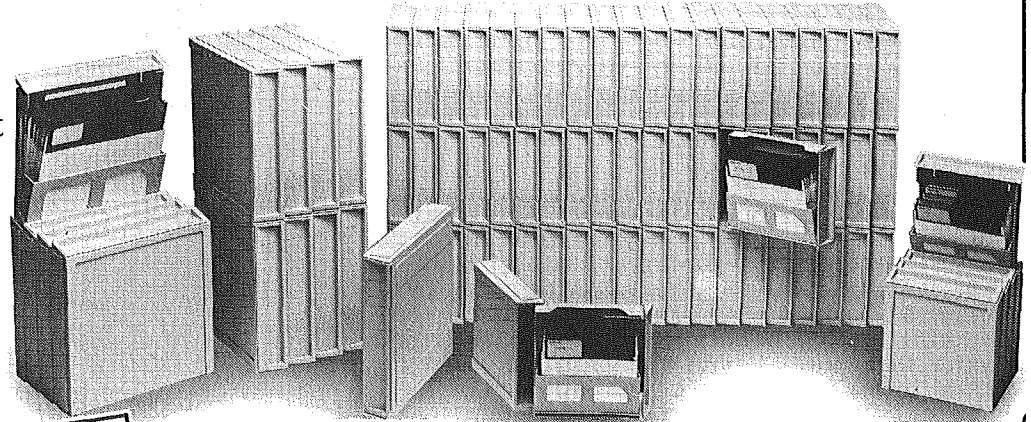
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## ANNOUNCEMENTS

### REVIEW EDITOR

by Rita Wetzel

In the November newsletter Dan Buchler put out the call for volunteers to help him with the newsletter. Talking with Dan and discussing those areas in which he needed help, we decided that I would best be suited to wear the "hat" of the Review Editor.

The next question is: What is a Review Editor? Well, as programs and hardware are received by the club for review, I will be soliciting help from the club members to do the actual reviews. The reviews will then be sent back to me and, after I edit them for consistency, I will forward them to the editor.

Currently, I am preparing a draft of the Review Process and a set of guidelines for software reviews. Once these have been approved, they will be available for all reviewers to use to aid them in the reviews. This will contribute significantly to the consistency of our reviews.

By establishing this function, it is hoped that the club can acquire more software to review from various firms and to make those reviews available to our members. I will be pursuing the acquisition of additional software for the review process. Therefore, if any of you are interested in writing reviews, please give me a call at 474-5725!

### INVESTMENT SIG

by Eric Holterman

Since the deadline for this newsletter was before our December Investment SIG meeting, I can't report what happened, but will cover meetings in the first issue available after our meetings in the future.

The agendas for our January and later meetings are not firm yet, but here is what I expect. January will be a presentation by Portware, Inc., a Twin Cities firm that offers software for personal portfolio management. Their ad in the December issue may give you a better idea of their offerings.

The January meeting will be at 7:00 PM on Thursday, January 20 at the Minnesota School of Business, 11 South 5th St. in downtown Minneapolis. Until further notice we will be using this location on the third Thursday of the month for our regular meetings.

Further down the line, a presentation by Dow Jones of their services is expected. Sessions by two of our members on Compu Trac and on the use of VisiCalc, VisiFile and VisiTrend/Plot for investment purposes are also on tap. Suggestions and offers to help for future meetings are always welcome.

We hope to have one of the Cluster Groups following the main presentation at the general meeting dedicated to investments on a monthly or every other month basis. HELP and suggestions for this are also needed. The response so far to the Investment SIG has been quite strong, so a Cluster Group might also prove to be popular.

A reminder to you budding authors. Dan Buchler is always looking for good articles to run in the Newsletter. One or more on investment applications for the Apple would surely be appreciated.

### EDUCATION SIG

by Janelle Norris

The Education Sig meets as one of the cluster groups following the main meeting (Jan 19th). Jane Cahatterjee will give a brief report on the MECC conference. We will also be distributing a questionnaire and having a group discussion on what direction the Education SIG should go. That is, meeting topics, contacts, education sessions, software demos/services, etc.

### COMMUNITY RESOURCE POOL (CRP)

CRP is an enrichment program for schools in Bloomington, Eden Prairie, Edina and Richfield. Teachers within those districts may request resource people to come into a classroom as speakers, demonstrators, etc.

CRP gets requests for people familiar with specific aspects of micros including, vocabulary, binary numbering systems, programming, careers, graphics, etc.

If any members are interested in becoming a resource person, please call CRP at 925-5734.

CRP have volunteered to identify specific high school students who have advanced computer skills and who might be willing to assist members in some way.

GOTO 28



## DOM #17

by Alan Peterman

This newest Disk of the Month features some programs from the International Apple Core as well as some programs (and modifications) by our own members. While this disk is rather heavily oriented towards the programmer or advanced user, there are several programs that should be useful for all users.

For those of you who don't have two drives for copying and hate the constant disk swapping, there is a revision of SINGLE DRIVE COPY PGM for DOS 3.3 that will speed up your file transferring. It will copy all files and will take up to 110 sector of material at a time. Also, this disk has a modified DOS that will boot INTEGER into the language or RAM card in under 3 seconds and there is a program to allow you to put this DOS on your diskettes. Going along with the disk access programs there is a rather slow but thorough SECTOR MAP program that will tell you where on the disk each program is located. This can be useful in cases of bad disks or merely to know what the disks format is. Lastly, in the disk category, there is a program to let you use track 35 and gain 4K of storage. Evidently, most APPLE II (and compatible) drives can use track 35 for a total of 36 tracks (0-35).

For recreational use, Jeanne Walsh has contributed a program that will generate and save music files. On the DOM there are two examples of music files. It probably would be a good idea to transfer the MUSIC program onto a work disk so that you can write new tunes to disk. Also, there is an interesting game/puzzle from Ken Shuck called PETALS. He claims in the instructions that the name is a clue to the solution of the puzzle, but I, for one, didn't get any help from the name. Also, there is a CALORIE COUNTER program that will keep track of your diet now that the holidays are over.

Utility people should have a field day with the subroutines in PUF (Print Using and Friends). It allows easy formatting of dollar amounts and has a string swap and array delete command. Also the POKE.33 routine makes program editing easier. There is a program, HUFFIN, to read Pascal disks in DOS and a program to read the memory of the APPLE II in standard ASCII. Also there is a long list of important addresses in the APPLE II and a program to convert lower case to upper case for people without lower case chips. An 'EXEC' file called MEMAP will tell you how you are currently

using the RAM memory and the UN-NEW program will restore a lost program if you accidentally type 'NEW'.

The FILE CABINET program from DOM 2 has an obscure bug that will cause trouble if you use more than 9 fields in it and try to select a report by certain fields. To correct the problem I recommend making the following changes to the program:

```
15525 IF S < 0 OR S > (NH)
      THEN PRINT CHR$(7);:
      VTAB PEEK (37): CALL - 868:
      GOTO 15520
15545 IF X < 0 OR X > (NH)
      THEN PRINT CHR$(7);:
      VTAB PEEK (37) - 1: CALL - 958:
      GOTO 15540
15570 IF X < 0 OR X > (NH)
      THEN PRINT CHR$(7);:
      VTAB PEEK (37) - 1: CALL - 958:
      GOTO 15565
```

I have had input from very few members on what kind of programs they want on their DOM. I really would like to hear from more of you about the kind of programs (games, utilities, business, home accounting, etc) that you want or need. While I can't promise that I can supply exactly what you want, it does give me better guidelines for my choices as to what goes onto a DOM. Also, as always, PLEASE submit anything that you can for the DOM.

## SINGLE DRIVE COPY PGM

An updated version of a DOM #2 program that will be very helpful to owners of just one drive. It allows you to copy several files at one pass including text, Binary, and Basic files.

## FASTBOOT CREATE

A program to create a fast-booting DOS that will load Basic into the RAM card in under 3 seconds. This makes Integer much more convenient to have up. The program describes exactly how to modify your disks for this fast DOS. It uses the file FAST.LOADER and FAST.RWTS (Read Write Track Sector) to accomplish the changes to DOS. These programs should be used on a disk after initialization to create the fast-booting disk. Another way to get the FASTBOOT is to initialize a disk after booting a disk that has this DOS active. From IAC

GOTO 6



DOM#17 Continued from page 5

**CALORIE COUNTER**

A nice program that will keep track of daily caloric intake and has a built in library of foods. You tell it what and how much you ate and it gives the total calories consumed and the amount of weight you gain or lose. Donated by Ken Slingsby.

**MUSIC**

A music program that allows you to generate files of music or play back ones that you previously saved. It covers 3 octaves and has tempo adjustments. By Jeanne Walsh. There are two files of music to play on the disk or you can create new music files by entering the note, duration and octave for the composition you are working on.

**PETALS**

A HIRES dice game by Ken Shuck. It lets you find the rule for getting a number from the dice displayed as a mathematical puzzle. There is a good routine for displaying dice cubes that one could adapt to another game.

**ADDRESS INDEX. INSTRUCTIONS**

Instructions on how to use the ADDRESS INDEX program. It tells how to convert the ADDRESS INDEX to upper case if you don't have a printer or lower case chip. From the IAC

**ADDRESS INDEX.LC**

A long list of important addresses in the APPLE. List it on a printer to get a very good reference or read it on the monitor. For more info run 'ADDRESS.INDEX.INSTRUCTIONS' first. From the IAC.

**LC-KILLER. INSTRUCTIONS**

Instructions on use of the LOWER CASE KILLER program. From the IAC.

**LC-KILLER.OBJ**

The binary lower case killer. It will convert any lower case in a program to UPPER CASE. This can be very useful if your APPLE doesn't have a lower case chip and the programmer did have one. Run the instructions for full info. From the IAC.

**SECTOR MAP**

A nice program to map out where on the disk each program's directory is and how the total disk is used. In Integer and from the IAC.

**DISPLAY ASC PAGE BY PAGE.INST**

A program to describe how to display the current memory of your APPLE in standard ASCII code. The program is a machine language program that you 'BRUN' to 'read' memory without having to convert from HEXADECIMAL. From the IAC.

**HUFFIN**

A program to let you read PASCAL disks on a DOS system. If you get a disk in PASCAL you can access the data with a standard APPLE and/or convert the data to DOS for use in non-PASCAL programs. There is an instruction program to describe the use of this utility in more detail. From the IAC.

**POKE 33. INSTRUCTIONS**

Instructions on how to use the POKE.33 system. If you program it allows a one keystroke change to a 33 column screen which makes editing of programs much easier. This program sets up an ampersand vector so that all you have to do is type "&" and the program switches the screen mode. The machine language program comes in a normal Binary file which can be 'BRUN' and a relocatable version. There is also a source file for those of you who know what to do with such a beast. From the IAC.

**PUF. INSTRUCTIONS**

The instructions for the 'PRINT USING AND FRIENDS' program. This handy set of routines provide the ability to easily define print formats and also provide a mechanism to clear to end of line or page. Like the POKE.33 program there is a source code file in addition to the object file. From the IAC.

**TRACK 35. INSTRUCTIONS**

The instructions on how to modify DOS to allow use of track 35 on the diskette. The disk now uses 0-34 (35 tracks) but most can access track 35 and gain 2048 bits more storage. Again there are object, source and relocatable files. From the IAC.

GOTO 28

# HANDS-ON LEARNING

## Presfax<sup>®</sup> and Apple<sup>®</sup> II



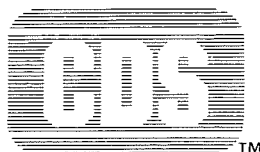
Young students, the handicapped and many others are finding the Apple<sup>®</sup> II computer more accessible than ever before. Thanks to the Presfax 100<sup>®</sup> Touch Teacher keypad from Computer Data Services.

With a square, touch-sensitive area consisting of 100 "keys," the Presfax 100 keypad fits right over the Apple II's keyboard, freeing users from any restrictions they may encounter with the standard keyboard arrangement.

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## DAISY WHEELING

### A Review of Format II

by Arsen Darnay

A friend of mine and a fellow member of the Mini'app'les read halfway through last month's column before he checked to see the author's name. He'd gotten curious. My BS had had a familiar sound, he said. "Kind of light on technical content, but I've got to hand it to you," he said. "Getting a few novels published is nothing much. But to make the Mini'app'les Newsletter -- now that's an achievement."

Concerning 'technical content' -- you've got to have the know-how before you can get technical, and mine is rather slender. I have the greatest of admiration for those heroic types who attack their Apples with soldering iron and tell the tale in A.P.P.L.E. after -- written in machine code, no less. But if I represent any group at all, it's those who're brand new to the game and sweat cold sweat changing a single card on the revered mother board. ('Mother board' has always struck me as irresistibly funny!)

But, anyway, I'll try to be a little more technical this time and tell about the (self-proclaimed) champion of Apple word processing systems, Format-II by Kensington Microware.

It comes to you with three diskettes, a chip, a wire for upper-lower case, and a well-written, thick application manual in an attractive book that looks a lot like VisiCalc's.

Two diskettes for program -- and if you wear one out, you can get a replacement for \$10 provided that your registration resides in their computer. The utility diskette converts Format-II's binary files to normal DOS text files (or vice versa). (My version of the utility program refused to work until I did some surgery on the Applesoft in which it was written. Kensington, I think, dislikes poor Sup'R'Terminal a lot.)

The chip I didn't use. It's meant for those who have a Videx card; it gives you an inverse character set.

To get upper and lower case with Format-II you have to install their keyboard modification kit -- a blue block with wires that fits snugly into the game socket and two tiny clips that attach to specified wires of the keyboard's electronic rack.

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If you use Format-II, say good-bye to games -- unless you're willing to change fixtures back and forth. It's no problem for me. I don't even own a paddle. My frustration had another cause. I already had a shiftkey mod -- to use with Apple Writer II. Format-II's modification doesn't work on Apple Writer! I can use both systems; but to do so I have to fiddle with faint wires inside the forbidding frame or else return to the equally frustrating custom of using Escape to capitalize in Apple Writer.

Anyway. I got my system one Thursday night. It'd been a long, long day. On the way home I told myself to leave well enough alone until the morning, but that resolution didn't hold. I kept finding myself in front of my machine, caressing the Format-II package. At last (poor addict), I tore into the cellophane and -- not bothering to read a single line (well, not quite) -- I booted the damn thing up. And, wouldn't you know it, it wouldn't boot!

I often have that problem with new diskettes. I think I shove them in too far or something of the kind. Else new diskettes take a while to feel at home inside my drive. Don't know. I worked and swore well into the night before the payoff came at last and I sat staring at the Menu. Tried a key or two. It was working. I was up. And I went to bed all wrung out, wondering why I ever got involved with Tron.

**Daisy Wheeling Concluded from page 8**

The rewards came later. Format-II lives up to the claims of its makers in most regards. It's a sophisticated system of the 'what you see is what you get' variety -- the chief reason why I bought it.

It's great for the technical or business writer who needs to format text in complex ways. You don't need CP/M -- although you have to have an 80-column card. It comes complete with a mail list program which boots up with the processor. And it's relatively inexpensive. You can get it from a mail house for under \$200.

The best way to characterize the virtues of Format-II is to say that it emulates a typewriter while it gives you all the usual bells and whistles of a computerized word processor.

You can set the margins and see them. They are inverted bars at the top and bottom of the screen. Tab settings show up as little arrows. You can reset margins in mid course and stretch or squeeze the text into the new parameters you've set. You can define the page length in advance; a counter tells you which line you're on. At the end of the page you hear a pleasant trilling sound and the cursor stops. You can, of course, change page length any time you wish.

You can insert, delete, store, and move text. Goes without saying. Format has a find/replace routine as well -- although that feature works only one page at a time unless you have a RAM card.

It will justify and center a line, a paragraph, or a page at a time. It won't justify to the right margin *only* as Apple Writer II will do -- but that's a feature I've never used.

It underlines as a typewriter does, without using embedded commands that take up space (as Apple Writer does). It will underline blank spaces without having to be forced. The underlined text shows up in inverse if you use a Videx but not (alas) if you use the Sup'R'Term 80-column card.

There are more features yet, but let me spend the rest of my bytes on the Champion's flaws. None fatal -- in my opinion. But like all distinct and powerful personalities, Format-II can be demanding.

For one thing, it demands diskettes dedicated to its exclusive use. Each diskette formatted for this program's

files will hold maximally 17 pages, each with maximally 80 lines of 80 columns -- hence just shy of 109,000 bytes. But in practice the diskettes hold far less. My typical page is 3400 characters and a diskette, consequently, 58,000 bytes -- which is a far cry from the 140,000+ characters the normal diskette will hold. If you store data on diskettes, prepare to shell out more money.

To produce the bells and whistles, Format-II uses every byte of available memory in the Apple. There is hardly any room for text! You work on one page at a time and save it to disk before you go on to the next one -- which can be tedious. With a RAM card on the mother board, however, you can switch from page to page fast.

What else? I'm used to the I-J-K-M cursor moves from Apple Writer II and THE Spreadsheet. Hence using Format's N for up and M for down is a pain. With N I use the 'north' mnemonic. But what about M? I've tried 'Miami' because that's to the south, but my unconscious does not cooperate.

The mail program has limitations which deserve more space than I can give them here. The worst is that the program uses only six characters to sort.

On balance I am satisfied -- and getting used to the beast. It treats my Smith-Corona Printer like it ought, and that's where the payoff really comes. More about that some other time. Meanwhile, for more help on Format-II call me at 933-2540 by day or 933-0399 by night.

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941-4504



# APPLE JOURNALS

## For Beginners

by Dan Buchler

Beginners are always wanting to know the names of available journals or magazines that relate to Apples. I have just updated my list, which follows below. A similar list of education related journals is included in David E. Laden's Turning the Pages elsewhere in this newsletter.

### SOFTALK

Softalk is really a beginner's magazine but has something for all. It is well known for its lists of best selling software and reviews of software house personnel. It also has columns on Assembly Language, Basic, Apple ///, Pascal, VisiCalc, etc. Your first year subscription is free! Send your name address and serial number (the Apple's) to

Softalk Circulation  
Box 60,  
North Hollywood,  
CA 91603.

### Nibble

Nibble is for those of you who want to learn more about how to program. It's generally at a fairly low level, but again with something for everyone. If you use the Apple only with canned programs like VisiCalc, Nibble is probably not for you. Subscription is \$19.95 (8 issues).

Nibble,  
Box 325,  
Lincoln,  
MA 01773 (617-259-9710)

### Call A.P.P.L.E.

This is the journal of the Apple Puget Sound Program Library Exchange (A.P.P.L.E.). This is a user group, like Mini'app'les. It started before Mini'app'les and quickly gained National importance because of the quality of its newsletter. A.P.P.L.E. now has about 15,000 members 99.9 % of which joined for the purpose of receiving the journal.

Call A.P.P.L.E. is a medium-to-advanced user's journal though, like all of the others, there's often something for everyone. Another advantage of belonging to A.P.P.L.E. is because of their software. A.P.P.L.E. distribute some very high quality software at low prices (usually \$20 to \$30 per disk). Included are THE Spreadsheet, GPLE, Big MAC Assembler, Higher Text and others. To join, you pay a one time Apple-Cation fee of \$25.00 plus annual dues of \$20.00, a total of \$45 the first time.

A.P.P.L.E.  
General Offices,  
304 Main Ave. S., Suite 300,  
Renton,  
WA 98055 (206-271-4514)

### PEELINGS II

This is "the Magazine of Apple Software and Hardware Evaluation." Although it has been published for over 2 years, it has only recently evolved into a major publication. It is entirely devoted to reviews. The July-August issue reviewed 10 word processors and it is the best and most even evaluation that I have ever seen on any product. I really recommend that you gain access to this magazine if you are going to spend much money on software. Subscriptions are \$21.00 for 1 year (9 issues) or \$38.00 for 2 years (18 issues).

Peelings II,  
PO Box 188,  
Las Cruces,  
NM 88004-0188 (505-526-8364)  
The Source TCT 120

### Apple Orchard

This is the official journal of the International Apple Corps. It is geared to beginners, but like all, has something for everyone.

We sell the magazine at meetings, or you may obtain your own subscription for \$15 for 6 issues from:

Apple Orchard  
908 George St.,  
Santa Clara,  
CA 95050 (408-727-7652)

There are literally 100s of Apple user group newsletters. If you really want to subscribe, contact your newsletter editor for further information. We periodically try to bring you extracts from these newsletters where copyright permits.

In the area not exclusive to Apple I wish only to mention one publication:

### SpreadSheet

This is the journal of InterCalc, formally VisiGroup, which is a VisiCalc and VisiCalc look-alike user group not in any way connected with VisiCorp. Their newsletter is excellent, though small (8 pages typeset). Send \$25 for membership and subscription to SpreadSheet for one year to:

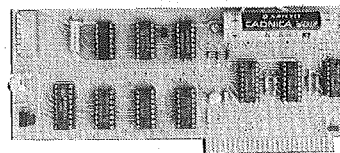
InterCalc,  
PO Box 254,  
Scarsdale,  
NY 10583

# APPLE PERIPHERALS ARE OUR ONLY BUSINESS

## TIME II

### THE MOST POWERFUL, EASIEST TO USE CLOCK FOR YOUR APPLE

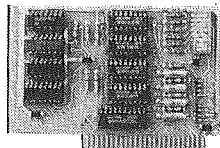
- Time in hours, minutes and seconds.
- Date with year, month, day of week and leap year.
- Will enhance programs for accounting, time and energy management, remote control of appliances, laboratory analysis, process control, and more.
- 24-hour military format or 12-hour with AM/PM indication.
- User selectable interrupts permit foreground/background operation of two programs simultaneously.
- Crystal controlled for .0005% accuracy.
- Easy programming in basic.
- On board battery backup power for over four months power off operation (battery charges when Apple is on).



- Twenty-seven page operating manual included with many examples of programs to use with your Apple in any configuration.
- Includes disk containing a DOS Dater and many other time oriented utilities plus over 25 user contributed programs at no extra cost.

**PRICE \$129.00**

## SUPER MUSIC SYNTHESIZER



- Complete 16 voice music synthesizer on one card. Just plug it into your Apple, connect the audio cable (supplied) to your stereo and boot the disk supplied and you are ready to input and play songs.
- It's easy to program music with our compose software. You will start right away at inputting your favorite songs. The Hi-Res screen shows what you have entered in standard sheet music format.

- We give you lots of software. In addition to Compose and Play programs, the disk is filled with songs ready to run.
- Easy to program in basic to generate complex sound effects.
- Four white noise generators which are great for sound effects.
- Plays music in true stereo as well as true discrete quadraphonic.
- Envelope control.
- Will play songs written for ALF synthesizer (ALF software will not take advantage of all the features of this board. Their software sounds the same in our synthesizer.)
- Automatic shutoff on power-up or if reset is pushed.
- Many many more features.

**PRICE \$159.00**

## ANALOG TO DIGITAL CONVERTER

- 8 Channels
- 8 Bit Resolution
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- Ratlometric Capability
- Fast Conversion (.078 ms per channel)
- Eliminates The Need To Wait For A/D Conversion (just PEEK at data)
- A/D Process Totally Transparent to Apple (looks like memory)

The analog to digital conversion takes place on a continuous, channel sequencing basis. Data is automatically transferred to on board memory at the end of each conversion. No A/D converter could be easier to use.

Our A/D board comes standard with 0, 10V full scale inputs. These inputs can be changed by the user to 0, -10V, or -5V, +5V or other ranges as needed.

The user connector has +12 and -12 volts on it so you can power your sensors. (These power sources can be turned off with on board dip switch).

Accuracy 0.3% Input Resistance 20K Ohms Typ  
A few applications may include the monitoring of • flow • temperature • humidity • wind speed • wind direction • light intensity • pressure • RPM • soil moisture and many more.

**PRICE \$129.00**

## DIGITAL INPUT/OUTPUT BOARD

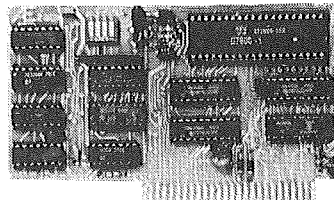
- Provides 8 buffered outputs to a standard 16 pin socket for standard dip ribbon cable connection.
- Power-up reset assures that all outputs are off when your Apple is first turned on.
- Features 8 inputs that can be driven from TTL logic or any 5 volt source.
- Your inputs can be anything from high speed logic to simple switches.

- Very simple to program, just PEEK at the data.
- 4 other outputs are also provided. User 1, reset, interrupt request, non-maskable interrupt.
- Now on one card, you can have 8 digital outputs and 8 digital inputs each with its own connector. The super input/output board is your best choice for any control application.

**PRICE \$62.00**

## Z-80 CARD

- TOTALLY compatible with all CP/M software.
- Executes the full Z-80 and 8080 instruction set.
- Allows you to run your Apple CP/M based programs.
- Does EVERYTHING the other Z-80 boards do, plus supports Z80 Interrupts.
- Hardware and software settable switch options.
- An on-card PROM eliminates many I.C.'s for a cooler, less power consuming board.
- Complete documentation included. (user must furnish software)



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# BRAVO!

## BYTE, POPULAR COMPUTING AND INFOWORLD APPLAUD QUIC-N-EASI

*“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.”*

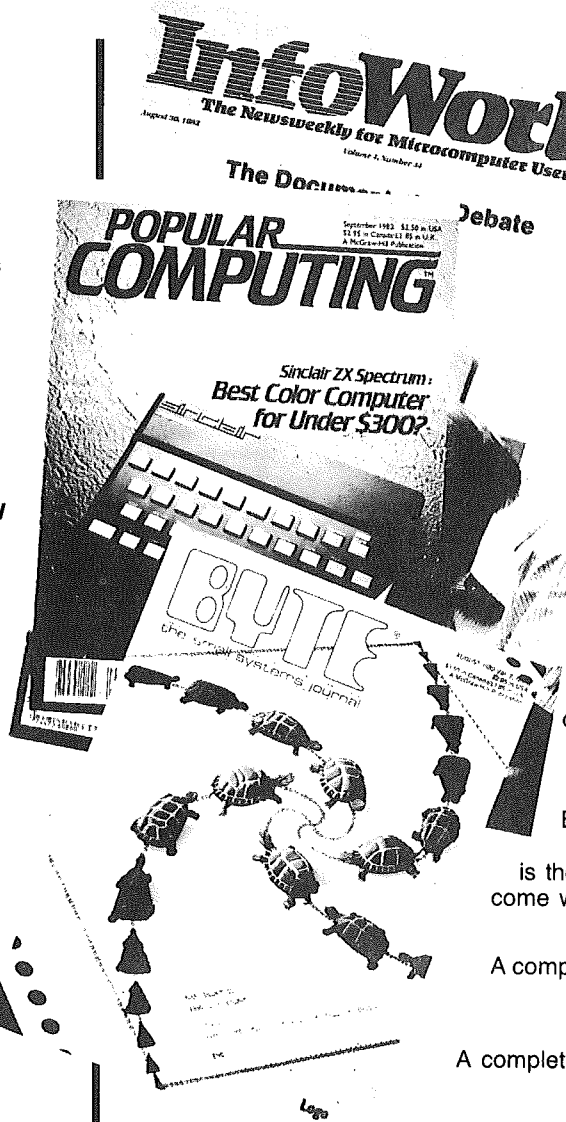
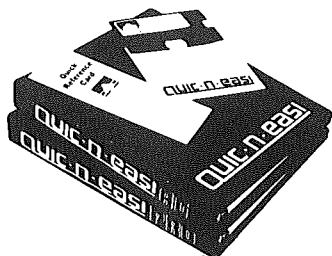
*“Quic-N-Easi should help you to generate common business-application programs much faster than could be done using BASIC or other programming languages.”*

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?

Quic-N-Easi is the best and easiest way to generate custom business applications. It handles your input, your data base, your reports, everything.

Your finished programs will work better, run better and return more dollars to you—or your money back. So don't delay. There is absolutely no reason to waste one more day.

BYTE, POPULAR COMPUTING and INFOWORLD are right. Quic-N-Easi is the one system that is good enough to come with a 100% money back guarantee.

### **Quic-N-Easi AG - \$295**

A complete Applications Generator Package for the first-time user.

### **Quic-N-Easi PRO - \$395**

A complete Applications Development System for the programming professional.

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# WORD MACHINE

## A Word Processor Review

by Rita Netzel

*Word Machine* is a word processor offered by NIFTY INFO, a local firm, for the home user and small business person. Personal correspondence, school papers, maintenance record, and mailing lists are but a few examples of how *Word Machine* can be put to use. This word processor requires a 48K Apple II or Apple II+ with Applesoft in ROM and one or two DOS 3.3 drives. It will work with most printers although it is configured to work with control sequences for the Epson MX-80 and MX-100 printers.

*Word Machine* is conceptually based on two pages of text buffer or work space. There are 250 lines per page which is approximately equivalent to 8 typed pages. Because of the two page concept, information can be transferred from one page to the other. For example, when typing personal correspondence, the first page could be the letter and the second could be loaded with a file of addresses. The address could then be transferred to the first page when necessary to avoid having to key it in every time a letter is written. Each of the pages and, therefore, both cursors operate independently of each other.

All of the options are menu driven. It is relatively easy to jump from one menu to another. All of the menus are consistent. That is, you always use ESC to leave a menu, all options within the menu are selected by a number, and the chosen option appears in inverse video. There are help sequences associated with each of the menus. Essentially these help sequences are as informative as the documentation.

*Word Machine* comes with a powerful feature called the "Inspect" command. With this command one can view the text as it will be printed. All line and page breaks are shown on the screen by means of backward slashes, inverse for end of line and flashing for page break. This allows the user to inspect long words and page spacing. In conjunction with the "Inspect" command, a Hyphenation Alert function can be activated. Upon inspection of the end of lines, a half tone bell will sound when a word is found to exceed the right margin print parameter. The user has the option of either ignoring the bell (the word is automatically moved to the next line in its entirety) or the user can hyphenate the word.

Up to 10 'dot command' sequences may be configured to control your printer. Printer control in this context includes such things as **BOLD**, Underline, etc. *Word Machine* comes with 10 sequences for the Epson printers; however, they are relatively easy to modify by selecting the PRINTER CTRL SEQUENCES option. There is no provision for entering individual control characters as can be done with some of the more expensive word processors. You are therefore stuck with the 10 configured sequences which is sufficient for the more common things might do with an Epson but prevents one from getting really exotic.

Other features of this word processor include: selectable right justification, selectable auto paging and page number printing, global find, replace, edit and delete, printout hold, abort, restart, or continue, and re-assignable editor keys. The editor functions include character and line insert or delete, block move, and high speed scrolling.

One unusual feature of *Word Machine* is a tool for programmers. This is in the form of a utility which allows one to create a BLOADable TEXT screen (location \$400 thru \$7xx) which can be used to display one page menus, etc. by using the BASIC statement:

```
PRINT CHR$(4);"BLOAD filename".
```

This feature was not tried.

Generally speaking, *Word Machine* does perform as documented. It is relatively easy to manipulate the cursor around the text: up, down, and sideways on both pages of text. Block moves are simple to perform from one page to the other. Inserting and deleting characters are also executed with ease. And, as has been stated prior to this, the menus are explanatory and easy to use, so saving and loading text is just a matter of selecting the appropriate number.

There are some problems with the product although there are ways of coping with them. There is no initialization routine to start a new text file. Therefore, when starting a new file after having worked with an existing one, the existing one still resides in memory.

GOTO 15

# WORD MACHINE

## WHO IS NIFTY INFO?

While the Apple II enjoys the widest selection of software available for any computer, there are many applications where the available software lacks affordability, friendliness, and speed. Nifty Info is a group of computer enthusiasts who have organized to develop and market software that fills this gap. Our first software package is a word processor. Although there are many word processors on the market, Word Machine will satisfy the needs of many users better than anything now available and at \$39.95 its affordable.

## WHATS A WORD PROCESSOR?

In general a word processor is a program designed to manipulate text. Functions common to most word processors allow the easy correction, insertion, deletion and rearrangement of text. Its widely recognized that word processors are among the most useful programs available for either home or business.

## "DO IT ALL" SYNDROME

Beyond the basic abilities common to the majority of word processors, most of the extra features offered by the "Do It All" programs are designed to support special hardware or to simplify the composition of highly formatted documents. However, in making complex operations simple, simple operations have become complex. All microcomputers have limitations and once the complexity of a program saturates its host computer, the addition of more features must result in tradeoffs. Its evident by sluggish operation, multiple operating modes and cluttered displays that many of the word processors now on the market have gone beyond the saturation point and have sacrificed fundamental performance in favor of extra features. What this all boils down to is that no single word processor does all types of word processing well. The same programs that are best for highly formatted work often are slow and cumbersome when working with normal text such as memos, letters, lists, school papers, Etc.

## WORD MACHINE

Word Machine is a true word processor with many advanced features. However, unlike most word processors, Word Machine is optimized for normal text. The "free form" assembler and uncluttered display allow Word Machine to operate in a very natural (logical) manner while the single mode editor and advanced menu system make is easy to learn and use.

### SYSTEM REQUIREMENTS:

48K APPLE II OR II PLUS  
WITH APPLESOFT IN ROM &  
1 OR 2 DOS 3.3 DRIVES.  
WORKS WITH MOST PRINTERS

## TIRED OF WAITING?

Others talk about speed but Word Machine's 100% machine language assembler/editor delivers. Scrolling speed is twice that of a Basic program listing. You can insert or delete whole lines of text in just a third of a second and the character insert or delete keeps-up with the repeat key. search through 20,000 characters a second to find, edit, delete or replace any word. Move blocks of text as large as 10,000 characters in just half a second. Word Machine loads and stores text in half the time of many other programs.

## FRIENDLY

Word Machine sets new standards in user friendliness. The advanced menu system along with numerous prompts and status displays minimize mistakes and keeps you informed. If you need help and don't have the manual handy, there are over 30 screens of instructions that can be easily accessed without disturbing your text. Files can be accessed by name or menu number and many files can be locked, unlocked or deleted in a single operation.

## MORE FEATURES

Typically programs selling for this amount are nothing more than text editors. Word Machine however, is a true word processor and besides the features already mentioned, other features include... Right justification; Hyphenation alert; Auto paging; Supports printed lines of from 40 to 132 columns; Supports user definable embeded printer commands; Reassignable editor keys; Printout hold and restart, continue, abort; numerous cursor and text access controls; A comprehensive set of utilities is accessable right from the menu.

## AFFORDABLE

Because our motto is "Friendly Affordable Software" and because we want to give people an incentive to get to know us, we are offering Word Machine at less than half the price of comparable software.

## QUALITY AND SERVICE

Word Machine comes on a 100% certified and tested disk with a 44 page manual, quick reference card and a backup disk request form. Backup and replacement disks cost five dollars. Prepaid orders received by 1:00 PM are shipped via First Class mail the same day.

SEE REVIEW  
THIS ISSUE

**NIFTY INFO**

P.O. BOX 20081 - MPLS., MN 55420  
(612) 854-8712



## Word Machine Concluded from page 13

The "clear to end of page" command can be used to clear the screen. Caution must be exercised though as the last file name used is always used as the default file name when executing the File Save routine.

Prior to writing this review a problem was discovered with one of the print features. You can select the number of copies of a file to be printed. If, however, you chose to have the pages numbered, it would not begin renumbering at page '1' each time a new copy started to print; rather the page numbers were continually incremented by one. I relayed this problem to the author who lives in the Twin Cities. This numbering problem has now been fixed.

Another problem that I discovered was within the F.R.E.D. - Find/Replace/Edit/Delete - function. The F.R.E.D routine functions like other search and replace routines common to most word processors. This routine requires the usage of the top two lines of the page to key in the search string as well as the replacement string. This means that if you have text on the two top lines, they will then be wiped out and will have to be replaced after the search routine is complete. The other option is to always leave those two lines blank.

One other criticism concerns the justification technique used. The more expensive word processors will place the additional spaces between words evenly distributed across the page (as in this article). *Word Machine* inserts spaces always starting from the left margin. This tends to make the text look uneven.

*Word Machine* is extremely easy to learn. The keys used for editing appear to have been assigned based on their relationship to others on the keyboard. For example, to move the cursor up 1 line, CTL A is used and to move it down, CTL Z is used. And to set the cursor to the prior word, CTL Q is used and to set it at the next word, CTL W is used. However, top of page is CTL T, bottom of page is CTL B, and the left and right arrows are used to move the cursor on the line. It should be noted that if you don't like the particular key assignments they may be changed through use of the re-assignable editor key function. After you have made such a

re-assignment a new quick reference card may be printed. Anyway, with the default key assignments, *Word Machine* is easy to use and even the novice computer user can begin to effectively use the product at the first session.

A create Text File Utility allows one to create standard DOS TEXT Files which may be read by other word processors. I did not test this feature. Your newsletter editor was able to translate the standard *Word Machine* binary files to *Pie Writer* format with a very simple BASIC program which converted from *Word Machine* lower case to standard ASCII lower case. This would not be necessary with the TEXT Files.

*Word Machine* comes with two forms of documentation. The manual itself is an eight part manual which gives an overview of the product and detailed description of specific functions. As an interesting sidelight, the manual was printed using *Word Machine*! There is also a convenient card that lists all of the functions along with the appropriate keys. The other form of documentation is the "help" sequences that have been built into the product itself. These "help" sequences are just as informative as the documentation.

*Word Machine* is copy protected. However, a backup copy is available for \$5 from NIFTY INFO. And if the program disk, for whatever reason, becomes faulty it can sent be back for a replacement, again for a small fee.

In summary, *Word Machine* is a good word processor for the home user. The editing functions as well as the other related functions of manipulating and transferring data are relatively easy to use except for those described above which, as stated, can be coped with. I like the editing features better than *Applewriter* and it seems to give one more control of the printer. However *Applewriter* does allow you to indent a whole paragraph automatically: *Word Machine* requires one to do the indentation line by line. It doesn't have all the bells and whistles which some of the more expensive word processors have, but on the other hand has a few features even the expensive ones don't have. *Word Machine* is priced around \$40 and, as such, is a very good buy for its intended users.





## HOME-PROJECTS (5)

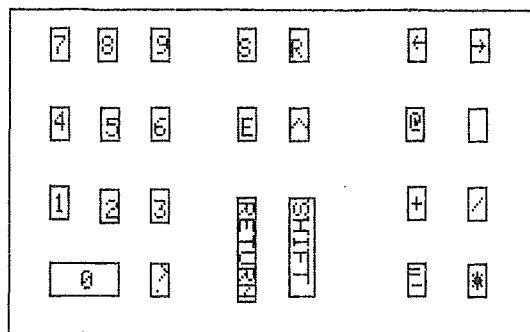
## Keypad

by Roger Flint

In the November Mini'app'les I said that I would try to have the key pad project ready by this month. With the help of friends like Dan Mayer and Ray Fuller we did it! The first prototype works just fine, and at a cost I think most of you will really like. Assuming you can buy the key-board itself for around \$5, the total cost should be in the \$30 to \$35 range.

As with all of my projects, this is not intended to be a complete construction article. It is intended to be a group project. You are encouraged to call me before and during the construction period.

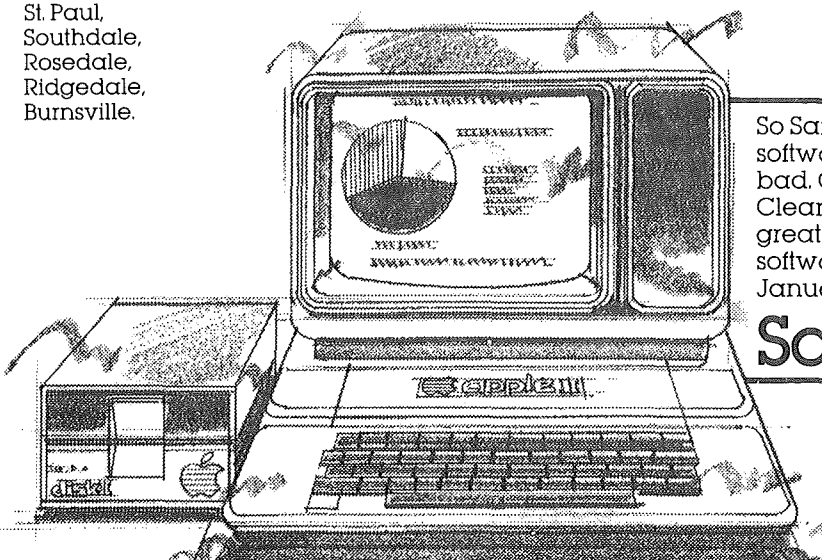
The keypad can be picked up from Axman used electric parts for about \$5.00 dollars. The trick is to look for old adding machines or calculators in which the keys act like switches, momentary contact closed. The box to hold your project will depend on how big the keypad is that you get. As for me,



radio shack 270-265 for \$8.49 was just right. If you use most of the possible combinations you will need connecting cable with 18 wires. Flat cable or shielded cable will work fine, and can be picked up at most electrical parts stores. The hard part of this project was finding the connector to plug in the back of the apple keyboard. An AMP connector with .01 center was what we found worked the best (part number 3-87854-6 8036). The apple keyboard has all the 'debouncing' circuitry already built in so there wasn't much sense paying for it again.

# One week only

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Southdale,  
Rosedale,  
Ridgedale,  
Burnsville.



So Santa forgot to bring that piece of software you wanted? Don't feel bad. Come to Dayton's January Clearance instead, where you'll find great savings on selected Apple software from January 21 through January 26.

## Save 15% to 50%

DAYTON'S

Dayton's Electronics



If you look in your Apple, the back of the keyboard has a set of pins between two boards - Rev 7 and later Apples only. The earlier Apples without the piggyback board will not be compatible with this technique. By putting the AMP connector on those pins and hooking the cable to the connector you can get any letter or number you want. Sitting in front of the Apple, you see the number 1 pin on the left. Here is a list of combinations.

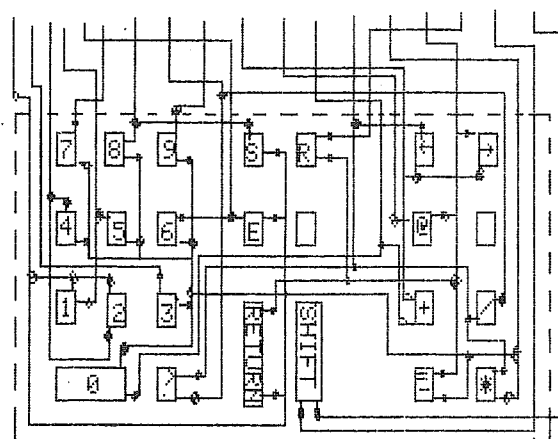
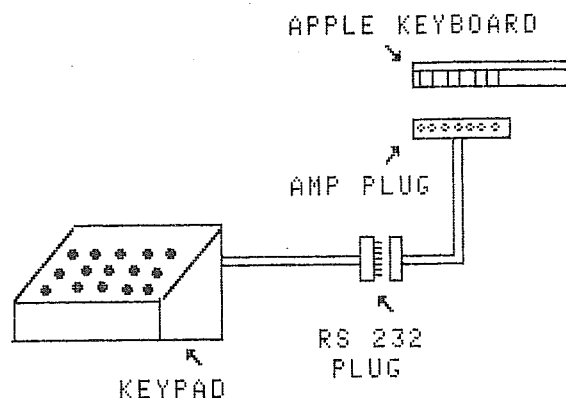
- (pin 1) - (not used)
- (pin 2) - (return, S, A, space, esc, 1, 2)
- (pin 3) - (ctrl)
- (pin 4) - (light)
- (pin 5) - (Q, 3, S, D, Z)
- (pin 6) - (4, W, F, X, 2)
- (pin 7) - (5, E, G, C, 1)
- (pin 8) - (6, R, H, V, esc)
- (pin 9) - (7, T, J, B, A)
- (pin 10) - (8, Y, K, N, space)
- (pin 11) - (/ , ., M, N, , B, V, C, X, G, F, D)
- (pin 12) - (9, U, L, M)
- (pin 13) - (right arrow, left arrow, ; , L, K, J, H, G, F, D)
- (pin 14) - (P, O, I, U, Y, T, R, E, W, Q)
- (pin 15) - (0, I, ;)
- (pin 16) - (: , 0, left arrow, .)
- (pin 17) - (- , =, 0, 9, 8, 7, 6, 5, 4, 3)
- (pin 18) - (- , return, P, right arrow, /)
- (pin 19) - (repeat)
- (pin 20) - (repeat)
- (pin 21) - (reset)
- (pin 22) - (reset)
- (pin 23) - (ctrl, shift, light)
- (pin 24) - (shift)

Now say for example you wanted to get the number 1. Just put pins 2 & 7 together. Most of the numbers can be linked together with pin 17 and some other pin. The shift key works the same as before so you can get \*, =, (, ), and things like that.

Now to get down to basics, hook two wires to each switch and then to a terminal block, using the number sequence for the letter or number you wish that key to display. This will make a good anchor spot for the connecting cable. An RS 232 connecting plug (part number DB25P, DB25S, DB25H for plug, socket, hood), works well at the back of the Apple, so the keypad can be disconnected easily.

After completing this project, you should be able to run all the VisiCalc functions. As for places to buy, Dan Meyer of Autophonics did most of ground work for this project and can help get many electrical parts,

Autophonics  
1357 Magnolia Ave E.  
776-0452.



KEYPAD HOME-PROJECTS by Roger Flint

Or -  
Jameco Electric,  
1355 Shoreway Rd.,  
Belmont,  
California 94002,  
is a low cost mail order supply house.

Gopher electric  
222 E. Little Canada Rd.,

is another local source. As always,  
if you have questions just call,  
771-2868 or write to me at:

1096 E. Sims,  
St. Paul,  
Minn. 55106

Note The logo at top of each  
page was printed using  
D. Buchler HIGHER PRINT  
program and a LOGO  
Font.



## TURNING THE PAGES

with David E. Laden

## GIFT TIME!

Right before Christmas you received a marvellous gift from someone unexpected. You want to send a gift (belated) in return, but can't decide on what. You might consider a gift subscription to your favorite computer magazine!

## EDUCATOR'S NOTES

There are now several publications aimed at educational computing. They might be worth checking out.

The Computing Teacher is one of the oldest publications geared toward computer use in education. Originally published as the Oregon Computing Teacher, it is now published by the International Council for Computers in Education (ICCE). The Computing Teacher is published nine times per academic year. The single issue price is \$3.00. A yearly subscription is available for \$16.50 from:

The Computing Teacher  
University of Oregon  
Eugene, Oregon 97403

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Of course, many of the other computer related periodicals may also be of interest to educators, including Creative Computing and Popular Computing. More information about these and other publications may be found in the October 1982 issue of the Mini'app'les newsletter.

Byte's topic of the month is graphics.

Problem Solving with Logo, by William Wienreb. Pages 118-138.

Software Review: The Graphics Magician, by Pete Callamaras. Pages 138-144.

Software Review: Executive Briefing System, by Peter Callamaras. Pages 164-170.

The Game of Rat and Dragon, by Truck Smith. Pages 336-374. This is "an animated chase game for the Apple II..." It is written in Applesoft and Assembly language.

A Graphics Primer, by Gregg Williams. Pages 448-470.

Interactive 3-D Graphics for the Apple II by Andrew Pickholtz. Pages 474-505. Programs are written in both Applesoft BASIC and Apple Pascal.

CREATIVE COMPUTING  
DECEMBER 1982

The Better Bulletin Board System, by Michael Coffey. Pages 20-26. This is a review of Communitree.

New Processors For the Apple II, by Michael Coffey. Pages 30-47.

Stocking Stuffers Games for Apple, TRS-80 and Atari. Pages 58-99.

Digital Duo, by David Ahl. Pages 114-119. This is a review of Electric Duet Music synthesizer.

Speech, Speech! by Gordon McComb. Pages 120-130.

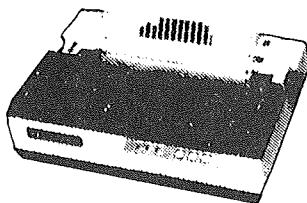
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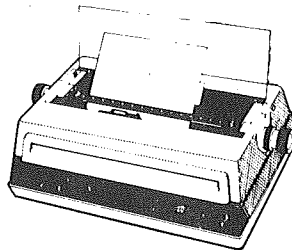


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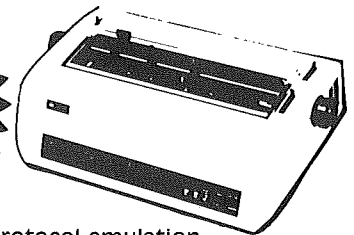
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## NEWS from AFAR

by Dan Buchler

### NEW APPLES

Apple have finally admitted that the new Apples are coming. The Super II, or Apple II E, or whatever Apple chooses to call it, will arrive in the first quarter of '83. Per input from AppleFest and elsewhere, it is expected to contain the following:

- 64k on mother board. Slot 0 is missing (not needed).
- Same case as Apple II but the mother board is much smaller, being populated by the 8 64k bit RAM chips and eleven custom large scale integrated circuits.
- According to one source, 80 columns will still be an option, however, a special slot for that optional board is provided.
- The keyboard will have the Apple /// up and down arrows as well as a complete upper/lower case capability.
- The Monitor ROM has been slightly modified to provide for the new keyboard. In general the system will run Apple II + software.
- The Super II will have a faster version of the 6502 microprocessor chip so programs will run faster.
- A second micro has been added to control the display, thus taking some load off the main processor. This also makes for a different, and therefore potentially incompatible, monitor ROM.

The major unknown is the price!

Apple is saying that it will release Lisa in January. Lisa is patterned after the Xerox Star and will be a top line machine with a 68000 microprocessor selling for approximately \$10,000. If it's anything like the Xerox Star, it will be a fantastic machine. However this computer is not for the average home use or for low end small businesses. For those unfamiliar with the Star, its forte is in human engineering and in graphics. The Star is a complete office automation system including word processing, electronic mail, electronic filing, graphics integrated with text, business graphics, photo typeset quality fonts, etc., etc. The Star has an ultra high resolution screen and uses the new Xerox laser printing technology for output (300 dots/inch resolution).

### Turning the Pages Continued from page 18

Talk is Getting Cheaper, by John Anderson. Pages 137-147.

Logo Ideas, by Robert Lawler. Page 214.

Pilot Tutorial II, by Mike Smith. Pages 243-253.

Creating A Hole In Applesoft Basic by M.J. Parrott. Pages 312-318. Assembly language program is included.

Keeping Track of Variable Names in an Applesoft Program, by Lawrence G. McMillan. Pages 320-321.

Apple Cart, by Chuck Carpenter. Pages 364-369.

The Graph Paper Part 6: The Power, by David Lubar. Pages 378-383. This is a tutorial about Apple graphics.

### POPULAR COMPUTING DECEMBER 1982

A Business User's Guide to Electronic Mail, by Tom Wadlow and Larry McClain. Pages 38-46.

A Gift-Giving Guide Computer Stocking Stuffers, by Rachael Wrege and Jane Wollman. Pages 71-74.

Modems: Hooking Your Computer to the World Part II: Software Communications, by Stan Miastkowski and George Stewart. Pages 111-118.

Advanced Word Processing for the Apple, by Robert Schilling Jr. Pages 126-131.

Also, the programs 'Rubik's Cube Unlocked' and 'Castle Wolfenstein' are reviewed.

Well, I'm tired of typing. Happy New Year from Turning The Pages.

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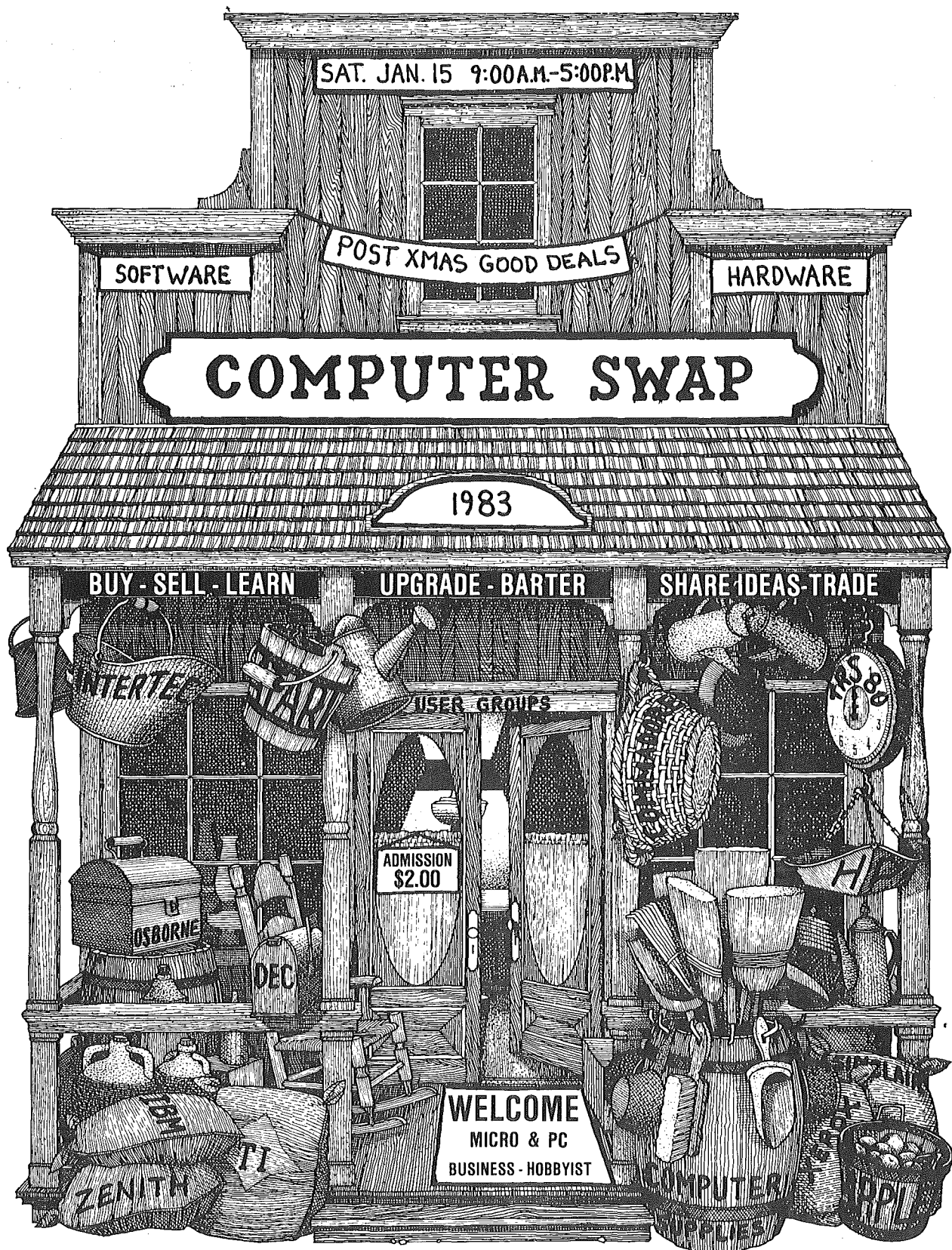
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## EXEC "EXEC" C/R

## A Tutorial

by David Nordvall

I'm sure that most of you have read or looked at Chapter 7 (Auto Apple) in the DOS manual. I did, when I first got my Apple, and quickly went on to the next chapter. Just what use the EXEC command could be I did not understand.

The best way I can explain it now, is like writing notes to your spouse, "Turn on the pot roast," "Take out the garbage," "Give me a hug when I get home." ("Don't spend too much." - Ed.) It also might be regarded as pulling slips from a job jar.

A text file of commands or instruction is created like writing notes, one to a page on a tablet. Each page is a field in the file. As each note is read the appropriate action is taken and then the next note is read. These commands can be for Immediate or Deferred execution. See page 2, Applesoft manual; "a deferred command needs a line number." Deferred commands are entered into memory as program lines. Immediate commands are executed as if typed from the keyboard.

What is needed is a easy way to create a text file. This is given to us by Apple. On the System Master Disk there are two programs, "MAKE TEXT" and "RETRIEVE TEXT". You might take time out to play with them. Check over Chapter 7 and run the EXEC DEMO at this time.

To make a text file for use with the EXEC command we need to make one change to the "MAKE TEXT" program. The first thing that "MAKE TEXT" saves is the number of lines in the file. "RETRIEVE TEXT" needs this to know how many lines to read to read back, but it is not wanted in the EXEC text file. Delete line 180.

What is needed now is a practical use for the EXEC command. The first one will be a auto program list to the printer. Load "MAKE TEXT" and delete line 180. Type in the following:

```
RUN C/R
PR#1 C/R           (Printer in slot 1)
PRINT CHR$(9)"70N" C/R   (70 columns)
LIST C/R           (Lists program)
PRINT CHR$(12) C/R      (Page feed)
PR#0 C/R           (Turns off printer)
C/R                (End of commands)
L70 C/R            (Name of EXEC file)
```

The disk drive should have started and the text file "L70" saved. Turn on the power to the printer and type in:  
EXEC L70 C/R.

Now any time you want to list a program just do the EXEC thing.

Another use would be in making a subroutine file. These routines can be long ones or just one line. One such could be a centering routine). A\$ is the string to be centered. Load in "MAKE TEXT" and delete line 180 and type the following.

```
200 HTAB 20 -LEN(A$)/2:PRINT A$: RETURN
C/R
C/R
CENTER 200 C/R
```

Now to use type:

```
EXEC CENTER 200 C/R
```

List the program and you have a routine at line 200 that will center the string A\$. Set A\$ = "string" and GOSUB 200.



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## PROGRAMMING FOR KIDS

### A Review of a Teaching book

by Thomas Klausler

*Computer Programming for Kids and Other Beginners (Apple II Version)* is a workbook and guide for teaching elementary students programming in Basic published by Sterling Swift, Austin, Texas. This set of books is part of a series being introduced by Swift called 'Earlylearningware'.

Teaching students how to program is often a component of the computer curriculums found in schools. The problem with this is often there are not enough teachers capable or comfortable with teaching programming. The reviewed materials are written to be completely self-directed.

The program has two components: a teacher's guide and a student workbook. The student book contains eleven lessons on programming in Basic. The first few chapters are an introduction including what a computer is and how to get it going. The programming begins with making graphics. The last half is devoted to non-graphic program statements. Within each chapter on programming are an explanation, samples to try, a lesson with programs to work and questions to answer. At the end is page for notes.

The chapters on teaching graphics are well done and students should have little difficulty going through them. The last part on introducing Basic statements which do not deal with graphics starts out well, but I feel the author attempted to put too much in the last chapter. It's as if the author was running out of space and needed to end!

The teacher's guide is divided into three sections: teacher's guide to student book, background material for teaching programming, and resources for teachers. The material does an adequate job of teaching programming to beginners, and, being self-directed, makes it easier for reluctant teachers to have it as part of their curriculum. More explanation could possibly be provided by the instructor to improve the last chapter. *Editor's note: Tom is a media specialist in an Elementary school, and is familiar with Apples and how they are used in Minnesota schools.*

## WHY JOIN THE CLUB

by John Wexler

I joined Mini'app'les in September and found out that I could save \$12 on a set of disks right off the bat. \$12, incidentally, is the cost of joining. The advice I have received, along with the DOMs, is priceless. For less than \$100, you can buy all the DOMs and have a library of disks that would commercially cost approximately 1,000 dollars. (I think you might be exaggerating the worth a little, John, but the point is a good one - Ed.) I was also impressed by the number of new Apple owners. It seems like 90% of the members have had their computers for less than a year.

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## NEW PRODUCTS

by Mike Casey

This column is intended to provide, for your information, a brief summary of some of the many product announcements which we receive each month. We do not endorse these products in any way.

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(unless otherwise noted, system requirements are Apple II or Apple II+, 48K, one disk drive, and DOS 3.3)

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## WORKING WITH THE Spreadsheet and VisiCalc

by Dan Buchler

I'm trying hard to keep this column going. I need input. The VisiCalc group, I am sure, can come up with some ideas. How about it, fellows?

Meanwhile, Charlie Lazer, Member No. 1263, writes that, for a beginner, the VisiCalc manual is difficult to use as a tutorial. He got hold of a public domain disk from Softalk for \$8.95, called Basicalc. Apparently, this program with built-in prompting was much easier to use, although it doesn't 'replicate'.

If there is any interest in this, we can probably put it on the Disk of the Month.

It would be interesting to find out if Charlie would find THE Spreadsheet easier to use!

Talking about THE Spreadsheet, apparently A.P.P.L.E. has run into some difficulties with Apple Inc. We don't know the whole story, but THE Spreadsheet software hasn't been shipped to anyone as of this writing except those, like yours truly, who purchased same at the AppleFest. On calling out to A.P.P.L.E. last week, I was told that they were trying to decide what to do. Either some sort of announcement will have been sent out to those who had ordered it or the actual software will have been shipped by the time you read this.

Are you looking for a VisiCalc user group (other than our own SIG run by Mike Carlson)? See InterCalc in article called APPLE JOURNALS elsewhere in this newsletter.



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## VISTA MEGA-FLOPPY

### A Hardware Review

by Roger Salter

The VISTA 1200 is a floppy disk drive with a total capacity of 6.2 megabytes of data storage. This unique product offers the large storage capacity of a hard disk plus the flexibility of a floppy. The diskettes are stacked five high in a cartridge and each has a capacity of 1.2 megabytes. The system is compatible with DOS 3.3, PASCAL, and CPM and can handle files from each within the same drive concurrently.

Physically, it is identical in height and width to the standard Disk II, but it is approximately six inches more in depth. This extra depth is required to hold the diskette cartridge. The unit is equipped with a mechanical picker arm which removes the proper diskette from the cartridge and positions it within the drive mechanism. The unit is also equipped with its own power cord and does not draw power from the Apple.

Logically, the system thinks that it has five eight inch double sided, double density drives in the same slot. (Remember: the Vista is a 5 1/4" unit.) It also thinks that all even numbered tracks are "side one" and all of the odd numbered tracks are "side two". Under DOS 3.3 it assumes the drives are one through five. Under CPM the drives are either A - E or C - G depending upon from which slot CPM is booted.

The most amazing feature is that on one 5 1/4 diskette there can be reliably recorded over one megabyte. The data is recorded at 9600 bits per inch and 170 tracks per inch. One of the problems associated with attaining high density on floppy media is that the diskette physically changes size with changes in temperature and humidity. In the V1200, a mylar reference strip is used to control head motion. Since this is the same material used to manufacture the disk, the reference strip and the disk expand and contract at the same rate. During operation with a disk in the drive, if the disk is not accessed for 30 seconds or so, the drive goes out and checks the reference track to see if anything has changed. By being so precise, it is able to get 154 tracks of 30 sectors on the diskette using one side only.

The system comes with software patches for DOS 3.3, PASCAL, and CPM. It also includes a special version of FID which can be used for transferring files either between the V1200 and a standard DISK II or within itself. Using this program allows it to copy files from one diskette within the cartridge to another within the same cartridge. This is extremely useful for backing up large files. Also included is a program called "quickcharge" which speeds up DOS by a factor of 5. It uses a technique called "direct memory access" (DMA) which bypasses the DOS buffers and shoves the data or program directly into memory. I loaded some very large programs and the load time was reduced from 12 seconds to 2 1/2 seconds using "quickcharge". It was also apparent that the disk I/O was substantially faster.

The only problem that I encountered was while using software that has its own DOS. Since these programs must be booted, they wipe out the VISTA DOS operating system and the internal INIT commands do not work properly. There is also the standard problem encountered with copy protected software in that the NIBBLE copy programs are all designed for single controller use only.

To put everything into perspective, each VISTA diskette holds about the equivalent of 10 APPLE diskettes and the VISTA drive has the total storage equal to about 50 APPLE disks. The unit is priced between the floppy drives and a hard disk with a suggested list of \$1549. While this may be overkill for home use, in the business environment where handling of large files is a major problem, this unit is easily justified. I would be happy to answer any questions that anyone has regarding this drive.

## INSPECTOR USERS

by David Nordvall

Ever want to change the name of your HELLO program? Take a look at Track 1 Sector 9 byte 7D. Anything over 30 characters is truncated. This leaves room for a disk I.D. or something.



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Announcements Concluded from page 4

#### NEWSLETTER DEADLINE

A reminder that the deadline for submission of manuscripts of articles for the newsletter is the 1st Wednesday of the month. Material will of course be gratefully accepted at any time. But in order to be considered for publication in the next month's newsletter, the above deadline should be observed.

I want to thank everyone who has responded recently to my call for help. For the first time in Mini'app'les history we have sufficient material ahead of time to properly balance the newsletter. Please keep the stuff coming!

#### NEWSLETTER PASTE-UP

Finally, I could still use help in the production process. I am looking for volunteers to come to my house on a Saturday or Sunday for four to six hours to help with the paste-up of the newsletter.

DOM#17 Concluded from page 6

#### UN-NEW. INSTRUCTIONS

The instruction for a little program to UN-NEW. If you accidentally type "NEW" and then realize you have lost a program that you wanted, you can 'BRUN' UN-NEW and recover it. While this shouldn't be a routine that is needed often it may be crucial the one time you need it! From the IAC.

#### MEMAP (EXEC)

A set of commands to list out the way your APPLE is currently using memory. It will give the current values of HIMEM, LOMEM, THE VARIABLES, DOS, STRING ARRAYS etc. From the IAC. To use it at any time just type 'EXEC MEMAP (EXEC)'.



## PFS

### A Review of PERSONAL FILE & REPORT SYSTEM

by John Nexler

Personal Filing System, published by Software Publishing Corporation, is easy to use and easy to learn. I am currently using it to keep track of over 300 customer accounts. This includes information such as name, address, city, tax #, and the day of the week that I see the customer, and the names of the staff. If you have a lot of information you would like to keep on a form and you want to set that form up quickly, without having to read through reams of instruction material, then this is the program for you.

Using PFS, reports may be generated showing the order in which customers are seen on a given day. I also keep a quick telephone directory developed from my records on PFS. PFS will provides many print options including inverted, ascending, bilateral positioning.

This system will delete unwanted files, add new records, search numerically and alphabetically for any string in any of the fields. In my application, I can find out which of my 300 accounts live in a given city in about 2 minutes. Or, using the requested name, any account record may be found in about 10 seconds.

PFS for most of its functions requires only one disk drive. The only time you need two drives is to change form design and for the copy routine. You can probably avoid using those two options or borrow someone else's computer to do these operations. (This is a big plus - you would be hard pressed to use DB Master on one drive - Ed.)

The PFS File and Report is a database that even the first week computer user could easily figure out in several relaxing hours.

If any one has any question regarding this system, please feel free to call me at 722-7069.

### New Products Concluded from page 25

#### Early Games For Children

##### Learning Tools

Suggested price \$29.95

##### Educational

Audience--Preschool (2 yrs to 7 yrs)

An adult will be needed to start the program.

##### Teaches:

location of keys on keyboard  
counting  
math  
alphabet  
perception--shape comparison  
spelling  
drawing

(A detailed review of this product is in preparation - Ed.)

#### Arcade Machine

##### Broderbound Software

Suggested price \$44.95

##### Game builder

Audience--Arcade game players

Design your own arcade games. No programming knowledge necessary. Menu driven. Cannot design maze games. Comes with 5 games on back.

### MAIL ORDER HOUSE:

#### Microworld

P. O. box 7376

Alexandria, Va. 22307

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Introduction to Assembly Language

Managing Your Small Business With (or Without) a Microcomputer

Visicalc: Beginning and Advanced

Word Processing Concepts

Word Processing on the Microcomputer: Beginning and Advanced

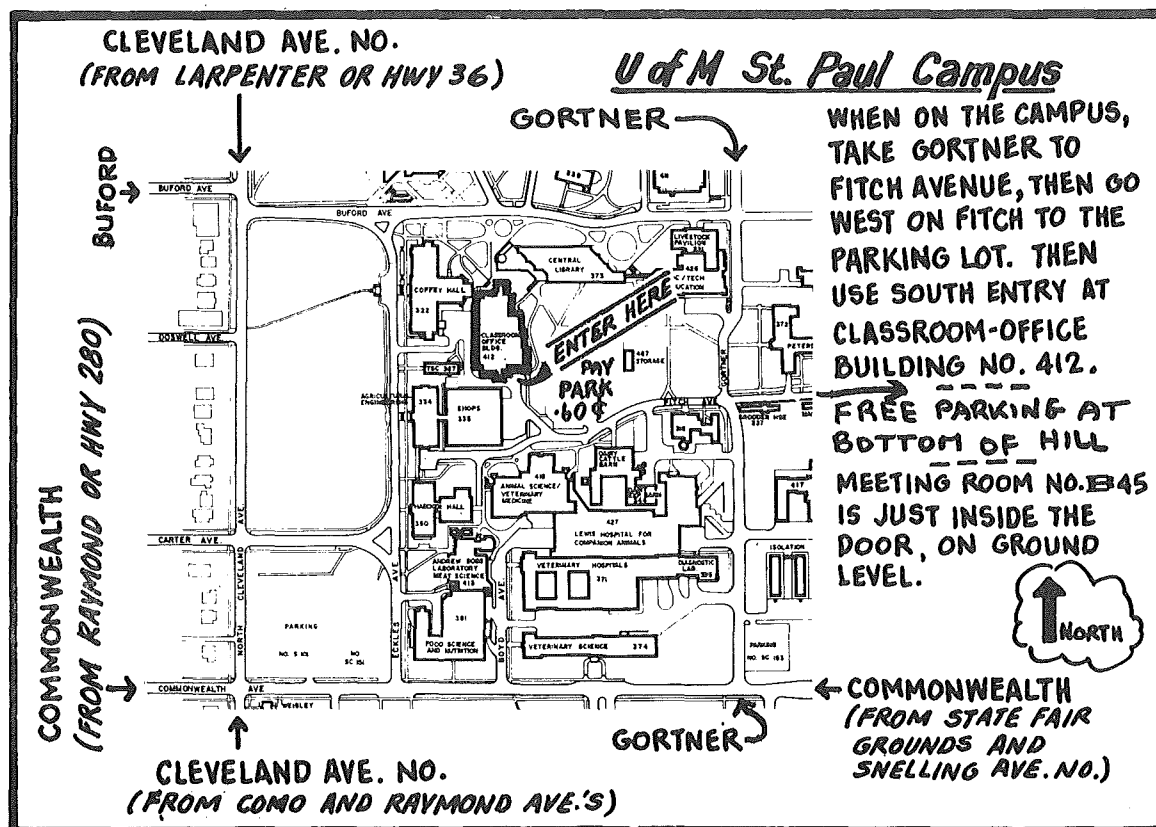
Data Management on the Microcomputer

Review of Music Programs for the Apple II

The best news is the cost: \$14.00 to \$28.00 per course. Call 348-4047 for further details or a catalog. Registration January 3 to January 20, 1983. Classes begin the week of January 24th.

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I have used software that I want to sell or trade (temporarily or for good). Business, games and educational. If you have some disks collecting dust, call David at 736-1359 (days) or 224-4360 (eves)

Malibu 175 132 col. printer with Apple Interface card. Best offer over \$350.  
Orville Ruud 887-9138

Apple II Family System without Monitor,  
Kitty Francene 340-5761 (weekdays)

New software: Applemriter II, \$95.00; Choplifter, \$22.00; Electric Dueat, \$15.00; Cannonball Blitz, \$20.00; Pie-man, \$22.00 and Starblazer, \$19.00.  
Barb 934-1852

HAYES MICROMODEM II -virtually brand new- \$295. Continental Software's THE HOME ACCOUNTANT with most recent updates and backup copy...\$60. With this powerful budgeting tool, you will discover you shouldn't be buying all this computer stuff.  
Jym Hubbell 489-4713

### ORDERING DOMs

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

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

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



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January 1983

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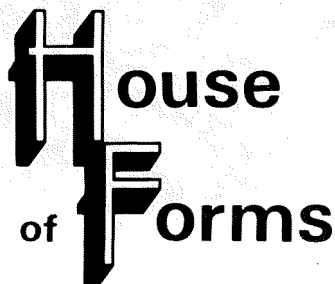
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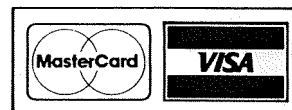
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