

VOLUME V No 12 DECEMBER

1982

CALENDAR		CALENDAR	CALENDAR
WHICH	WHEN	WHERE	WHAT
Minnetonka Branch Note 8	Wed Dec 1 7pm-10pm	Minnetonka High Sch Cafeteria	Apple /// demo by Mike Carlson, PBS
Pascal	Wed Dec 1	Minnesota Federal	Regular <i>Pascal</i> Special Interest Group Meeting.
Note 1	7:30pm	9th Ave 8 Hopkins	
Dakota County	Tue Dec 7	St. John Neumann Chch	General Meeting
Branch	7pm-10pm	Pilot Knob Rd, Eagan	Note 7
Officer's Note 5	Wed Dec 8 7:30 pm	General club business	
Business	Thu Dec 9	Minnesota Sch of Bus's	Bob Zarracina
Note 10	7:00pm	11 S. 5th St., Mpls	of CompuServe
St. Paul	Tue Dec 14	Minnesota Federal	Dave Schur on
Branch	7pm-10pm	White Bear Lk Shp Ctr	Pie Writer- Note 3
REGULAR MINI'APP'LES Note 2 Map inside	WEDNESDAY DEC 15th Prgm-7:00pm SIGs-8:00pm+	PENN COMMUNITY CENTER 84th & Penn Bloomington	Keyboard & Software for Music Making and Teaching: J. Borowicz Passport Design, Inc. will demo Soundchaser.
Pascal	Wed Jan 5	Minnesota Federal	Regular <i>Pascal</i> Special
Note 1	7:30pm	9th Ave S Hopkins	Interest Group Meeting.
<i>Dakota County</i>	Tue Jan 11	St. John Neumann Chch	General meeting
Branch	7pm-10pm	Pilot Knob Rd, Eagan	Note 7
St. Paul	Tue Jan 11	Minnesota Federal	Don Weinke on
Branch	7pm-10pm	White Bear Lk Shp Ctr	CP/M - Note 3
Board Meeting Note 5	Wed Jan 12 7:30 pm	Ann Bell's Residence	General club business
Investment	Thu Jan 13	Minnesota Sch of Bus's	First Meeting
Note 4	6.00pm	11 S 5th, Mpls	Consecutive with Bus 816
Business	Thu Jan 13	Minnesota Sch of Bus's	Kathleen Leo
Note 10	7.00pm	11 S 5th, Mpls	on Quick and Easy.
REGULAR MINI'APP'LES Note 2	WEDNESDAY Jan 19th Prgm-7:00pm SIGs-8:00pm+	UNIVERSITY MINNESOTA ST. PAUL Room B45 Bldg 412 Near State Fair Map next month	
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	



MINI'APP'LES

The Minnesota Apple Computer Users' Group, Inc.

P.O. Hopkins, Box MN 796

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Past President 869-3447 Stephen K. Johnson 6053 Wentworth Ave S. Minneapolis,

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Hugh Kurtzman 11622 Live Oak Dr., Secretary 544-7303

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Co-ordinator	8325 39th Avenue N. New Hope,
	Minnesota, 55427
Newsletter Editor	Daniel B.Buchler 890-5051

Burnsville, Minnesota, 55337

Software Distr. - Mail Terry Schoeppner 455-8613 and Software Sales Box 241 Inver Grove Heights Mn., 55075

Eric Holterman 332-8460 933-5290 475-3916 Advertising Co'tor Chuck Boody Peter Gilles Bibliographer Blank Disk Bulk Purchases Co'tor Education Co'tor Chuck Thiesfeld 831-0009

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Technical Advisers:

INFORMATION

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

Membership Applications for membership should directed to the Membership dinator. \$12 buys membership he Co-ordinator. 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 meetings for \$5/disk or any at for \$5/disk or any DOM ordered by mail for DOM be \$7.50/disk. Software Contact 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, soft-

ware, hardware and publications on behalf of its' members.

Newsletter Contributions Please send contributions directly the Newsletter Editor. Hard copy binary or text files are prefered, 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, the opinion of the Newsletter Editor, it constitutes suitable material for publication.

Advertising inquiries to our co-ordinator Eric Holterman 19 S 1st St., B1704 Minneapolis, MN, 55401 612-332-8460

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Ken Slingsby 507/263-3715

Larry Larson Marilyn Thomas

Martin Thames

Pete Halden

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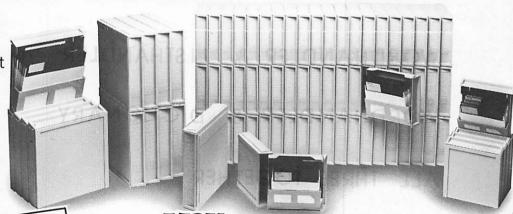
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to all
members of
Mini'app'les
and your families

-3-

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ANNOUCEMENTS

A committee is being formed to look at Mini'app'les' organization structure. "How can we change our Officer/Board member structure to better diversify and delegate responsibilities?".

Please call Steven K. Johnson at if you are interested in serving on this committee or if you have any suggestions.

FORTH Language Class by Mark Abbott

854-8304

A class in programming in FORTH is planned for sometime in early December. The syllabus is listed below. If you are interested please call me ASAP.

SYLLABUS

- 1) Getting Started.
 - A) Background information i) Historical: How and why FORTH was created, and how it has evolved since it's creation.
 - ii) Reference: What books, magazines, manuals, etc. are available on FORTH.
 - iii) Support: What local and national groups have been set up to foster support of FORTH.
 - B) The FORTH Environment.
 - i) How FORTH interacts with you and your computer.

 ii) The Dictionary - the heart of
 - FORTH.
 - iii) The Stack.
 - C) Starting to program.
 - i) Arithmetic operators.
 - ii) Stack Manipulation
 - iii) How to define words.
 - iv) Some important words.
 - v) Standard types of words.
 - vi) Using the EDITOR.
- 2) Explaining the Magic.
 - A) How FORTH works.
 - i) Dictionary Structure.
 - ii) Outer interpreter: INTERPRET
 - iii) Inner interpreter: NEXT

 - B) Compiling words.C) Control structure.
 - D) Vocabularies.
 - E) Some more important words.
 F) The ASSEMBLER.
- Advanced topics.
 - A) Good FORTH "style"
 - B) Creating "defining-words"
 - C) Some advanced examples.

SIG SAUCE

INVESTMENT SIG by Eric Holterman

The first meeting of the Investment SIG was a great success. About 30 people were at the meeting and we look forward to more at the next. It looks like we will have no shortage of interesting topics, with emphasis on commercial software, databases and communications.

Perhaps the most encouraging item is that those in attendance are willing to put some of their own time and effort into making the SIG go. Volunteers are the lifeblood of our organization. Special thanks to Lanny Berke for offering to handle our roster.

Our next meeting will be at 7:00 PM on Thursday, December 16. We will meet at the same location, the Minnesota School of Business. The Personal Investor will be demonstrated by PBL, the people who wrote it. I am looking forward to it.

Thanks too, to Dave St. George and the Minnesota School of Business for the use of their facilities.

BUSINESS SIG by Subir Chatterjee

The Business SIG met on Thursday, Nov 12 at the Minnesota School of Business. John Wexler reviewed PFS and PFS:Report. The two together form a powerful, yet simple, database and report generator that can be learned in a matter of hours. John uses PFS to keep track of his clients in his sales business, and produces reports calling schedules, etc. If anyone is interested in learning more about .his applications and experience, contact him at the next meeting. Our thanks to John for his presentation.

The next SIG meeting will be on Dec. 9th. at 7pm. The speaker will be Bob Zarracina (612/338-5678) of CompuServe. CompuServe is an Information Service. In order to access such databases which include CompuServe, the Source, etc., you must have a microcomputer or terminal and a modem. These databases contain information on current affairs, corporate financial data, money market and commodity news, electronic mail, personal computing services etc. etc. Payment for these services is usually based on 'connect time' - with certain, specified services costing extra for access. The focus of the presentation will be on business uses of CompuServe.



APPLE SPICE

Review by Chuck Boody

One of the really nice things about the recent "Applefest" (was that really what it was??) was the chance for members of our club to talk to many dealers and vendors about their products, and about the role Mini'Appl'es plays locally in bringing attention to various products. One of those vendors, Adventure International, responded by providing a variety of packages for review by local club members. This is, I think, good for everyone. We get a chance to see and evaluate software, and the vendor gets visibility for the product. Among the packages that Adventure International (A.I.) provided was one called Apple Spice. Unlike most A.I. products this is a set of utilities, not a game, and I was fortunate enough to get it for review.

Included in the package are five very different and very well done utilities. Each should appeal to different people, so collectively they are a clever package to put on one disk. A user may buy the package for one utility, and then discover he has use for the others. Since the price is reasonable (\$29.95 list and probably available for less), the disk is unlocked, and the programs may be included in commercially sold software with only the inclusion of an appropriate credit, many people may choose to purchase the disk for different reasons.

The disk is provided in 3.2 format, but is completely unlocked, and can be MUFFINed to 3.3 without problems. The utilities included (all in machine code) are:

- 1. Print Using
- 2. String Search
- 3. IF THEN ELSE command
- 4. Extended input
- 5. Screen output.

In addition, a relocator program is provided that will place the routines in memory at a location the user chooses. Also included on the disk are all of the example programs from the manual which illustrate the use of the utilities. Space (and time!!) does not permit a complete discussion of each of the utilities here, but a fairly extensive overview will be given.

The Print Using command allows the user to format numbers to a given number of decimal places, and to line them up in columns correctly. The version provided here is quite similar to the

Print Using command found in other versions of BASIC (let's face it, the Apple II doesn't have everything!!). The user designates the number using number signs as place holders either within a string or within a string variable. The command:

& PRINT

will activate the routine. Thus

& PRINT "##.##", 12.345

will cause 12.35 to be printed. Commas can also be included in the format so that the commands:

A\$="#,###.##": B=3456.789: & PRINT A\$,B

will cause 3,456.79 to be printed. Methods are also provided to print "floating" dollar signs or fixed location dollar signs, and to replace the blanks in the format (when the number is smaller than the maximum field width) with asterisks. Brief but clear instructions are also included for printing multiple sets of numbers with the same format, and for making the routine a part of your program.

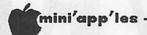
The String Search routine uses the USR function as its connection to Applesoft, a welcome change from the Ampersand command. It will search for a string of characters within some other string and will tell you if the string was found, and if so, at exactly what location within the source string the searched for string was found. In addition, the user can search for any one of a whole group of strings within the source string. Imagine being able to search a free form student answer for any one of a whole set of possible correct responses! CAI programmers should have a grand time with this one!

IF THEN ELSE allows the programmer to construct a set of statements (on any number of lines) to the effect that

if this is true,

then do these steps,

else (otherswise do these steps. This is another common programming construct that was left out of Applesoft. Using this construct will provide neater structured programs that are easier to understand or modify and that more nearly mirror the way humans think about some procedures. Like the Print Using command this command uses the & command, and provision is made (as is the case with all of these utilities) to use them simultaneously. Nested IF THEN ELSE commands can also be used. Examples in the manual provide some small idea of the power of this command.



Apple Spice Continued from page 6

The Extended Input routine provides an "input anything" routine (yes, there are ways to enter a comma into an input and this routine is one of them) with some additional features. The user can specify the maximum length the input may A "bell" will sound when this be. and the routine length is approached, will refuse further input. The user may also provide a list of up to twenty characters that s/he wishes converted into blanks on input. One possible use: screening out commas entered when numbers are wanted. Finally, the input routine will automatically "wrap" words line to line without breaking from them.

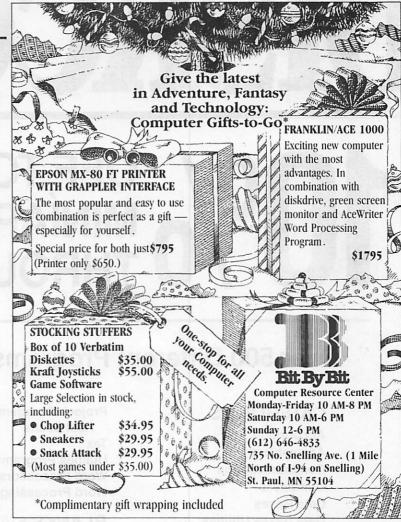
The Screen Output routine will format output to the screen without breaking words, will space the output vertically as the users wants it, will automatically put

PRESS RETURN TO CONTINUE on the screen when so desired, and, if that isn't enough, will allow you to refer to certain variables by number within the output string and put quotation marks onto the screen when appropriate.

The manual for these routines is fifty pages long and contains numerous examples as well as most of the appropriate information for making these routines work with your own programs. That's a lot of information for under thirty dollars!

All of the commands work as advertised, and I was unable to find any bugs in the way they worked. There are a few limitations of the routines, but these have been carefully pointed out. When appropriate, methods have been provided to allow the user to change some of the parameters. In summary, this is a professionally prepared package.

Well, Now--how useful is it? for those who are just getting started with their Apple, probably not very. those doing a fair amount of programming though, the routines are quite useful and very powerful. Those developing educational/instructional packages may find the input, output, and string search routines useful, and that their use will be extended by the IF THEN ELSE. Those doing business programming will find the Print Using particularly useful and the IF THEN ELSE useful, too. However, there is another side to this whole thing which must be recognized. There are several string search routines and several Print Using routines presently available in the literature that are in the public domain. Some are



more powerful than the ones here, others less so. This is also true of "input anything" routines though this one has features I have not seen elsewhere. Doubtless the accessability of these routines means that some programmers will already have their own set of routines and will not want to adapt to these even if they are better. Finally, though the package is very well done there is not sufficient information for programmers who have routines that use the Ampersand or USR commands to integrate these routines with their own. I hope that Adventure International will later see fit to provide that information. Or, perhaps, they would already do so if phoned them.

In summary, then, these are a well done set of utilities in machine code that can make a programmer's task easier if he has need of the capabilities they provide. The package is carefully put together and is a good value for the price. I can recommend it for those who need it, and will be happy to talk further with those who find this review does not provide them with enough information.

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DIVERSI DOS

by Dan Buchler

The club received a disk thru the mail from a company called DIVERSI. The disk contains a high speed DOS which is about 4 times faster than regular Apple DOS for Binary files. I'm using it with Pie Writer on this newsletter and it works great!

DIVERSI's The interesting thing is distribution philosophy. The disk boots with a message to copy the disk, then, if you are satisfied with the program, and are still using it after 2 weeks, to send DIVERSI \$25 as payment for the software. They claim that they would have to charge double using normal - through distribution techni ques They are banking on the retailers. I think honesty of the average user. they should be encouraged in their approach.

Shortly after receiving the disk, two members reported a bug - failure to APPEND a TEXT file correctly. Also, Al Peterman and myself independently had a problem which resulted in the directory being bombed. I immediately called the author, Bill Basham, who was already aware of the two problems. After receipt of my VISA card number to pay the \$25 fee, he promised to send an updated disk right away. Two days later I received the updated version and have not had any more problems. That is excellent support by any standards!

If anyone wants a copy, most of the Mini'app'les board members now have a copy. We have also asked permission of the author to place it on our DOM.

A DIVERSI MASTER DISK can be made by typing 4 in response to the menu on their HELLO program. It just takes a few seconds to make a complete copy. You can install the DOS on any unprotected disk in a few seconds by typing 1 in response to their HELLO program menu. There is also a technique for using the DIVERSI DOS with copy-protected disks.

Also contained on the disk is a program to turn the language card into a printer buffer. I haven't tried it.

Bill Basham is working on a program which will install his DOS in a 16K RAM card. We have ordered a copy and will let the membership know when it arrives. None of the available utilities which perform that function will work because the DIVERSI DOS is an extensively modified APPLE DOS.

In order to get the DOS into the same space as the APPLE DOS, they use error numbers instead of full error messages. But since you now all have the REFERENCE CARD, you won't mind, will you?



TAX DEDUCTIONS ON SOFTWARE

SOFTWARE NOW SUBJECT TO FAVORABLE TAX TREATMENT Excerpt from Personal Computing by Dick Marchiafava

As a result of the new Economic Recovery Act there are three kinds of favorable tax treatment available to business buyers of software. The most agressive method is to treat the costs of purchased, custom software as a current expense. Such costs are currently deductible for tax purposes if it can be shown that the risk of the usefulness of the computer software is borne by the taxpayer.

The taxpayer may also be entitled to a research and development tax credit for the software cost. To do that, the buyer has to capitalize its purchase price and amortize it over the software's useful life. The IRS has attempted to treat software as an intangible asset if purchased separately from the hardware. Intangible assets are eligible for amortization over the short life, as opposed to being depreciated over five years under the new law.

A third alternative, if the software can be classified as tangible personal property, you can claim it for an investment tax credit or depreciate it over a five year life. To do this, "off-the-shelf" characteristics must be identified, meaning the software must have been purchased as a standard package.

It is in the interest of the business user contemplating the purchase of computer software to review the applicable tax laws and incorporate tax planning into the contractual agreements with software vendors. Consult your accountant or tax planner.

WORD MACHINE

THE NIFTY WORD PROCESSOR

Word Machine is friendly, affordable and has many advanced features. Home users will find Word Machine handy for maintaining a personal inventory, car maintenance records and warranty information. Create your own mailing list, store recipes, picture captions, vacation stories or any other information on disk and merge it with your correspondences.

THE ASSEMBLER...

Word Machine keeps-up with even the fastest typist. The unique "free form" of the assembler is easy to learn and use. The text buffer (work area) consists of 2 pages of 250 lines per page (40 column). Word Machine allows rapid access to any part of the text. Printer control commands are easily embebed. These commands and all parameters as well as the editor keys are easily re-assigned by the user.

PRINTING...

Any part of your text can be selected and printed without storing to disk or disturbing other text in memory. Selectable parameters include the number of copies, margins, right justify (on or off), all upper case or normal, and auto paging with its related parameters. To help align labels and forms the printout hold feature lets you abort, restart, or continue printouts as desired.

THE EDITOR ...

Global find, replace, edit, and delete. Insert and delete characters or lines. Move blocks of text. Adjustable margins allow printed line lengths of 40 to 132 characters. The inspection of text to find end of lines, end of pages and words which you may want to hyphenate requires only a second. Page length and the hyphenation alert criteria are adjustable.

DISK CONTROL ...

Text is stored as normal DOS 3.3 binary files. Files can be accessed by name or catalog number. Any part of your text can be selected and stored without disturbing other text in memory. When reloaded, the text resumes its original location in the buffer without disturbing text in other locations. Many files can be locked, unlocked or deleted in a single operation.

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DAISY WHEELING

A Word Processor Adventure

by Arsen Darnay

The slender, dark, intense young man was selling. Hard.

"What do you use now?" he asked.

"Apple Writer II," I said, "on a Sup'R'Terminal."

He looked at me with an expression that the city-bred reserve for hicks. "Doesn't compare. Not even in the ballpark," he said. "Sup'R'Term is ancient state-of-the-art."

"Works fine for me," I said, a bit defensive. "I don't know about your package, but I like Apple Writer. It works."

"No comparison," he said. "Tell you something. Apple will publish anything that Paul Lutus writes, but that guy The only reason they push the Sup'R'Term is because that's the only board that Apple Writer will run on."

I let it be and let him show me Format-II by Kensington Microware Ltd. -- supposedly a champion-grade word processing software just like the kind that I'd been dreaming of. It was the Applefest of 1982, my second day of fighting crowds. Like many other moths that week, I too was there, drawn by the flame of the New Age.

And it burned me a little, afterwards, that Sup'R'Term might be ancient history and I a has-been. Had I been had? My trusty dealer hadn't said doodley-boo about the Sup'R'Term, either pro or con. And I trust my dealer.

It'd cost four hundred bucks. That eighty-column board and I — we'd fought great battles since the summer. All my programs — minted on the anvil of my new knowledge of BASIC — were designed to run on each and every one of its marvellous eighty columns. Texts plucked out at lightning speed have decorated Sup'R'Term's lovely face day after day. And now this fellow tells me — and he sounded damned competent — that I was just a country-boy who hadn't heard the latest scoop . . .

I had much less inherent love of Apple Writer II — although willing to defend it when attacked. It was a bargain, sort of, part of the package deal that got so many of us into computers this summer and into Mini'app'les. It came with the box, the drive, the terminal. And I was glad to get it. But you get spoiled awfully fast.

For one thing, I discovered that I like to see text formatted the way it will end up on the printed page. Apple Writer II doesn't. I wanted text underlined without underlining periods or colons at the end of titles, sentences. Apple Writer doesn't — because you have to put a reverse slash ahead and behind a phrase to underline it. The slash isn't visible on paper but it takes up a space anyway. I wanted a mail-list program compatible with my word processor that will sort files by name or city. No such thing with Apple Writer II.

But Format-II had all these goodies. The young man, selling hard, made sure I got that message. And at the Applefest, seated before an Apple equipped with the up-to-the-minute Videx card, I felt the saliva collect in the bottom of my mouth.

But \$375? That seemed a little steep -even for a "championship" word-churning device. Someday, I told myself, I'll own one of those things. But not quite yet.

Am I alone or are there others like me in the Orchard? Others who cringe with guilt all the way to the dealer's showroom — but write out big checks anyway? To keep the monster happy, running?

I see something that I like ('lust for' is a better phrase). The price puts me off for a while — but as time slinks by, the price appears to drop. Not that it always does. It just seems more reasonable after a while. And the value of the precious object grows in proportion.

It began like that with Format-II. I told myself soberly that the software had shortcomings. It's so damned sophisticated that it swallows whole the entirety of the Apple's 48K memory. You type in one page at a time. Then off to the disk it has to go to make room for a second page. It doesn't even help much to have a RAM card. Format-II will use it for some extra commands — but not to store text. Not like my Apple Writer at all which, aided by the extra 16K, can store more than 30K in memory all at once — which is about 20 pages, a nice rich cargo of stuff you can scroll through with a cursor turned to Pac-Man and speeded on its way by the Repeat key.



Daisy Wheeling Continued from page 11

Resigned to the hard facts of life, I went my way. But when I sat to write reports, proposals that called for a lot of formatting — which involves printing twenty lines or so to the screen just to see what you will get, with Apple Writer II, a somewhat cumbersome procedure although it becomes a habit — I kept thinking of that other 'format' with the championship qualities.

Back in the good-old-days I used to read philosphy in bed before going off to sleep. Or history, or literature. Science. Adventurous stuff like the story of the Gulf Stream or the way they used to rig the clipper ships. These days I blink my eyes in hopeless deciphering of Assembly code. JMP's, JSR's, LDA's dance before my eyes until I give up for another day. Assembly doesn't want to come as easily as BASIC.

Sometimes, for fun, I give myself a break and study magazines. I even read those mail house ads in print so small you need a magnifying glass. Almost asleep, one night, I noticed something I hadn't seen before! Woke up. Format-II! Retail, it said, \$375. (I knew that already.) Our price, it said, \$247! Now wait a minute. The Champion — up on the block? I got up, got a blunt pencil, and marked the page before zooming off.

The next day I called the vendor and learned, by-and-by, that Kensington Microware had just then chosen to slash the price of Format-II from the by now legendary \$375 to a more sensible \$250. And learned that the Mail Order types would let me have it for a good deal less than that! The hunt was on.

"Oh, boy," the man said on the other end of the long distance line. "It'll run on it, of course, but I wouldn't recommend it. Get the Videx card. That's the best."

I was on the telephone with Kensington Microware. I had dared to mention Sup'R'Term again.

"Sup'R'Term doesn't support a full inverse character set," he said, "and we use that capability." How? I asked. "Well, when you underline, the stuff you underline shows up in inverse. With Sup'R'Term you can't do that. It'll work, you'll get used to it, but it's a little awkward."

"Well, yes, you get a bunch of garbage in the lower right hand corner of the screen. Doesn't harm anything, but, well . . . " I think he said that the card was 'too long' or 'too short,' but I forget. And answered my other questions competently enough. The call couldn't have cost more than three or four bucks. Anything for the cause.

This was the first of many calls I made in chasing Format-II. They say you ought to buy your stuff from dealers because the extra margin buys support. Good enough. I needed that. So I called dealers. One of whom — not many have the package — knew less about the software than I did. And when I went to see the system up and running. We couldn't make it print left margins on a Smith-Corona TP-I, the kind of printer that I use.

After that inconclusive session, I braced myself for the first cold evening of the year. But where's my car? The police had towed the damn thing. In my greed for Format-II, I'd overlooked the small red sign. An omen in anybody's book. Two hours later my wife arrived by cab. She came bringing cash — the towing contractor sneers at every other form of money. Forty green ones on the greasy counter. Ten bucks for cabfare. There went the margin for support!

Now I don't want to hold you in suspense and will confess right now. I bought the Format-II soon after from a local discount house. What the system's really like will be told next month. There is too much to tell. I'll wind up this adventure with a comment — about the Discount Industry.

I picked a house here in the Cities to speed the acquisition. When you're hot with lust for software, you don't want to wait! All seemed to go quite well, at first. I called. A human voice answered. We negotiated briefly. It would take a week, the man said, and the innards of my stomach cringed with disappointment — but what with business travel to distract me, it'd be soon enough. We parted with the amicable transfer of a number from a Visa card.

That fateful Friday came. No Format-II. I steeled myself and waited until the Tuesday after before I called — and by then I boiled with rage. The phone played some music. Then a British-sounding guy began to talk real cute. I was to leave a message.

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BUSINESS ROUNDUP

by Jane Chatterjee

CREATIVE COMPUTING Oct. 1982

Mathematics program that accepts instructions in the same way as equations are written on paper - Symbolic Notation - with the capability of handling calculus. \$250p.26

Educational authoring system for parents and teachers, called Mentor. Designed for people with limited experience, the program has been created to enable the user to develop instructional units, using the templates provided (?)! This is not a CAI system like LOGO or PILOT. The program also has graphics capability. There are additional Picture File Disks with hi-res graphics of selected topics, for you to incorporate into your lesson. Reviewed as being very friendly. \$39.50 for Mentor/manual, \$62.00 for Mentor/Game show/manual....p.38

Review of Consumer Electronics Show & National Computer Conference — product shows. Note that not all products exhibited are introduced, so don't place any orders yet! Reference to Apple III CP/M card from Apple. \$450. Also, various printers, both daisywheel and dot-matrix. Debut of Apple-compatible 'dotsy' printer: 150 cps dot-matrix and 20 cps daisy. \$1450.

Apple announce 2 printers: 120 cps dot-matrix and 40 cps daisywheel. No prices available. Also, references to software being marketed by Apple Computer (Quick File III, Senior Analyst, Business Graphics, Apple III Cobol)....p.155.

System is described for blind people using Apple computer and braille typewriter for education and employment....p.186

Part 2 of series on Searching Techniques (data structures & algorithms). Good overview for someone designing their first database!....p.210

CREATIVE COMPUTING Nov. 1982

Review of TK!Solver, the "engineer/scientist's VisiCalc" - a problem
solving tool for the non-programmer.
Developed by the authors of VisiCalc, it
can be used with application packs,
which have to be purchased separately.
\$299, with \$50-\$100 per packp.33

Finally, a program to make your \$2000 Apple behave like a \$100 calculator! Called MatheMagic, it happens to cost \$90....p.50

Review of PFS:Graph — the graphics program to work with PFS and PFS:Report. The program is designed to generate bar, line and pie charts from a set of data. Data is entered either from the keyboard, from PFS files or via DIF files, and the graphs can be displayed on a screen or printed on an HP plotter or printer using a Grappler interface. \$125.....p.55

Reviews and comparisons of 5 computer graphics 'slide show' presentation programs - Executive Briefing System (\$199), Screen Director (\$150), /the Slide Show (\$ 40), Apple Flasher (\$35), "Poor Man's" (Free). All are designed to enable you to make a presentation using the Apple and data disks.....p.63

Business modelling program, called Micro-Dynamo, that has the capability of handling multiple equation models. System requires Pascal, but does not require the user to be proficient in the language. Also has the ability to plot results. \$245....p.93

Programming data structures in Basic - how to use data structures in programs to simulate dynamic allocation of memory in Basic.....p.207

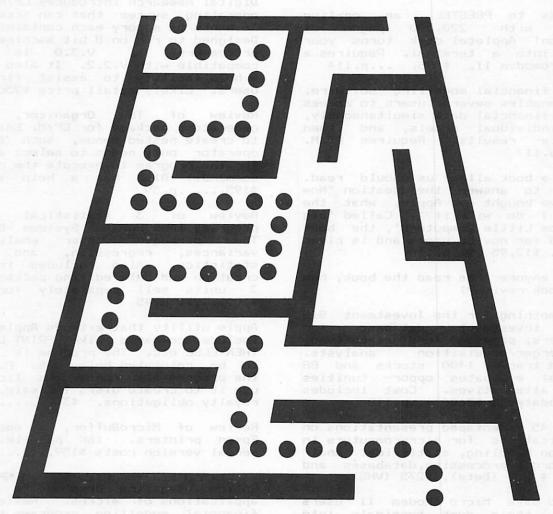
Hard disk for the Apple from X Comp, with the ability to have DOS, CP/M and Pascal all stored at the same time. 5 Mbyte and 10 Mbyte versions are available. \$3,995 for 10 MB.....p.262

Two different speech synthesizers are announced - Vortrax ST-02 costs \$149 and will provide continuous speech at 100 bits per sec input. Mimic speech processors cost from \$20 to \$200 (!) and convert speech to ASCII for input....p.262

Slot Swappers, a hardware device that enables slot dependent peripherals to be used without having to ...swap slots! Operates with a switch. \$80.....p.264 Article on Apple II and Epson printers...interfaces, printing graphics and software graphics packages. good overview....p.266

SOFTALK — Oct. 1982 Outline of Word Processors - sets out to answer what makes a good word processor. List of features that different users might wish to think about before spending money.....p.76

How to find your way through the software maze!



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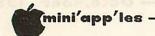
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Business Roundup Continued from page 14

Timely plug for Business Users' groups from Softalk, no less! Also, reference to Paula Ozols, of Prairie Microsystems, and MINI'APP'LES.....p.88

Protect your CP/M files from being seen by unauthorized people. Program encrypts code to prevent access. \$150.p.112

Get access to PRESTEL, an on-line database with 220,000 pages of information! Appletel disk turns your computer into a terminal. Requires a Hayes micromodem II. \$ 85. ...p.114

Multiuser financial modelling software, TelePlan enables several users to access the same financial data simultaneously, prepare individual models, and then consolidate results. Requires CP/M. \$995...p.117

Review of a book all of us should read. Sets out to answer the question "Now that I have bought my Apple, what the heck do I do with it?". Called 'Big things from Little Computers', the book is written for novice users and is clear of jargon. \$12.95 ...p.118

(PS. If anyone has read the book, how about a book review?)

Here's something for the Investment SIG – an investment database for stockbrokers, pension fund executives, and merger/acquisition analysts. Micro/Scan tracks 1400 stocks and 88 industries; evaluates oppor- tunities and tests alternatives. Cost includes monthly updates! \$3600!!..p.118

Series of 45 videotaped presentations on the implications for microcomputers in information handling, statistical analysis, word processing, databases and VisiCalc. \$ 250 (Beta), \$275 (VHS).

Program to make Micro Modem II users transform their dumb terminals into smart ones. \$60...p.120

Tax Byte '82 - a tax planning program for 1982 taxes. Can handle form 1040, Sch. A, B, C, D, E, G, and form 4797. \$48. ..p.120

Insurance policy for microcomputers, to cover home or office. Hazards covered include damages to software and hardware from fire, theft, accidents including power surges. Approx. annual premium for \$6000 system is \$60., with \$50 deductible...p.122

Owners of Epson printers with Graftrax Plus can add a collections of programs that will print 8 different stationery letterheads, etc. etc. Called Print + Apple, from MicroWest Software. \$35...p.126

Program for Safety Professional, Safety Report, generates reports, analyzes statistics and will calculate ANSI rates monthly. \$100...p.126

INFOWORLD Oct. 25, 1982

Digital Research introduces CP/M 3.0, an operating system that can access up to 16 banks of memory each containing 64K. Designed to run on 8 bit machines (Z-80 processors), V.3.0 is totally compatible with V.2.2. It also contains a help facility to assist first time users. Likely retail price \$250.

Review of The Organizer, a menu generating package for CP/M. Enables you to create nested menus, such that the operator only needs to select an option for the program to execute the necessary commands. Also has a help sequence. \$195.....p.39

Review of 3 statistical analysis programs from Humans Systems Dynamics. The packages cover analysis of variances, regression, and simple statistics. Also included is a file creation and data editing package. The 3 units sell separately for \$75 - \$100.....p.45

Apple utility that extends Applesoft to include commands like PRINT USING, IF THEN ELSE etc. The program is designed to be relocated below DOS. Purchasing the program also confers a license to use it to create disks for sale, with no royalty obligations. \$30.....p.49

Review of MicroBuffer, a spooler for Epson printers. 16K parallel or 8k serial version costs \$159.....p.72

BYTE — Oct. 1982
Entire magazine devoted to business applications of micros. Review of 3 financial modelling programs that goes beyond VisiCalc - aimed mainly at financial planners, strategic planners etc. Programs included are Desktop Plan II, Microfinesse, Plan80.

Desktop Plan Microfinesse Plan80
Basic Pascal CP/M
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🔍 Business Roundup Concluded from page 16

Programs appear to require adequate understanding of financial principles to obtain benefit of features - the last line of the review reads, "..and remember, a model is only as good as the skills of its modeller."!! An interesting and eyeopening article on why business programming is difficult. Written by a banker and programmer, he shows insight into why a potentially simple application fails to become 'all to all people' in the acc. A key point he raises is things marketplace. the need to cope with the exceptions - even to the extent of how different companies calculate time! He also offers the idea that successful business programming requires an understanding of human psychology that has to be at least as extensive as an understanding of program code. He even predicts the demise of 'long haired, wild eyed, computer gurus' to be replaced by an applications-orientated and people-orientated person who also has the capacity to write code. (I wonder where that leaves MINI'APP'LES and Business SIG members ?) ...p.68 (Jane, I think we fit well into such a people oriented classification. The long haired gurus are all in California! Ed.>

Article and extensive Pascal code for using an Apple II as an intelligent interface to a Corporate Management Information System. The author is a regional manager for a systems development company. His system consists of an Apple II, Hayes Micromodem II, printer, and, of course, programs available on his mainframe via timesharing....p.315

Review of Software Art's TK!Solver - the algebraic equation solver that works with formulae like Visicalc works with financial data.

The program does not have the capacity to handle differentiation or integration, though some of this may be accomplished with numerical iterative techniques...p.360

Review, by a patent attorney, on the subject of trademark laws and naming of software. Unfortunately, his advice is that you still go out and get a lawyer to help you !....p.380

6



Daisy Wheeling Concluded from page 12

It's funny, really, how easily a smart brochure can make you imagine a gigantic warehouse filled with disk drives, monitors, and racks of software. You see crowds of laborers at terminals, at docks. The reality may be quite something else — a basement with a phone line and an answering machine. Thin inventories or none at all. The owner is the staff. "The People of XYZ" turns out to be one people.

Suffice to say . . . I heard the jingle and that British voice many times before I learned that Format-II, briefly delayed, still winged its way to my lusting arms from the distributor.

And when the package did arrive at last, I had to leave town. Urgent business. Two more weeks passed before I brought it home one night. A brown book in a virginal wrap of translucent, tight-fitting polyethylene. Format-II by Kensington Microware. The Champion and I had met at last.

About that historic meeting . . . next issue.

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WORKING WITH THE Spreadsheet

and VisiCalc

by Dan Buchler and by John Hansen

Many of the micro magazines have a Visicalc corner. Well we are going to bring you a VisiCalc/THE Spreadsheet corner. Sometimes but not always THE Spreadsheet things in it will be applicable to VisiCalc too.

I noticed that VisiCalc users always had trouble setting up their printer to make use of printer features requiring control characters, In fact we just got a technical question from one of our members requesting that we explain how to set up an Epson for 132 columns with VisiCalc. Here is the answer:

With VisiCalc in command mode type:

/P, VisiCalc will ask for the SLOT number for the printer. This is usually 1 - so type 1 and then Return. VisiCalc now asks for directions with respect to 'Linefeeds'. Usually with an Epson you can ignore this step. If your switches inside the Epson are set in a strange manner you might have to type a - to eliminate a line feed or - to add a line feed after each line. The way to tell is-

- If you get double spacing all the time with VisiCalc then next time type a — at the above point.
- If everything types on top of itself with VisiCalc then next time type a +.

Now to the meat of the matter. We have to tell VisiCalc to set up the printer for 132 columns.

For the MX-80/100 type:
"^EF^CO^CI132N Return.
The ^EF says turn off Emphasized.
The ^CO says turn on Condensed.
The ^CI132N is a command to the Interface board rather than the printer to tell it to stop sending RETURNS each 40 characters. The ^CI132N may not be required with all interface boards. Experiment! If you want the print darker, you can turn on double-strike by typing ^EF^EG instead of ^EF.

MAKING A PRINTER SETUP FILE for THE Spreadsheet

I was determined to overcome having to key in the printer parameters with THE Spreadsheet. It seemed that one could make a TEXT file for input through the Storage Read functionality.

In the following example I wanted to print with the following parameters:

Spreadsheet
Printer in Slot 1
Print from Col A, Row 1 to Col D Row 139
Left Margin at Col 1
Right Margin at col 80

Epson MX80
Condensed (C)
Not Emphasized (CF)
Continuous Wide on (CWA)
Unidirectional on (CUA)

Where O is a Ctrl O

C is an Esc

A is a Ctrl A

This was accomplished by creating a a TEXT file with Pie Writer that looks like this:

>A1M P1.D139M L1M R80M M

where M is a RETURN.

If you follow through the file comparing with the Parameters in the table above it, you will see one or more characters that correspond with each item in that table. This file when input to THE Spreadsheet with the command SR will immediately start the printer printing with all parameters correctly set-up. You must of course Storage Load SL THE Spreadsheet model first or construct it in memory.



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BINARY NUMBERS

by Ron Androff

The use of binary, octal, decimal and hexadecimal numbers confuses many a new computerist. The question is why, that is, why do we use all of them? Why don't we use decimal and skip the rest? Well, as appealing as that may seem, each numbering system is very useful in certain situations; so, it is better to learn to understand them, than to ignore them. First of all, the value of the number is the same regardless of the numbering system used; it just looks different.

Binary is the native language of the computer. There are only two possible values each position may take, a one or a zero, just as there are only ten possible values a position may take in decimal (zero through nine). As the progression in decimal is from 1 to 2 to 3 to 4, etc., the progression in binary is from 1 to 2 to 11 to 100, with corresponding values of of 1 (01), 2 (10), 3 (11) and 4 (100).

One could use one's fingers to translate a decimal number to binary and vice versa, but obviously that would prove awkward with all but the simplest numbers. Let's consider the mathematical method (Ugh, who said that?) of converting from decimal to binary. A few examples should illustrate the method.

Let's try to convert the decimal number twelve to binary. The method is one of division, which in this case, is not so terrible since we will only be dividing by two. OK? Divide 12 by two and you get six with a remainder of zero. The remainder is important as it will form the binary number when we are done. This first remainder (a zero) is the least significant position of our binary number. In other words, the first digit on the right.

We divide six by two and get three with a remainder of zero, again.

It doesn't seem like much yet does it? Well, divide the three by two and we get one with a remainder of one.

Dividing the one by two we get zero and a remainder of one.

$$\frac{1}{--} = 0 \quad \text{Remainder} = \frac{1}{1} \quad \text{No} = \frac{1100}{-}$$

Now if we put the remainders together we get: a zero, a zero, a one, and a one, but remember that first zero is the lowest position value, so if we reverse it, we have 1100 and to prevent any misunderstandings binary numbers are often written as %1100 or 1100B to differentiate them from decimal numbers. If this binary number was a byte in your Apple computer it would have eight bits and look like %00001100.

Summary: To find the binary representation we repeatedly divide the number, 12 in this case, by 2 and keep track of the remainders. Then assemble the remainders in reverse order to form the binary number It's a piece of cake.

Lets try another example, a harder one this time. How about 157 (notice we don't mark the decimal number in any way as we did the binary - the accepted rule is if a number is unmarked it is a decimal).

'r' = remainder in this example:

Whew, ok, now lets see what that amounts to. In order the remainders were:

Now since the first remainder was the least significant number, if we reverse the order we will have the binary representative of 157. Thus, %10011101 is 157 in binary. This process may seem awfully complicated, but it really is not too hard once you have done a few examples. The explaining is actually more complicated than the doing is. Try a few of your own examples to reinforce the method in your mind.

If you're ready to go on, let's see how one converts a binary number into a decimal one. Let's use the same examples 12 = %1100 and 157 = %10011101. In binary, each position has a value, a power of two, just as in decimal each position has a power of 10,

BOTO 22



Binary Numbers Concluded from page 21

that is, in decimal the number 100 is equal to 10 times 10 or 10 squared and 1000 is 10 to the third power. In binary the first position is two to the zero power or one, the next is two to the one power, and then two to the second power etc. Sounds too technical to get involved with, but multiplying by two is pretty easy.

Lets try %1100. 1*(2*2*2) + 1*(2*2) + 0*(2) + 0*18 + 4 + 0 + 0or 8+4=12

Well there is our twelve again, anyway.

Let's see if we can get back to the 157. %10011101 = 1*(2 to the 7th) + 0*(2 to the 6th) +

0*(2 to the 5th) + 1*(2 to the 4th) + 1*(2 to the 3rd) + 1*(2 to the 2nd) +

0*(2 to the 1st) + 1*(2 to the zero)

and

2 to the 7th is 128, 2 to the 6th is 64, 2 to the 5th is 32, 2 to the 4th is 16, 2 to the 3rd is 8, 2 to the 2nd is 4, 2 to the 2nd is 4, 2 to the 1st is 2, 2 to the 0th is 1.

Therefore:

1*128 + 0*64 + 0*32 + 1*16 + 1*8 + 1*4 + 0*2 + 1*1

and

128 + 16 + 8 + 4 + 1 = 157.

that looked too formidable, think of it this way: the value of the lowest binary number is one; if there is a one in that position write down a one. next position is double the first or two, the next double that, or four then eight and sixteen, thirty-two etc. So now, by examination, we look at %10011101, starting from the right, think one and there is a one, so write a one. The next is a zero; think two but skip it because of the zero. The next is a one; think four and write it down. Then comes a one; think eight and write it down. Next is another one; think sixteen and write it down. Now there's a zero; think thirty-two but skip it. Then comes another zero; think sixty-four and skip it and finally a one; think 128 and write it down. up the nwmbers and it should total 157. Again practice will make it more understandable and easier to do.

If you This should be enough for now. are still with me and you want to learn about hexadecimal and octal numbers catch me in the next newsletter.

BBS's

MSP Bulletin Boards by Dan Buchler

A Bulletin Board System (BBS) is a free Computer based information system which you may dial up from your modem equiped Apple. BBS's are springing up all the Some die out, but most survive. Most of the systems are privately owned and privately financed. Their owners enjoy being SYSOPs (System Operators) and providing the service.

Here is a current list. All are in area code 612. Note the Conference tree has a new number (also see article elsewhere in this newsletter). Thanks to SYSOPs of Minneapolis PMS and Maxwell's Place for help in compiling this list.

ACTIVE SYSTEMS

CBBS Richfield (CP/M)..... 423-5016 CMC/ABBS..... 471-0252 Computer Pace (After 5pm).. 869-3246 Conference Tree #17..... 854-9691 Erik's Net (NETWORKS)..... 920-3975 Heathkit (After 5pm)..... 778-1213 Loki's Corner (NETWORKS)... 571-5965 Maxwell's Place (NETWORKS). 922-9338 Minnesota Microphone..... 933-2606 NC Software..... 533-1957 On-Line Minneapolis..... 929-3094 PMS Minneapolis (ABBS).... 929-6699

INACTIVE SYSTEMS (systems are down)

Hector's Message System Mailbox (UofM Pascal System) Osmosus (OSI User Group) Unix Ziggy's Message System (ZBBS) Zim Computer NET-WORKS

For beginners - if you have a Hayes Micromodem II, just do: IN# slot Ct1-A Ct1-H, Ctl-A Ctl-Q, and dial number.

If you want a complete list of BBS's in the country, there is a 4 page document available by signing on to PMS Minneapolis.

Seasons Greetings to all members of Mini'app'les and your families

HANDS-ON LEARNING

Presfax® and Apple® II



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

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GPLE REVISITED

Global Program Line Editor Review

by John L. Hansen

In the July issue of Mini'App'Les, I reviewed a Synergistic Software version of GLOBAL PROGRAM LINE EDITOR (referred to as SSV in this article). Since that time, I have purchased the program from A.P.P.L.E. (this version is listed as AV below). This mini-review covers the differences I found between the two versions.

Computer magazine ads led me to believe SSV automatically loaded into a 16K-RAM card when booted. As I reported, this was not true with the particular copy I reviewed. The AV has revised HELLO and APPLESOFT programs that look for a RAM card in Slot O and load GPLE properly to the card.

With SSV; when I loaded Applesoft to the Language Card and then tried to load GPLE using PR#6, Applesoft disappeared. Since I have substituted Applesoft ROMs for my Integer ones, I cannot test to see if this is still a problem. The solution, of course, would be to run the proper HELLO program. The manual still says, "Just insert the included disk in your drive and boot it normally." If you have an Integer Apple with Language Card, you will have to boot the 3.3 Master first to to use Applesoft.

The SSV contained a Quick Reference Command Summary. AV contains that summary plus an Escape Quick Reference Summary. Two blue, handy reference cards, each containing both of the summaries, are also included. A more complete list of Escape functions is included (46 in AV compared to 29 in SSV). BRUN ESCAPE PRINTER will list all Escape functions (printer must be turned on, but the printer slot is not indicated). This was not mentioned in SSV.

The Ctrl-F errors in the Edit example on page 14 and the substitution of "0" for "0" in Escape commands on page 15 have not been corrected.

Changes (additions, deletions, and rewritten material) have been made on 20 pages of the 32-page manual. The rewritten sections generally are easier to understand than the same sections in SSV.

I talked to Dick Hubert, President of A.P.P.L.E., at the Applefest. He felt that I must have had an early copy of GPLE for my review. The manual cover was identical to the one shown in Synergistic's multicolor ads. The absence of automatic load to a RAM card and the numerous changes in the later manual suggest that it certainly was a "too early " copy.

In summary, although a few errors were not corrected in the manual, the changes that were made and the revised HELLO programs to automatically load GPLE to the Language Card are substantial improvements over the SSV that I reviewed earlier. If you are working with BASIC, either writing your own programs or just copying programs from magazine, GPLE is one of the best software purchases you can make.

VISAFILE UPDATE

Excerpt from the CCA DMS/VISAFILE Newsletter

by Dick Marchiafava

Visafile Version 1.1 has been released by VISACORP. This is not an "enhancement release" since it incorporates no new features. It contains a multitude of corrections to mostly obscure problems which have been reported by users or discovered during quality assurance testing.

If Visafile owners have returned their warranty card they may order the new version from Visacorp for \$20.00. The update includes two program discs and a new manual. Those who have previously ordered backup program discs will receive two sets of program discs. You will be asked to return the Version 1.0 discs in the prepaid mailer provided.

To update send \$20.00 to: VISACORP, Consumer Sales Department, 2895 Zanker Road, San Jose, CA 95135. Residents of CA, MA, NY & TX include sales tax. No phone orders or charges.

A word about the CCA DMS/VISAFILE Newsletter. This newsletter is published by Jameson Electronics and offers information, support, and "users group" discs to members. Membership is \$15.00 a year. Send to:
Jameson Electronics, P.O. Box 3934, Torrance, CA 90510-3934.

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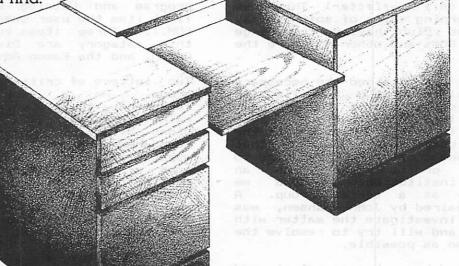
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MINUTES

OF BOARD MEETING Nov 10, 1982

The Mini'app'les Board met at the president's home. The following items were discussed:

Nominations for Regional Representative to the International Apple Corps are due in by early January. Dan Buchler has volenteered for that position. There was unanimous agreement that Dan would do well in the position if nominated.

The Treasurers report was read: Opening Oct. balance \$9754.23

October transactions:

	INCOME	EXPENSE
Dom sales	833.00	
Disks and duplicating		575.50
Interest on check acct	49.15	
Membership	639.00	
Membership expense		35.65
Newsletter Ads	580.00	
Ad Manager expenses		48.38
Newsletter production		3.50
NSF checks made good	22.00	
Applefest residuals	4.22	
Applefest Booth		60.85
Totale	2127.3	7 723 88

Closing Oct. Balance \$11157.72

John Hansen read a letter from the Minn. Dept of Taxation. (Published elsewhere in this newsletter) This new ruling concerning sales of software may result in the Club having to charge sales tax on DOMs and other software the club may sell.

John Hansen has obtained the necessary forms to enable the club to file for non-profit status with the federal government. Input from the local 'Fed' office and from the president of the Dallas Apple User group indicates that we would be unsuccesful in attempting to obtain non profit status as an Educational institution. Instead we should apply as a social group. A committee, chaired by John Hansen, was appointed to investigate the matter with our attorney and will try to resolve the matter as soon as possible.

Rick, Gates and Larry Larson volunteered some time ago to review the several Newsletters the club receives from other clubs via exchanges. They have found this to be a huge task and are soliciting membership help in scanning

the issues, picking out interesting articles, and entering them into a word processor for inclusion in our newsletter from time to time. Photo-coping the material generally results in unreadable quality. Some general ground rules have been made to insure proper credit is made in this operation.

Due to the amount of business that comes before the Board, a motion was made that future Board meetings will be held on the second Wednesday of the odd numbered months. The executive Board will meet on the alternate months. Motion carried unanimously.

The Club recieves promotional much material from manufacturers each month. Some of the material of interest to the group is read or distributed at the various meetings. At least three commercial software packages are known to exist where the author or publisher has placed the material in the public domain with the hopes that other software by that author would be purchased or that a donation would be be made to continue the offering. A motion was made and carried to add these items to the DOM on a space available basis if the publisher agrees that his program can be added as just another program (ie. the Mini'app'les Logo or banner program and Catalog will remain the first item the user sees on booting the DOM.). Three items known to fall into this catagory are Diversi DOS, Fire Organ, and the Eamon Adventure Series.

Two letters of critism were read to the group. As a result, the Board reccomends to those in charge at the main, branch, and SIG meetings put up signs directing members to the correct room where the meeting is held. This is especially important for newcommers in some of the larger buildings where the meetings are held. There was much discussion concerning the content of the main meeting. Chase Allen and Chuck Thiesfeld are trying several formats to arrive at a meeting agenda that will please the majority of the members. The general content and direction of the October meeting seemed to please the most people. More member input is urgently needed in this area. If any members have any ideas or comments, please contact one of the two above individuals.



Minutes Concluded from page 26

Approval was given by the Board for further investigation of the following items.

- A distribution of locally produced software enhancements may be made available to the club by individuals in the Hopkins School District. This would require the printing of detailed instructions for operation of the enhancements.
- 2. Bylaws reorganization to include additional officers to spread the load of administrative tasks that must be completed for smooth functioning of the club. Steve Johnson volunteered to chair a committee to make recommendations.
- Investigation of Corporate memberships in return for services given to the club as a whole.
- 4. Installation of a telephone answering machine to inform callers of the meeting locations and tell a little about the organization. Committees were appointed to investigate each of these and report to the Board at a later date.
- 5. A motion that the club purchase a letter quality printer to print the newsletter was approved in concept. The newsletter Editor will investigate the market and report to the Officers when the best price/performance printer is found. Respectfully submitted,

Ken Slingsby, acting Sec.



The following meeting will be on Thursday, January 13, 1983 when Kathleen Leo will demonstrate a 'program generator' called - Quick & Easy!

We have decided to institute a Business Disk of ? Only YOU can determine whether it will come to be known as a DOM, DOQ, DOY, or, as someone suggested, DON - "Disk of Never, never"! All the programs will be 'public domain', which means that they are free for anyone to use and copy. As ever, the 'well of free, good quality, applicable software' is beginnig to run dry, so we had all better get out our Apples and start producing! Kenneth Ruzek will be co-ordinating the compilation of programs, so please contact him with your submissions and suggestions. He can be reached on 612/424-2003.

At the last meeting, we discussed the value of our experiences: other SIG members benefit from knowing that a screen editor on a DOM does not print! (for example). An effective way to communicate your experiences, both good and bad, is through a letter or article. Please take time to write a note to Dan. Looking to hear from you!!

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FORTH Concluded from page 5

6

Although not required, it is recommended that you get a copy of the book "Starting FORTH" by Leo Brodie (published by Prentis-Hall, \$16.95). This book is the best introduction to FORTH that I've seen to date. A public-domain copy of a FORTH system will be provided at the first class to those who bring a blank disk (the disk will be formatted to 16-sectors). Two other disks will also be made available for copying: one with the source for the FORTH system and the other with some application programs which I have written.

Seasons Greetings
to all
members of
Mini'app'les
and your families



TAX LETTER



STATE OF MINNESOTA

DEPARTMENT OF REVENUE CENTENNIAL OFFICE BUILDING SAINT PAUL, MINNESOTA 55145 PHONE: (612) 296-6181

June 25, 1982°

The Code Room 7402 Mitchell Road Eden Prairie, MN 55344

Dear Sir:

We have recently completed a review of our position with respect to sales of cassettes or floppy disc programs which are now commonly available in retail stores. These programs are generally broken down into three categories; entertaining, learning, and application.

Our position is that entertainment and learning programs are sales of tangible personal property and are, therefore, taxable. These programs are distinguishable from application programs because entertainment and learning programs are not modified and are sold as tangible personal property.

Application programs are not taxable. These are designed to perform a specific job or task when applied to a customer's (or user's) raw data.

If you have any questions, feel free to contact our office in writing or by calling 296-6181.

Sincerely,

P. M. Dahlstrom, Tax Examiner Sales and Use Tax Division

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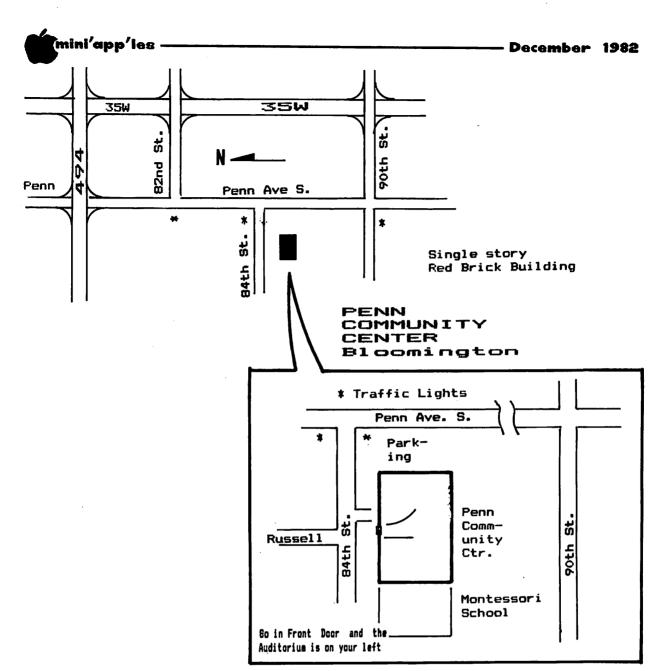
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A reminder that DOMs are available by mail at \$7.50 each. Send your order to:

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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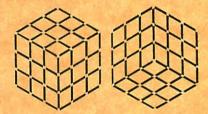
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