



mini'app'les

apple computer user group newsletter

VOLUME IV No 11

NOVEMBER 1981

CALENDAR

WHICH

WHEN

WHERE

WHAT

Pascal
Note 1

Wed Nov 4
7:30pm

Minnesota Federal
9th Ave S Hopkins

Regular *Pascal* Special
Interest Group Meeting.

Nibble
"Subscribers"
Note 4

Wed Nov 11
7:30pm

Home of Ron Androff
1725 Crest Ridge Lane
Eagan

Status and Discussion

REGULAR
MINI'APP'LES
Note 3

WEDNESDAY
NOV 18th
7:30pm

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

Mike Birnbaum 546-2166
(Parade of Homes)
Home Control Techniques
VERA HEIDNER
See
Parking Note
Below

Fort Snelling
Note 2

No meetings
This month

Nokomis Community Ctr
Minnehaha Parkway

Programming Special
Interest Group Meeting

Pascal
Note 1

Wed Dec 2
7:30pm

Minnesota Federal
9th Ave S Hopkins

Regular *Pascal* Special
Interest Group Meeting.

Education
Special
Interest Group

Wed Dec 9
7:30pm

Sperry Univac
3001 Metro Dr.
Room 103
Bloomington

Large *Pascal*
Program Considerations

REGULAR
MINI'APP'LES
Note 3

WEDNESDAY
DEC 16th
7:30pm

Place to be
Announced

Group Discussion
Evening
-Tentative-

Note 1. Contact- *Keith Madonna*
2. *Dave Nordvall*
3. *Chuck Thiesfeld*
4. *John Schoeppner*

Parking Note:
The On-Campus lot
is not free. Use
State Fair lot to
South of Midway Pky
for free parking.
See map

Pay your dues * * * * * See back cover

MINI'APP'LES

P.O. Box 796
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INFORMATION

This is the Newsletter of Mini'app'les, the Apple II Users' group of the Twin Cities of Minneapolis and St. Paul.

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.

After Dec 19th, 1981 Dues will be \$12/year; Before Dec 19th, 1981, \$10 buys membership for current and next year. Members receive a subscription to this newsletter and all club benefits.

DOMs

DOMs (Diskettes of the Month) are available at meetings for \$4/disk or by mail for \$6/disk. Contact Software Sales coord'r.

Newsletter Contributions

Please send contributions directly to the Newsletter Editor. Hard copy binary or text files (ASCII coded) 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 rates

Rates are as follows:
Full Page \$30/issue
Half Page \$20/issue

Circulation 750 (approx)

DOM #8

by Ken Slingsby

This DOM is largely made up of programs from the IAC #8, provided by the Sidney Group of Australia. They included a MENU program which I left intact to denote which programs are a part of the IAC disc. Your comments are welcome concerning this menu program as it differs considerably from the Catalog Management program we have been using with the DOMs.

The programs on DOM #8 are:

CAT INIT CAT MENU

These programs make up the Menu program supplied by the Sydney Group of Australia. Cat Init is used to make the menu contents of Cat.

HGR DEMO!

This program contains a series of hi-res demos. By the Sydney Group. From the IAC.

BIORHYTHM

This is THE biorhythm program. There are many features not usually found in the usual bio program. The program will print the biorhythm charts on an eighty column printer. From the IAC.

TARGET SHOOT

This game's object is to "shoot" targets by placing blocks in the path of the bullet, causing it to glance off in another direction. The best score is obtained by using the least number of blocks. From the IAC.

LUCY

The thinking program, has an answer for almost anything. It also has a seemingly endless number of questions.

THE TALKING CALCULATOR

A four function calculator is simulated. It uses the APPLE's speaker to vocalize the key presses. The voice is not as good as those synthesized at the September meeting, but the price is much better. From the IAC.

APPLESOFT SHAPE MAKER

It seems that we are getting a new variation of shape makers with each DOM. This version creates shapes from text displays, using a 1 or a 0 to plot points. A little hard to visualize, but the method does work. From the IAC.

MASTERMIND

The game of MASTERMIND with a new twist. From the IAC.

BACH

A musical lo-res demo which uses the APPLE's speaker. From the IAC.

GERMAN

This program was written to aid the author in learning the German language. It operates as a German/English dictionary, giving you the words of one language, and prompting for the equivalent words or phrases in the other language. The program contains a mixing algorithm to insure that the words are not given in the same order each time the program is run thus aiding in the learning process. The comments in the program describe how to change the words or add to the vocabulary.

The program could be used for other computer aided learning by substituting math tables for the words, for instance. By David Lau.

LIGHT SABER

Here is the noise of the light sabers used in Starwars. Just right for your games. Contributed by Chuck Boody.

SPECIAL REM

This is not a program but is a description of how to obtain characters not available on the APPLE's keyboard for REM statements. Typed in by Ron Androff.

TAX PLANNING

This may be a misleading title as this program provides quick calculations of the worth of tax sheltered investments. It can be of valuable assistance for such planning. Contributed by Chuck Boody.

CAPTURE BY LINE NUMBER

By David Nordvall

If you are going to be writing programs, some form of standardization is desirable. One of the best tools is the use of subroutines. Having a disk of subroutines that you use in all or many of your programs will save time and errors.

(Editor's note: At the last board meeting Peter Gilles volunteered to lead a club sponsored effort to compile a set of BASIC subroutines which we will ultimately publish in some sort of notebook)

In order to make use of a set of subroutines which you might have stored on some disk, you need a way of pulling the subroutine off that disk and inserting it into a program. The MERGE programs available from many sources can do this but are either unwieldy to use or may be unavailable to you. (Note 1) Another method is to use a capture program and the "EXEC" command. That is the subject of this article.

As an example I'm going to use a simple centering subroutine:

```
200 HTAB (20-LEN(CT$)/2):
    PRINT CT$: RETURN
201 REM LET CT$ BE THE STRING
    TO BE CENTERED.
```

Enter the centering subroutine and the eight-line program found on page 76 of your DOS manual. (That routine saves a program to disk as a text file)

Change line 6 to:

```
LIST 200,201
```

Mount a disk on which to capture the text file. Now run the program. The catalog will show a new text file "LISTING". Rename this to "CENTER 200.201".

We now have a text file that is supposed to be a centering subroutine, but how is it used?

First, clear the memory with the "NEW" command and then type "EXEC CENTER 200.201" and when the drive stops list the program. The listing now shows lines 200 and 201 of the centering routine. These two lines can be "EXEC"ed into any program at these line numbers. By changing line 6 of the capture program, subroutines can be saved as text files and used as part of any program.

On DDM #5 there is a text file "CAPTURE". "EXEC CAPTURE" into Apple's memory and LIST. It is a one-line program to capture everything from line 1 to 63998 to a text file and allows you to give it a name. Much better than the one from the Apple DOS manual.

What I wanted, however, was program that would pick out part of a program and save it as a text file.

```
Try running: 10 REM
              20 X= 20:Y= 30
              30 LIST X,Y
              40 END
```

What you get is a syntax error because the list command cannot be used with variables. I am now down to the title of this article and the same type of problem I had with the ALL TIME HIGH SCORE (ATHS - See Aug. Mini'App'Les). In the ATHS I knew that the change was to be in the first statement and its location in memory would not be changing. If a capture program is to be out of the way, it should be up around line number 63999, as in the CAPTURE on DDM #5. As line numbers are added to a program this line number would keep having its address moved. What is needed is a method of finding where the LIST command is stored when the program is run. The actual line numbers then can be poked in as the program is run.

In Applesoft the memory address \$79-\$7A (121-122 Dec.) is the location of the statement being executed.

The key line in my capture program is:

```
63995 X = PEEK (121) + PEEK (122)
      * 256 + 82:
FOR I = 0 TO 4:
    POKE X + I,
        ASC (MID$ (ZL$, I + 1,1)):
    POKE X + I + 6,
        ASC (MID$ (ZH$, I + 1,1)):
NEXT:
LIST 00000,00000:
PRINT D$ "CLOSE"
```

ZL\$ is the first line number to be listed and ZH\$ is the last line number. Each is five characters long, filled in on the left with zero's.

There are three parts to the line.

- 1) X is set equal to the "memory address" of the line number by peeking 121(\$79) and 122(\$7A). Eighty-two is then added to X to give the address of the first 0 in the LIST statement. To see this:
 - key in the line number as shown (NEW first),

MINUTES

BOARD MEETING

by Ron Androff, Secretary

Meeting was called to order at 7:35.
Minutes were read and approved.

First item of business - incorporation
Report by Michal Young

*State has revised the laws recently;
*State has printed a guide.

*Requirements:

1. must file form with state;
2. advertize intent to incorporate;
3. file minutes of a board meeting;
4. file bylaws;

Moved we follow the above procedure and obtain an attorney to consult us. Amended that we find counsel before we actually proceed.
PASSED & PASSED

Moved that in the event we are unable to secure counsel we hire an attorney to file for us. Cost not to exceed \$350, and to commence before the November meeting.
PASSED

Motion to table the question of the bylaws until the next board meeting.
PASSED

Moved that we purchase DB Master with 1982 funds.
PASSED

Purpose: we need a better mailing list because of our ever growing membership.

Moved we publish the Roster in the February newsletter. Amended that we include a statement specifying: "Membership use only; not for commercial use".
PASSED & PASSED

Moved that after December 19, 1981 dues be increased to twelve dollars per year.
PASSED (10 to 6)

Moved we consider amending the bylaws to change from annual year membership to month started year.
PASSED

Moved we order stationary and envelopes.
PASSED

Moved we get a mail box at Hopkins or Bloomington so we will have a permanent address. President and secretary to arrange.
PASSED

Moved that 3.3 be the official DOS for DOMs
PASSED

Motion that we appoint Chase Allen editor of an effort to assemble Pascal subroutines with the intent of publishing them.
PASSED

Peter Gilles volunteered to perform similar function for BASIC.

Discussion on meeting places. Verified U of M St. Paul campus for the November meeting. Noted that there may be parking fees as the school is in session (60 cents). Michal Young volunteered to confirm each months meeting site and report the status to Dan in time for the newsletter.

Motion to adjourn at 11:00

Capture by Line No. from page 4

- CALL -151
- *800.867
- Count from \$801 to the first 30 in a group of five. This is the first location into which we want to POKE.
- 2) Our line numbers, ZL\$ and ZH\$, are poked in by a FOR loop.
- 3) The line numbers that have been poked in are listed (to an open text file).
PRINT D\$"CLOSE" then closes the file.

On DOM #7 is a program MAKE LINE CAPTURE. When this is run, a text file "CAPTURE.LINES" is made. Embellishments were added to make the program run smoother, to add line numbers to the file name, and to prompt on how to run. The whole program runs from line 63990 to 63997 and can be used by typing "EXEC CAPTURE.LINES". It can be "EXED"ed in at any time.

This is a subroutine to make subroutines. A prompt is given to:
Use RUN 63990 to capture lines.
You are asked for a file name; this will be the name you want for your subroutine. You are then asked for the first and last line numbers. The last line number cannot be 0, or, less than the first line number, or, > 63989. If the data is correct, a text file is made and you have a subroutine ready for use.

Thanks to Chuck Boody and Tom Edwards for some of these ideas.

Note 1: If you have DOS TOOL KIT, refer to:
&HOLD and &MERGE

32K RAM BOARD

A review by Ken Slingsby

As many of you know, I was one of the last users of Applesoft-in-RAM in the area. Up 'til just a few weeks ago that is. It was then that I received a SATURN SYSTEMS 32K Ram Board.

This memory board plugs into slots 0, 2, or 4 (0 is recommended). A jumper plug replaces one of the 4116's (16k bit memory integrated circuits) on the motherboard (in the center row - the board is quite long). Installation time was about 5 minutes. Most of that time is taken by reading the excellent instructions which come with the board.

Operation of the board is a snap with DOS 3.3. The master disk loads the language not present on the motherboard roms (in my case, Applesoft), when the disk is booted. This makes the initial boot a little longer than with DOS 3.2 but not all that long. By making a simple modification to the DOS on the disk, subsequent boots do not reload the Ram Board. The board can be used with DOS 3.2 but that version will not load directly onto the board. After booting, all operation is identical to using a Applesoft firmware card including the switch which determines the default language when Reset is hit. Now I can use all those programs that used HGR without extensive patching.

Editor's Note: Applesoft-in-RAM loads from \$800 (2048) into the middle of page one of the Hires Graphics, so HGR cannot be used.

"Ok", you may ask, "that takes 12K of the 32K, what about the rest?" Also included with the 32K Ram Board and instructions is a disk with several handy programs. One of them relocates DOS into the upper 16K of the board. This frees the area from \$9600 to \$BE00 for BASIC. HIMEM is set to \$BE00. The area from \$BE00 to \$BFFF is used to switch the appropriate bank on or off as needed and for DOS temporary storage. The appropriate locations on page three are modified as needed. Once these changes are made (about a 5 second operation with the program supplied), the operation of INT, FP and DOS is completely transparent. That is, to the user, operation is as before the changes are made unless you are using a program that communicates directly with DOS routines.

Editor's Note: CALL A.P.P.L.E., July/Aug has a routine to relocate DOS into a 16k board.

Other programs on the disk modify DOS for operation with the 32K Ram Board and an Applesoft firmware card or an Integer firmware card. Another program modifies the Apple supplied FID, MUFFIN, and BOOT13 for use with the relocated DOS. This relocated DOS can INIT a disk. The resulting DOS will be located on the 32K Ram Board along with patches for the firmware card, if appropriate.

The manufacturer has promised further software for using more of the 32K on the board. I plan to move RENUMBER to the unused area.

The 32K Ram Board is quite large. It is almost as long as the Mountain Hardware Clock. It has 17 ram chips so you are left with an extra after the board is installed. It generates a moderate amount of heat. The instructions advise using a fan for two or more boards in the APPLE. The lay-out of the board is simple enough with plenty of bypass capacitors used. It is solder masked but not silk screened. The switch on the rear of the board determines what the system will do in response to RESET. With the switch up, reset will cause a jump to Applesoft. With the switch down, reset will cause a jump into the monitor regardless of the switch position. If the Autostart ROM is used in place of the monitor ROM, the last used BASIC is always entered upon reset.

The 32K Ram Board is manufactured by:

Saturn Systems, Inc.,
P. O. Box 8050, Ann Arbor,
MI 48107.

Their phone number is (313)665-6416.

The board is warranted for one year. The \$239 price includes the software making the deal somewhat more attractive than two 16K boards plus the software.

Minutes continued from page 5

SEPT REGULAR MEETING (Sept 16th, 1981)

Meeting was called to order at 7:35.

No new business

No old business

Motion to adjourn at 8:16

MINI'APP'LES Education

by Chase Allen

On my second go-around at this column, I goofed!... I missed the deadline! Sorry!... I'll try to do better. However it seems that the sky didn't fall in and the schedule is relatively unaffected.

What I wanted to tell you last month was the primary results of the Educational Survey. The results set the stage for the seminar that was announced at the September meeting which was to be held on October 28th on the subject of Data Base Design Concepts. The second part of the seminar is to be on BASIC or Pascal implementation methods. At any rate the class was 70% "sold out" (no \$ cost) the night of the September meeting. More next month on how things worked out.

The Workshop that Dave Nordval hosted on October 3rd was successful for those who attended. But the attendance was very light, and we can only assume that the demand for this is not great enough to plan another in the near future. If you disagree please communicate your needs to me.

The next seminar will be offered on Wednesday, December 9, 1981. The subject will be "Structuring Large Pascal Programs". We will cover the different considerations and techniques for linking, swapping, and chaining of programs too large to either compile or execute in one memory load. Also we will cover Library Units, and linking Assembly Language segments.

The subject of the next seminar leads me to this month's programming tip. The use of subroutines is often misunderstood by programmers. The early rule of thumb used to be that you use subroutines only when a given code sequence is used more than once from various parts of the program. Anyone using Apple Pascal surely has run across error #253-"Procedure Too Long". Pascal puts a rather small limit on the code file of a given procedure, which is Pascal's name for a subroutine. Thus you are forced to break out code into procedures where there is only one reference. This is part of the concept of structured programming, and such routines usually should consist of a logically complete "task". Many programmers break their problem up into these logical groups, and code and test them separately. Again, this is another

element of the implementation of structured programming. As attendees at the Dec 9th seminar will see, this is also crucial to segmenting your problem for handling lots of code.

-: ***** :-

PROGRAMMER'S NOTEBOOK PROJECT

by Chase Allen

At the October 14 Meeting of your board, approval was given to a project to solicit material from the membership for compilation of a Pascal Programmer's Reference Notebook. I volunteered for the job of editing it, and Peter Gilles is to undertake a parallel project for BASIC.

The purpose for this project is to include under one cover in usable format a good selection of those nitty-gritty utility routines which we all need, write ourselves, and continuously repeat.

So..... the call is out for you all to scrounge your files for those neat little subroutines that do input, output, convert ASCII to Binary, Binary to ASCII, Hex to ASCII, etc, etc, etc. Every DP shop worthy of the name has a handbook for their people to document these as they exist in the local "System". I propose to write one for us, in the format as shown in examples 1 and 2. Please help us in this useful project, and the result will be a good product, which will be available to all members for cost.

To prepare a submission, I will have forms (similar to the one the two in this letter used) available at the meetings. Fill them out, attach a copy of the source listing, and when we are ready to go to press, you will have final editing checkoff. At some point later we will coordinate transferring source files to a master diskette, which will be duplicated for inclusion in the final product. Any application notes which apply to the entire subject of a reference work should also be included.

-: ***** :-

Continued on page 8

Programmers Notebook Project
Continued

Example 1

Day_Number Function for the PASCAL PROGRAMMERS REFERENCE HANDBOOK

NAME: Day_Number (INTEGER Function) AUTHOR: C. B. Allen

LANGUAGE: Pascal

SYSTEM: APPLE Pascal

MIN CONFIG: 48K (with Run-time Pascal or Language Board)

ABSTRACT: Returns an integer (1..365 - or 366 leap years) for Julian date, given integer inputs of Day, Month and Year. Assumes leap year if the remainder from Year/4 is zero. Reciprocal function to Date_of_Day_Number Procedure.

CALLING SEQUENCE:

x=Day_Number (D,M,Y)

INPUTS: D=Day of the month :INTEGER
M=Ordinal month :INTEGER
Y=Year :INTEGER

OUTPUTS: x=Day of the year :INTEGER

SPECIAL CONSIDERATIONS: Leap Year is assumed if (Y MOD 4)=0. Note that the complete leap year rule defines centennial years as non-leap years, except when evenly divisible by 400. Thus 1900 and 2100 would not be leap years. However, 2000 is a leap year, so this algorithm gives correct results for years in the range between 1901 thru 2099.

Example 2

ASCII_to_INTEGER FUNCTION for the PASCAL PROGRAMMERS REFERENCE HANDBOOK

NAME: ASCII_to_INTEGER (INTEGER Function) AUTHOR: C. B. Allen

LANGUAGE: Pascal

SYSTEM: APPLE Pascal

MIN CONFIG: 48K (with Run-time Pascal or Language Board)

ABSTRACT: Returns an integer (0..9999), for an input of character string, length=4.

CALLING SEQUENCE: x=ASCII_to_INTEGER (String_of_CHAR)

INPUTS: String_of_CHAR = "A string of characters" :STRING[4]

OUTPUTS: x = "Numeric value of the ASCII input" :INTEGER

SPECIAL CONSIDERATIONS: Numeric identity of the characters is not verified. i.e., alpha characters will be converted at their numeric value, decimal-48, etc.

THE EVOLUTION OF A COMPUTER CLUB

by Stephen K. Johnson

While watching the Vikings game last Sunday, I was scanning back issues of the Mini'app'les newsletter. I noticed that there were significant changes made in both form and content from issues dated fall of 1978 to issues of the present. It made me realize how Mini'app'les has grown and changed in the last three plus years.

Back on August 9, 1978 at 7:30 PM the first (or kickoff) meeting of Mini'app'les was held at the Computerland store in Bloomington Minnesota. Fourteen people were in attendance. Some of those 14 persons had purchased their Apples as early as February 1978. Computerland, Bloomington opened in June 1978. Prior to that, Team in Southdale was the only store selling Apples.

Dan Buchler chaired the first few meetings. Dan had published an information bulletin on July 26th, 1978 and he volunteered to continue publication of an official newsletter. That first issue consisted of eleven pages of typed information, eight of which were devoted to technical details of the high resolution graphics screens.

In January of 1979, approximately forty-five users attended the meeting. Four people from Apple Inc. spoke and answered questions. A users bank of software had been started. The newsletter was still typed and about eight pages long.

By February of 1979, it was decided that a formal Apple users group be organized with a board, president, and other officers. Membership dues would have to be charged to help finance the newsletter.

In April 1979 the first election of officers was held at the new meeting place (Minnesota Federal Savings and Loan) in Hopkins. Dan Buchler was elected president, Chuck Thiesfeld was elected treasurer and appointed as newsletter editor, and Chuck Boody was elected secretary.

I bought my Apple in May of 1979 and joined the club that month. The big item at that time was called the Wozpak,

three hundred pages of notes, collected by Steve Wozniak of Apple, pertaining to the design and programing of the Apple. Chuck Thiesfeld gave a demonstration of XPL0, a block structured high level programing language similar to Pascal. Several pages of the May newsletter were produced on an Apple. A cassette format was preferred for submission of articles.

By July of 1979, the users bank had grown to fifteen diskettes. Mini'app'les membership was now about sixty eight users and extensive rules for distribution of the software library were established. The newsletter was almost completely produced on an Apple. The meeting consisted of a beginners workshop.

The style and type font changed from month to month in the fall of 1979, as different printers were tried in order to find a good readable combination of size and font. Newsletters were typically four to ten pages and two columns of both left and right justified type.

In December of 1979, Mini'app'les joined the newly formed International Apple Core. Fifty five of the approximately one hundred members came to a meeting on music applications. The newsletter style and format was pretty well established, but still about eight to ten pages.

Early 1980 brought about the first bulk purchase of diskettes. Pascal was gaining popularity as articles started appearing in the newsletter about Pascal applications and programing.

Dan Buchler was reelected as president. Marilyn Thomas was the new treasurer and Mike Young was the new secretary. A new office, vice-president, was created to organize the meetings with interesting topics. I (Stephen K. Johnson) was elected that new position. Seven new board members were appointed at that time.

The May 1980 newsletter included the first of many International Apple Core application notes. Dave Laden started the first of a continuing column entitled 'Turning the Pages' which scanned the computer magazines for Apple related articles. About eighty members attended the meeting that month.

By October of 1980, it was announced that the circulating user bank would cease to exist. Too many problems with distribution was the reason. A Disk of the Month (DOM) program would be started

Continued on page 10

The Evolution of a Computer Club Continued from page 9

and these would be sold at the meetings. Mini'app'les now had two hundred and forty members.

The end of 1980 and the beginning of 1981 brought on a new problem for Mini'app'les. Over-crowding of our meeting place was getting serious. One hundred and seventy people squeezed into a place that sat only about seventy-five comfortably. A new meeting place had to be found.

The January 1981 newsletter was the first of the new bound magazine type format. It's thirty-two pages were the largest newsletter and the first to be bulk mailed. Excellent articles were repeated from other user group newsletters. A Pascal 'Special Interest Group' (SIG) had been started.

April of 1981 was the third annual election night. I (Stephen K. Johnson) was the newly elected president. The new vice-president was Chuck Thiesfeld. Marilyn Thomas was reelected treasurer. Ron Androff was the newly elected secretary. A new officer position of past-president was created. The purpose of this office was to smooth the transition between the newly elected and the past officers and board members. Dan Buchler assumed this office and was also appointed as the newsletter editor. April's newsletter was the first one printed on the new Epson MX-80. The newsletter now resembled it's preasent format.

The May meeting was the last one held at the bank in Hopkins. We had to find a place that would accomodate over two hundred and fifty people.

Edina's Southdale public library was the meeting place for June 1981. No disk sales or collection of membership dues were allowed because of library policy. Newsletter circulation was now about four hundred and fifty.

In July 1981 we started alternating each month with the University of Minnesota and the library for meeting places ending at the U of M in September. September's meeting was one of the best; demonstrations of voice synthesizers. Two hundred and seventy people attended that meeting. September's newsletter was the first to have a stiffer cover.

The October 1981 meeting is planned for Wilder school auditorium in south Minneapolis and another overflowing crowd is expected since the Mini'app'les membership is approaching seven hundred.

Now that I have everyone up to date, you can see that Mini'app'les and it's newsletter have undergone alot of changes in the last three plus years. I hope you feel that most of these changes have been for the good and that this user group will continue to better help it's members in the future.

Editor's note: The name "Mini'app'les" was conjured up by your editor in June of 1978. Mel Edman, who runs an advertising agency, supplied the logo.

RENUMBER REVISITED

by Jim White

In the July 1981 issue of Mini'App'Les I described how to fix an error in the Renumber program supplied on the System Master diskette. The information was derived from the Apple Answer Book. The fix has since been found to work only when the Renumber program is used with DOS 3.2! Here is the fix for Renumber when used with DOS 3.3:

Renumber is a very powerful tool for developing programs. However, if you use it, you may find some strange alterations in your program. RENUMBER may have done it. What happens is that the number after a "*" sometimes is mistaken as a line number and RENUMBER renumbers it! So, if you had a line:

```
10 LET A = B * 10
```

it might renumber as:

```
20 LET A = B * 20
```

The fix (for Renumber running under DOS 3.3 with Applesoft in ROM or on the Language card) is:

```

JLOAD RENUMBER
JPOKE 4789,172
JPOKE 4790,171
JSAVE RENUMBER

```

Happy renumbering!

EPSON PRINTER NEWS

by Daniel B. Buchler

1. There's a rumour around that a mod is coming out to upgrade the speed of an MX-80 to 120 c.p.s. Of course, this may have adverse effects upon its reliability and quality of registration.
2. Peterman and I are still looking for a low cost way to replace your ribbons when they wear out. We will report when we find a good solution. Supposedly there is a local St Paul company who does it, but we have been unable to raise them on the phone! If you can't wait, there's an outfit in Austin, Texas:
Southwest Ribbon Co.,
51st and N. Lamar
Austin
who will reload your cartidge for \$5.80 (plus postage).
Information: curtesy Apple Dillo,
July 1981
3. Do you know how to include **wide** letters within 'justified' text. The trick is to include as many non printing control characters as there are letters in the wide text. For the word **wide**, I typed **NNNwideT** where **N** and **T** are Ctl N and Ctl Ts respectively.

This may be obvious to everyone else, but it was'nt to me until a few weeks ago.

4. Some people have received their newsletter from Barden. In it is screen dump with a good aspect ratio. Someone will type it in and put it on the user bank.
5. The following is summarized from an article by Tom Sethre writing in the Sept., 1981 issue of the Austin, Texas, Apple-Dillo:

The Austin group made a group purchase of a friction feed kit for the MX-80. They purchased the type that uses two thin rubber rimmed friction wheels that pinch the paper between those wheels and a heavy brass pinch roller resting on top of them. These friction wheels replace the grey 'floater' wheel currently on your Epsoms. However, the tractor mechanism is retained. Because of this, you can still use various widths of pin feed stock such as labels and standard 9.5 inch wide paper. Another manufacturer of a friction feed kit allows only 9.5 inch paper to be used in the tractor mode!

Apparently, the manufacturer of the kits purchased by the Austin group is unknown, but they seem to think it is a simple enough contraption, that nothing is likely to break.

One side effect of having a friction feed on the Epson is that unlike a typewriter, which pushes paper up past the print position, the Epson pulls it into the print position. This means that you can't print higher than 2" from top of page, but you can print right along the bottom of page. With letterhead, thats probably not a problem.

6. This writer is negotiating with a software house to sell HIGHER PRINT. When I started out programming it, I had not planned such a move. But later it became evident that it was a saleable product. So if you are interested in it, please be patient for a few weeks.

COMPUSERVE

Note and Thank you by Dan Buchler

I want to thank Dorris Burndt of Tri-Star Video News for coming to us in August and giving an excellent presentation. I for one was definitely impressed with Compuserve and interested to hear some of their philosophies. For the benefit of those who did not attend, a couple of points:

1. Compuserve uses a menu selection system which though perhaps not as flexible as the Source's technique is much faster in processor overhead and thus in cost to the user.
2. You can buy Compuserve now from most Radio Shack stores. A couple of months ago there was a problem, but supposedly not any more. If you have a Hayes, buy the Dumb Terminal package for \$19.95. The Apple II package, at \$29.95, is only required if you don'y have suitable communication software!
3. Tri Star Video News is a subsidiary of the Minneapolis Star and Tribune. They are one of 8 newspapers in the USA that are on-line with compuserve and therefore contribute to it. They claim that they favour Microcomputer and Business news feeling that the current user-base is more likely to be interested in those two subjects.
4. Compuserve uses 12 lines per page, 32 characters/line

THE TWIN CITIES CONFERENCE TREE

By Mark Abbott

There is a new computer access message system in the Twin Cities area. It is called The Twin Cities Conference Tree. It is run on a 48k Apple II, with 2 disk drives, and a Hayes Modem. The conference tree is like a computer bulletin board, in that if you have a terminal and a modem, you can access it over the phone lines, and leave messages. The similarity ends there, however.

Bulletin boards are ordered linearly. This means that messages that cover a particular topic are spread out over the entire system. You have to keep track of messages by message number, or search through several items which are not related to the topic, in order to find what you want.

A conference tree, as the name implies, has a tree-like structure. In other words, a given conference topic (branch of a tree) has messages (sub branches) attached to it, and these, in turn, may have sub-messages (sub-sub-branches, twigs, what-have-you) attached ad infinitum. The Tree is set up so that it is very easy to follow a conference from its start to its current state, and to add your own input.

Several conferences will be going on at the same time. This particular Tree was 'planted' at the end of September, so it is still very much a 'sapling'. At present, we have conferences on topics such as FORTH, space exploration, flight (hang gliders, power gliders, etc.), Apple-Pascal, TRS-80, a calendar of computer related events and users group meetings, and movie reviews. There is no restriction on the range of topics, or contents of messages, as long as common civility is maintained. Guidelines detailing when messages are deleted are kept on-line, as well as a series of HELP files if you get stuck.

The Conference Tree was developed by The CommuniTree Group, based in San Francisco, who saw a need for a computer conferencing system designed with ease of use in mind, as well as low cost to run. The average user can learn the system in 10-15 minutes. The Conference Tree is written in FORTH.

Currently, the Twin Cities Conference Tree is the only one operating outside of California (at least as far as I know). It can be reached at

(612)-227-0307, and will accept 110 or 300 baud. In order for a tree to grow, it needs nourishment from the land around it. For a Conference Tree to grow and flourish, it needs input and strong support from as wide a base of local users as possible. Give it a try. Please leave a few comments on what you find especially good or bad about it. I'm certainly interested in what you have to say, and so is The CommuniTree Group.

HGR PRINT 48K ERROR

by Wayne Saylo

Last month's DOM contained the program 'HGR PRINT 48K' which unfortunately contained an error in the subroutine which sets HIMEM:. The program correctly sets HIMEM: but it fails to relocate the STRING POINTER. As a result, any use of strings will eventually write over the HGR PRINT 48K program data. The following is a patch to correct the problem:

Call-151 (to get into Monitor)

Then type:

8DE0:A9 E0 85 73

85 6F A9 8D 85 74 85 70 60 (RETURN)

Then save the corrected program with COPY HGR PRINT 48K.

It was also implied that Wayne Salo wrote the program to COPY HGR PRINT 48K. This is incorrect. Wayne modified a program from a previous DOM with the appropriate addresses and information.

VISICALC NEWS

Many other Apple Newsletters have a Visicalc Column. If our membership is interested, let us know, and what's more, let's have some contributions!

MINI' APP'LES SURVEY 10/20/81

THIS REPORT IS COMPILED FROM 128 SURVEY SHEETS.

THE NUMBER OF MEMBERS OWNING OR HAVING ACCESS TO AN APPLE IS 128 OR 100%.

SYSTEM CONFIGURATIONS:

APPLE II+	71	55%	COLOR TV	42	32%
16K RAM	2	1%	BLACK & WHITE TV	19	14%
32K RAM	5	3%	VIDEO MONITOR	43	33%
48K RAM	121	94%	MONITOR & TV	24	18%
DISK	79	61%	APPLESOFT ROM CARD	33	25%
DUAL DISK	44	34%	INTEGER ROM CARD	25	19%
TAPE	5	3%	LANGUAGE SYSTEM	34	26%

ADDITIONAL EQUIPMENT:

MODEM	56	43%	MUSIC BOARD	8	6%
PRINTER	77	60%	16K EXPANSION CARD	1	0%
GRAPHICS TABLET	6	4%	Z-80 (CP/M)	8	6%
80 COLUMN CARD	9	7%	ROM+	6	4%
CLOCK	12	9%	PA#1	14	10%

INTERESTS:

AMATURE RADIO	11	8%	HOME FINANCE	68	53%
BUSINESS	78	60%	GAMES	97	75%
EDUCATION	73	57%	WORD PROCESSING	67	52%
SCIENCE & ENGINEERING	24	18%	SIMULATION	2	1%

PROGRAMMING ABILITY:

LEVEL	POOR	AVERAGE	EXCELLENT
ASSEMBLY	91 (71%)	24 (18%)	13 (10%)
INTEGER BASIC	53 (41%)	50 (39%)	25 (19%)
APPLESOFT BASIC	31 (24%)	59 (46%)	38 (29%)
PASCAL	104 (81%)	13 (10%)	11 (8%)
FORTTRAN	85 (66%)	24 (18%)	19 (14%)

Pay your dues * * * * * See back cover

THANK YOU Hector

By Dan Buchler

The Speech Synthesis program at the Sept meeting was one of the most succesful that we have ever had. I want to personally thank:

Dale Heltzer Type and Talk
 Scott King (Votrax + text to
 phoneme conv. sftw)
 (alias Hector) Echo II (Votrax)
 Chuck Mages Sweet Talker (SC-01)

Scott Zerby Micromouth
 Keith Hausemann Echo II
 (Weldon Electronics)

Note: all were phoneme systems except for the Sweet Talker which stores a fixed vocabulary in its chip. Other sounds can be made by combining pieces of that fixed vocabulary)

All helped to put on a terrific show. I am sure the other 270 people at the meeting would echo my contention that it was a great evening!

ODDS & ENDS

- There's an interesting new reference book recently published by MICRO INK and written by William F. Luebbert. It consists of 128 8 1/2 by 11" pages of Computerized Printout listing 2293 different entries/locations into Apple firmware, and an alphabetical Gazetteer containing 1419 entries. It is Wire-O bound to stay open in one place. Each entry contains
 - The address in hex and decimal
 - The common name of the address or routine.
 - Coded information on the use.
 - A one or more line description.
 - Register information. (eg A- Y-REGS ALTERED)

The retail price is \$14.95. However, if we can put together and order for 20 copies, we can get it for \$12.00 including shipping! If you are interested send a check for \$12 payable to Dan Buchler to his home address shown on page 2. I will return checks if we do not get enough subscribers. Deadline is the Nov meeting!

\$0000-\$FFFF (0"-1) \HB\

ADDRESS RANGE OF APPLE II (\$0000-\$FF-32768"-1)

\$0000-\$BFFF (0"-16385) \HB\

RAM ADDRESS RANGE OF APPLE II (NOT I HARDWARE PAGE ZERO

\$0000-\$00FF (0"-255) \HB\

'SWEET-16' REGISTERS R0 THRU R15 OF

\$0000-\$0C1F (0"-31) [(R0-R15)] \PB\

APPLESOFT SOFT REENTRY (UG IS EQUIVA

\$0000-\$0C02 (0"-2) \SE\

'SWEET-16' REGISTER R0 (IN 16-BIT PS

\$0000-\$0031 (0"-1) [(R0-RCH)] \P2\

MONITOR MEMORY LOCATION 'LOC0'. PRES

\$0000 (0) [LOC0] \P1\

MONITOR MEMORY LOCATION 'LOC1' - P01

\$0001-\$0C02 (1"-2) [LOC1] \P2\

'SWEET-16' REGISTER R1 (IN 16-BIT PS

\$0002-\$0003 (2"-3) [(R1)] \P2\

APPLESOFT JUMP COMMAND TO \$F128 (HAR

\$0003-\$0005 \SE\

'SWEET-16' REGISTER R2 (IN 16-BIT PS

\$0004-\$0005 (4"-5) [(R2)] \P2\

'SWEET-16' REGISTER R3 (IN 16-BIT PS

\$0006-\$0007 (6"-7) [(R3)] \P2\

'SWEET-16' REGISTER R4 (IN 16-BIT PSEUDOMACHINE IN APPLE SY

\$0008-\$0009 (8"-9) [(R4)] \P2\

'SWEET-16' REGISTER R5 (IN 16-BIT PSEUDOMACHINE IN APPLE SY

\$000A-\$0016 (10"-22) [(A/S RESVD)] \PB\

APPLESOFT RESERVED BLOCK IN PAGE ZERO

\$000A-\$0C0C (10"-12) \S1\

APPLESOFT LOCN FOR USR FUNCTION'S JUMP INSTRUCTION

\$000A-\$0C0B (10"-11) [(R5)] \P2\

'SWEET-16' REGISTER R6 (IN 16-BIT PSEUDOMACHINE IN APPLE SY

\$000C-\$000D (12"-13) [(R6)] \P2\

- There is an interesting magazine published by MECC magazine called Educational Technology Magazine. Its primarily an educational magazine but does contain reviews of interest to Apple enthusiasts.

- An Apple, 2 disk drives, Sanyo 9" monitor and Epson MX-80 disappeared from a Honeywell Plaza location recently. If anyone hears or sees anything that might lead to apprehending those responsible, please get in touch with the Newsletter editor.

NOTICE

MINI'APP'LES
ADDRESS CHANGE


Mini'app'les now has a permanent home. Many thanks to Dan for the use of his address for all these years but now we'll reside in Hopkins at Box 796. Please send all correspondence to:

Mini'app'les
Box 796
Hopkins, Mn. 54343

Exceptions:

Newsletter articles should still be sent to Dan Buchler
Membership and renewal forms should be sent to Ann Bell

NOTICE




PUBLIC DOMAIN LIBRARY

TAKE A BITE!
FREE
PROGRAM EXCHANGE

- * 15-40 PROGRAMS FOR \$1.00
-BY SUBJECT OR MIXED,
-3.2, 3.3 OR PASCAL.
- * DISKETTES--MOST BRANDS
LOW AS \$1.85 EACH
- * MINI-FLEX FILE CASE FOR
50-100 DISKS \$18.90

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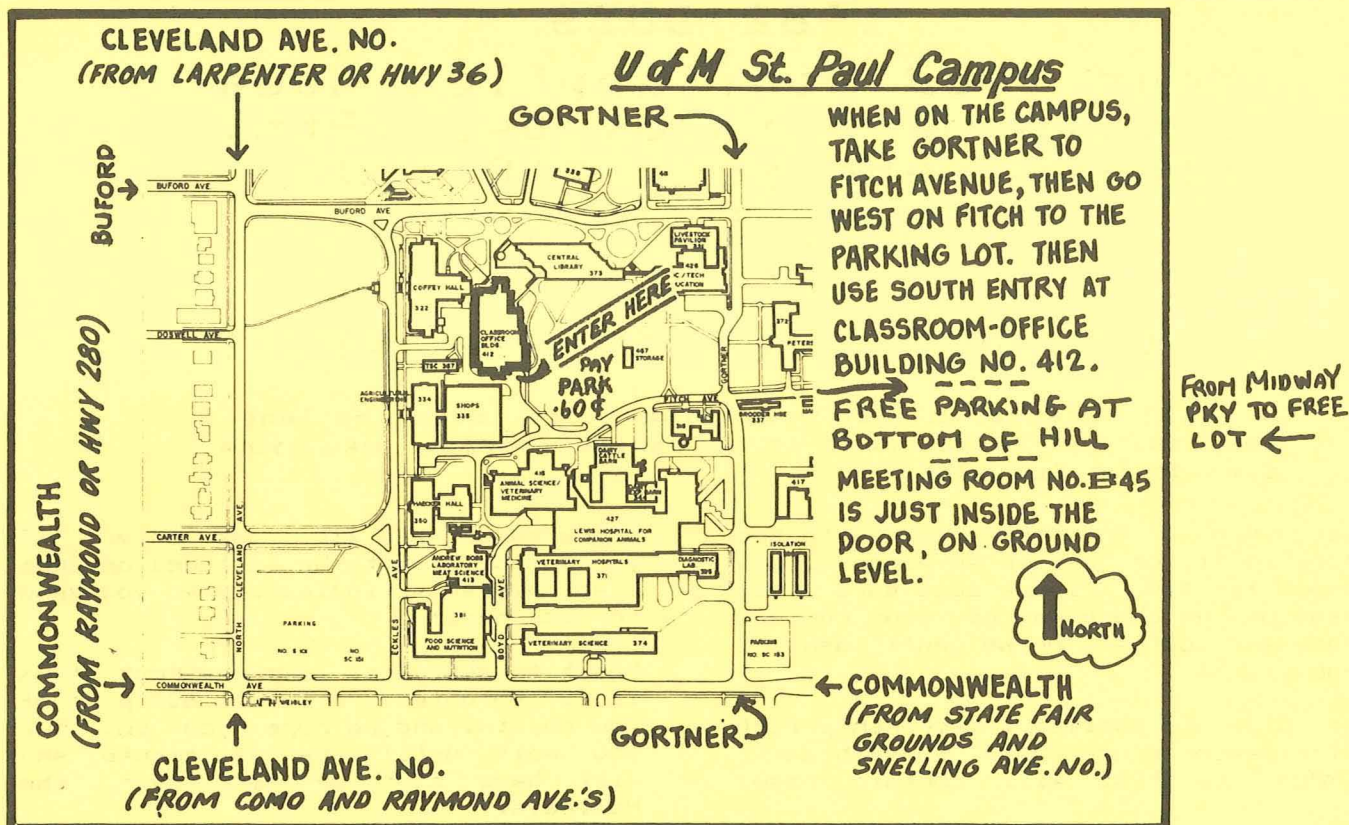
For Sale

APPLE II, 48K with APPLESOFT FIRMWARE card. Includes One Disk II (3.3) and Paymar Lower case chip. No problems. About 2 years old. Available about Oct 1 when new system arrives.

\$1850

Tom Edwards

927-6790



UNDER 18 USER

Special Meeting

*Education Special
Interest Group*

LARGE PASCAL PROGRAM CONSIDERATIONS

Are YOU under 18?

Do you like to program the Apple?

We could form a group to meet before the
monthly meetings - or on Saturdays.

Interested?

Contact- Stephen Edwards (age 11)
4941 Newton Avenue South
Minneapolis
Minnesota 55409
922-3341

DATE: Wed, 9 December 1981, 7:30 PM

LOCATION: Sperry-Univac Building
3001 Metro Drive - Rm 103
Bloomington, MN 55124

DIRECTIONS: I94 East of Cedar
Take 34th Ave Exit
South to E. 80th Street
RIGHT, 3001 is first building
on the right (1/4 mile)
Parking Entrance from 80th
is middle of block
Use entrance to right (east)
Go up 1/2 Flight thru door
Rm 103 is first room on left

This facility is offered to Mini'app'les
through the curtesy of Univac
Incorporated.

REGISTRATION FORM

Large Pascal Programs

NAME: _____

PHONE: _____ (Home)

_____ EXT _____ (Work)

Please give to Chase Allen or call-
432-6245, eves 854-1331, days

1982 DUES

Your 1982 Mini'app'les dues
should be paid by Dec 19th.
Please send your \$10 to:

Ann Bell (Membership Coordinator)
8325 39th Avenue North,
New Hope
MN 55427

After Dec 19th dues = \$12.

We will create a 1982 mailing list over the long weekend, and if you want to be on it, please get your dues in by Dec 19th.

Send Ann a Christmas card with the dues in it, or just an envelope with a check for \$10. Please make sure your name on the check matches your current name and address, or we can't identify you.

We plan to publish a membership list (for member's use only) in February, 1982. The list will contain name,

phone number and Zip code only. If you do not wish to be included on that list, please so indicate when you send in your dues!

Don't forget, Ann, like the rest of us is a volunteer. If all 600 plus of you rejoin, and we hope you do, but you wait until the last minute, she will have alot of work over the Holidays.

SO PLEASE GET YOUR DUES IN EARLY.
YOU WILL RECEIVE NO FORMAL NOTICE
OTHER THAN IN THIS NEWSLETTER.

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