mini'app'les

apple computer user group newsletter

IN THIS ISSUE

MEETING NOTICES:

NEXT MEETING: Weds August 15th at 7:30pm at the
Minnesota Federal Savins and Loan, 9th Avenue S.,
Hopkins.

TOPIC: Demonstration nisht - We hope to see
demonstrations of
The D.C.HAYES Micromodem II
The Appletalker
Heathkit printer
Other thinss, if they can be arransed
If you have an idea let us know as soon as you read
this.

MEETING AFTER NEXT: Weds Sept 19th
APPLICATIONS NIGHT: We will have a 10 or 15 minute
discourse each by several individuals on their
particular Apple application. We need volunteers for
this. Please contact D.Buchler if you would like to
participate.

NOTE OCTOBER 17 is tentatively scheduled as a prosram
exchanse nisht.

SPECIAL PROJECTS

If any of you are actively prosramming orbuilding
somethins which misht interest the members, please let
us know. Maybe we can come up with some joint
projects. After all in industry prosrams of any
consequence are developed by teams not individuals. In
the case of both hardware and software, it has always
seemed to me to be very wasteful for two people to be
developins the same thins. As a starter, this writer
is thinkins of buildins an interface to the General
Instrument AY-3-8910 sound senerator intesrated
circuit. See BYTE, JULY, 1979. I am also interfacins a
Victor 34 col printer (see elsewhere in this issue).
Asain we are developins a sort of special purpose text
editor/word processor for seneratins newsletter.

BUSINESS USERS

According to information from several of our local
stores, more andmore people or companies are buyins
Apples for Business and less are buyins Apples for
hobby use. This means that there are alot of owners of
Business systems around.   It seems that many of the
Business system purchasers are not interested in
prosrammins and the technicalities of the Apple. Their
interest is to purchase sood quality software. Some of
these people have been to our meetins and apparently
turned off by our type of technical discussions. This
is somewhat unfortunate, since it is beleived that
Mini'App'Les could offer such persons a neutral sround
on which to trade ideas and experiences.
Let us MINI'APP'LES hear from you Business users and
tell us your problems. I think we can help.

MINUTES

Minutes of the July Meeting

Meeting called to order by D. Buchler. Minutes approved as printed in the July newsletter.

Old Business:

1. Distribution points now have the user bank. Club members can get access by following the guidelines in the July newsletter.

2. A submission form is now available at the distribution points for those who would like to contribute programs. Remember that this is your club, and that it can only grow by addition of your programs to the bank. We will soon loose our ability to trade wit other clubs if we do not have new things to trade.

3. Copyrighted programs will be deleted from the user bank by the stores serving as distribution points. Be sure to let them know if you find copyrighted material on a club disk.

4. The BASIC program that teaches BASIC is still being investigated. The club has ordered the Disk-of-the-month from Call A.P.P.L.E. and will be getting Diskpac 12 from them also.

5. We are contacting Apple about the advisability of making Apple user bank programs generally available through the club.

6. D. Buchler has initiated a letter soliciting advertising from the area computer stores. This should provide some income for the club and also provide a forum for the introduction of new products onto the local market. New Business

1. Please notice the new format of the newsletter, and make comments to Chuck T. about it. We are now producing the newsletter on an Apple connected to a Heath printer and would like to improve the product.

2. Newsletter input (aside from these minutes) is badly needed—what are you doing or what have you discovered about Apple?????. For example, I would like to know how to access the floating point routines from integer BASIC. They are provided, but no information about how to use them seems to be around. With those routines, you might be able to get by without

applesoft. Or how about some dialogue about your favorite uses for the two languages? I prefer integer BASIC in many ways!! Has anyone found a way to scroll the HIRES screen? It would be very useful in writing these minutes!! OR, has anyone discovered some really good business software—or some good software/hardware packages?

3. We also need suggestions for meeting topics. Contact Dan Buchler—soon. Perhaps some of you would like some help with BASIC programming, or with specific problems. We have some very knowledgable people, but can't be helpful unless we know how to do so. YOUR input is needed!

4. A letter was read from a non-club member interested in developing software to use with genealogical data. Contact Dan B. if you're interested Meeting adjourned at 8:30 for a talk by Ken Brumbaugh

of MECC. He suggested ways to contribute to the MECC program bank, and mentioned that one can get the MECC newsletter free by writing MECC 2520 Broadway Drive, St. Paul, Minn 55113 and asking to be put on the list. (See article on Ken Brumbaugh's presentation elsewhere in this newsletter)

APPLECATIONS (Apple Applications)

2 Apples were recently purchased for use in the Bloomington Video Center. The center is a TV studio serving the Bloomington area Cable TV network on channel 10. The operators of the network plan to use the Apples to display messages and other textual or graphic information on the network. As a cable TV station they are required to present a minimum amount of educational material or community service type of programming.

There was a suggestion that we, MINI'APP'LES, might like to set up some sort of broadcast over the cable TV network. The purpose of this would be :
1. Offer the community a service.
2. Provide some sort of educational program, perhaps BASIC programming.
3. Help the cable TV co. find material to fill up the time that they are required to broadcast local community educational material.

MINI'APP'LES ADVERISING

As you may have noticed in this newsletter, and as mentioned in the minutes, we are now carrying ads. For your information the published rates
   as follows:-
Full page $25 per issue,
Full width ad (i.e. 2 columns wide) $4 per vertical inch
Half page width (i.e 1 column wide) $2.50 per vertical inch

We did have a special introductory rate in for this issue, but that is no longer in effect. If anybody wants to sell software and that person is a member of Mini'App'Les, that person may buy an ad or we will negotiate to place an ad on a commision basis.

The deadline for ads is exactly 3 weeks before the meeting day of each month, or putting it another way, the Weds preceeding the first Weds of the month for which the ad is to be run.

BOARD MEETING

There will be a board meeting at the President's house on Weds Sept 5th, 1979 . The meeting starts at 7:30 PM.

GUEST SPEAKER - KEN BRUMBAUGH (7/18/79)

Ken brumbaugh, head of User services at M.E.C.C. (Minnesota Educational Computer Consortium) provided a packed house of 46 Mini'App'Les members with some excellent insight into what MECC is doing and plans to do with their Apples. We thank Ken for coming.

The following are some notes on Ken's presentation:

-Demand for instructional Timesharing (TIES) has not diminished but actually increased since the coming of Apples to MECC.

-500+ Apples ordered to date.

-Apple competed with Rex, Astro, Exidy Sorcerer, etc for MECC business. PET and Radio Shack did not bid.

-Educational programs will be available in two ways to users:

  --Downloading from Ties.
  --Diskette Distribution.

In the later case diskettes are expected to sell for $25 to $30 per diskette. Downloading system software must be obtained from Ties before you can download. Downloading was picked as a viable technique as it is expected that programs will frequently be changed. Downloading provides an easy way of ensuring one gets the latest edition of Software. Techniques for downloading only the changes will probably be developed so one does not have to spend the time re-transmitting a large program.

-Any individual or non profit organization is eligible to make use of Ties. However you must have a validated ID. This is obtained by purchasing a $50 coupon for 50 hours of connect time from Ties.

-MINI'APP'LES users are encouraged to develop programs which are educational in nature, and thus of interest to Ties. These programs may be submitted to Ties for inclusion in their bank. This type of exchange of programs will ensure that we continue to benefit from the large bank which they have developed.

-On Ties are 4 categories of programs:

  System Library - approved Ties programs(wont work on Apples).
  Share Library - contributed Ties program(wont work on apples).
  Seeds
  Apple

The later 2 are Apple programs. They won't work on Ties.

A 'Catalog' command will print the contents of Seeds or Apple. -Music programs will not be available through Downloading. They will have to be purchased.

-MECC is developing

(1) an authoring language for the Apple which is a version of PILOT.

(2) An editor similar to the 'Prime' Editor.

-MECC is developing lots of documentation which will be available to us for a small fee. Included are:

-MECC/APPLE AUTHORING AND PROGRAMMING GUIDE. This will contain a guide to a very structured organization for programs. This promises to simplify program development.

-A monthly newsletter called 'USERS'. We have ordered a subscription to USERS for MINI'APP'LES (a few copies). We should receive our first copies soon. If you want to receive your own copy, see one of the officers at a meeting, and they will give you the application blank from one of the subscription copies.

A majority of MECC Apple users will be the school districts which already interface to Ties. They will probably purcahse the serial interface card which would be used in conjunction with their Modem (previously used for talking to Ties). Others will probably purchase the Hayes Micromodem.

It is of course the educational programs which are the grass-roots of the Ties programming output. These programs cover a vast spectrum. Ken Brumbaugh spent some time describing some programs being developed to teach grammatical students roots of words. The programs are sophisticated! Incidentily, because students typical work in rooms with others, sound in general will not be employed. Documentation of programs will be brief following a prescribed format. Extensive references to text books will be employed.

USER BANK

As stated in minutes the user bank is installed and circulating from the 3 distribution points:
Computerland
Team, Hennipin
Zim Computer
We are trying hard to eliminate the Copyright software and have worked with the stores to delete said programs. Several out of towners have called wondering how they can get the software. Well, after local demand has been satisfied, we will put one copy of the bank into mail distribution. We will have to

XPL0
"XPL0 IS PORTABLE"
XPL0 has been implemented on an IBM 370 computer system and a successfull compilation of the compiler has been performed. An XPL0 interpreter has also been written for a high speed miniprocessor and is running APPLE XPL0 programs. It's use on a small memory system seems to make it very appealing for special applications.

APPLE SERVICE

This article is curtesy the June N.L. of Apple Corps, Dallas.   It was written by Charles A. Randall, and modified somewhat.

Many of you Apple owners will be happy to learn that if you find a worm in your Apple, there are now Authorized Service Centers to fix the Apple. There are three levels of service being offered.-
level I   -Modular Exchange -Dealer level
level II   -Extended   -Distributor level
level III -Factory   -Factory level
Here's how it works. Your Authorized Service Dealer (Level I) has been issued a unique Service Center number.   With this, the dealer can acquire parts, modules, and a pipeline to service support at Apple.

The part the service dealer likes is he gets paid for servicing a set within the 90-day labor warranty.   Of course, after the 90 days but within the one-year warranty, you, as the owner, have to pay the labor charges while Apple covers the parts warranty. However, the Level I service centers may not replace modules or boards in an Apple between 91 days and 1 year without charging the customer the exchange price for the board or module.   This is because, if you brought a unit to your Apple service center, and they replaced a borad outright and sent it back to Apple, the dealer would have to pay the labor for repairing the board.   As a matter of fact, the dealer does'nt make much money after paying freight charges in both directions etc.
If the set is out of warranty, then you as the owner must pay for the parts as well as the labor. The parts prices, however, are reduced from those charged for a "BRAND NEW" board or module. If you are not sure of the competence or quickness of the Service Center in your area, you may ship the board or module to Apple in Cupertino.   In either case you will receive a board or module that is functionally

up to date as the Apples being shipped from the factory.   In this way you have an Apple that works and the latest updates (better IC's, improved boards, etc.).

Apple has announced to the service dealers that sometime in August a "Service Agreement", otherwise known as a service contract, will be available to Apple owners.   If time schedules of the past are any indication, the agreement will probably surface some time around the first of the year.

When your Apple evidences some symptom of a malfunction, please check it out very thoroughly. Many, many symptoms can not be demonstrated when the set is taken into the dealer.   Still others fix themselves after the computer has been turned off for 30 minutes or so. If you still have a problem, most service dealers would appreciate a call first. You would not believe how many sets are fixed or diagnosed over the phone. If the dealer asks you to bring in the set, be sure to determine how much of the system will be needed to properly diagnose the problem.

It should be noted that when a part under warranty fails and has to be replaced, the dealer is supposed to replace it with like module or part number. For example, a 3.1 diskette gets replaced with a 3.1 diskette not a 3.2 diskette; a monitor ROM does not get replaced with an Auto start ROM. If the new part, chip, board or module has the same model or part number as the old one, and its an improved version (like 4 color to 6 color mother boards), then you get the improved version.   But this is only because the old version is no longer available, and it causes no loss of revenue to the dealer or service center.

.USER BANK (continued)

see how it works

We have had alot of trouble with TAPE copies made on the REZOUND equipment at the Heathkit store. In this writer's opinion, it is the maintenance of that copy equipment that is the problem. Tapes will either be very readable or nothing can be read. Anyway, we have dropped Heathkit for duplicating and are now using S.A.V.E Co. of Bryant Ave S., Minneapolis. His quality on 4 tapes seems to be good, but I have insufficient input from other users at this time. The cost is actually less than at Heathkit. By the way ifany of you who got a bad tape want a free replacement, please let us know.   SPECIAL INTERESTS

Over the past few months , we have received mail from several out of town Apple users with special interests. These users indicated a desire to communicate with other Apple users with similar interests. Here is a list:-Ron Thorkildsen, Utah State University, Logan, Utah, 84322
Computer Assisted Instruction for Indian students in residential secondary setting.

Clifton M Howard M.D., 58 Van Orden Road, Harrington Park, N.J.,07640
Genealogical data-store, file, sort, retrieve, cross reference.

Vilar F.Kelly, 142 Sleepy Hollow Road
New Canaan, Conn, 06840
Commodity Futures market.

Conrad P. Pracht, Reliance Electric,
4705 Park Rd., Charlotte, North Carolina,28203.
Industrial Applications.

DAN ON PRINTERS

Dan bought a printer with none of the attributes listed in June or July N.L.s. It cost $50 only! It is an ex Red Owl store point-of-sale terminal printer with 34 columns, dot matrix, upper case only,prints from right to left.   Dan is designing an interface card (very simple) that plugs into an Apple peripheral card slot. There are about 30 more printers where this one came from, so if anyone is interested please see Dan. The interface will cost about $30 inparts (board ,sockets and 2 chips).

The COMPRINT printer, carried by some of our local stores is sort of interesting. At first glance it is simply a run of the mill wide paper version of the aluminized paper printers such as those made by Centronics and Axiom. However the Comprint does have a very high resolution dot matrix. If you want a higher than the usual 7 x 9 or 5 x 7 resolution, and dont mind the shiny paper, have a look at it.

MAINLY FOR BEGINNERS

"Editing BASIC programs"

There are 3 spiral bound excellent manuals published by Apple-
I am sure you have seen them all. An INTEGER BASIC manual, an APPLESOFT manual, and a DOS 3.2 manual. If I can be so brash as to say that you the average beginning user can't possibly assimilate all that information in a short time, its only what I see in myself.   It took me many months to learn the tricks that make editing a program easy. Actually they are not tricks since its all written down in those manuals I mentioned above. The first thing you do is hit the following keys
        ESC
        hold down SHIFT
        hit P whileholding down shift
The above clears the screen and homes the cursor to top left corner.
Now hit return to get > or] depending on whether you are in Integer or Applesoft BASIC. Now type POKE 33,33
The last POKE sets the width of line to 33. You need to do this so there are no unneeded imbedded blanks at left and right ends of line.   The later are real nuisances when trying to edit literal Strings. Now we can edit anything very easily. List the line you wish to EDIT.   Now use the rt and left arrows to move backwards and forwards over the line correcting as needed.
If you want to insert something use the ESC key followed by A or B or C or D to move the cursor right or left or up or down respectively without copying the information over which you move. Example - suppose you have in your program thr following line (as it appears with the POKE 33).
 100 PRINT "THIS IS AN EXAMPLE O
FTO CORRECT A TYPO"

You really wanted OF HOW TO instead of OFTO.
Space the cursor up to and including the T of OFTO then hit ESC C to move down below line and type 'space' HOW 'space',
Then move the cursor up with ESC D, and left back to the TO using several ESC B,ESC B, etc.The line will look like this after you finished off by spacing to the end of the line using the right arrow to copy all of the line,

 100 PRINT "THIS IS AN EXAMPLE O
F HOW TO CORRECT A TYPO"

Thats all there is to it folks.

COMPUTERS inc. ZIM

Y O U R   🍎 apple computer inc.   H E A D Q U A R T E R S

CO PUTERS inc. Z I M

THROUGH AUGUST 31 ---

+   Parallel Printer Interface Cards

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+   High Speed G.P. Serial Interface Cards

+   Communications Interface Cards

+   Introl - AC Controller & Dual Channel AC Remote

+   Introl - Dual Channel AC Remote

+   Apple II Clocks

+   Centronics Printers

+   Heuristics Speechlab

+   Novation Modem IIA

+   D. C. Hayes Micromodem II w/ Interface

+   Hazeltine 1410 & 1500 Terminals

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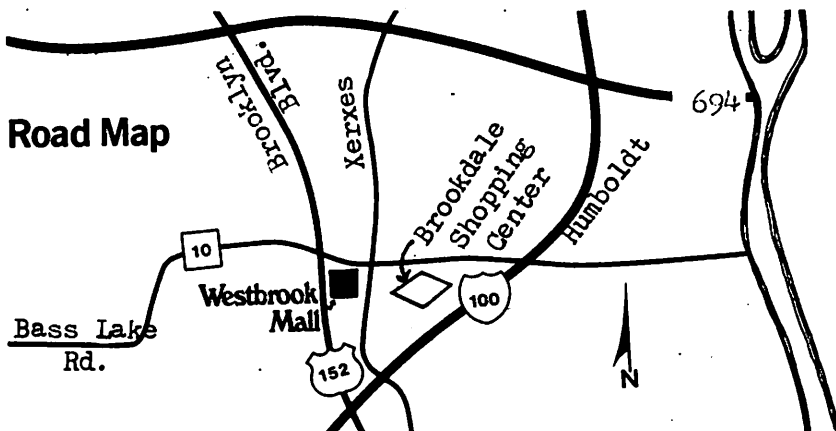
The following articles appeared in the
March 1979 Call A.P.P.L.E.   Thank
you Val Golding, Dan Paymar et al.

KEYBOARD MODIFICATIONS TO GET "[", "\", and "__" CHARACTERS

by Dan Paymar

Although the Apple II can display the "[" (left bracket), "\" (backslash), and "__" (underline) symbols, they cannot be generated from the keyboard. The MM5740 encoder chip used in the Apple II keyboard is capable of generating these standard ASCII codes, but the keyboard is incorrectly wired.

Users of the Centronics Microprinter will also appreciate this modification because it allows the 31 (decimal) code to be generated to set expanded characters (5 characters per inch). Without this modification, Control Shift M will set 20 characters per inch, and Control Shift N will set 10 characters per inch, but there is no way to set 5 characters per inch from the keyboard.

WARNING! Any mo.. :ions to an Apple computer may void the warranty. Although these modifications have been thoroughly tested on the author's Apple-II, neither the author nor the supplier of this Tech Note accept any responsibility for any damage to your equipment.

The modifications are quite simple, requiring only four printed circuit etch cuts and four jumper wires. This Tech Note is lengthy in order to give detailed checking procedures to prevent errors or damage. Perform the modifications carefully as described below:

1. Pull the power plug, and remove the computer's case with a Phillips screwdriver. There are three flat-head screws along each side of the bottom plate and four round-head screws at the front edge. Do not remove any other screws. Unplug the keyboard cable from the CPU board before lifting the case.

2. Remove the keyboard from the case by removing the hex nuts at each end of the keyboard assembly.

3. Have a piece of conductive foam ready. Carefully remove the MM5740 encoder chip (the 40-pin chip at location U5) from its socket, and stick it into the foam. This is to prevent damage to the encoder by static electricity. Aluminum foil may be used in place of conductive foam if the foam is not available.

4. Use a low-voltage ohmmeter (not over 1.5 volts) to check continuity as follows:

    U5-9 to 36R to 37R
    U5-10 to 23L to 24L
    U5-30 to 37L
    U5-31 to 23R to 36L
    U5-25 to 24R
    U5-26 to 35L
    U5-27 to 38R

U5 is the socket from which the MM5740 was removed. The other numbers refer to key switch numbers shown on the PC board, the "L" and "R" refer to the left-hand and right-hand connections, respectively, when viewed with these numbers upright. If any of these do not have continuity (zero ohms) then stop! There may be some keyboards with which this modification will not work.

5. Remove the key tops from the "O" (letter oh), "P", semi-colon, and left-arrow keys. Pull straight up to remove the keytops.

6. Use a sharp Xacto knife (or similar tool) to cut the PC etch on the top side of the board at the two points marked with an "x" in this diagram:
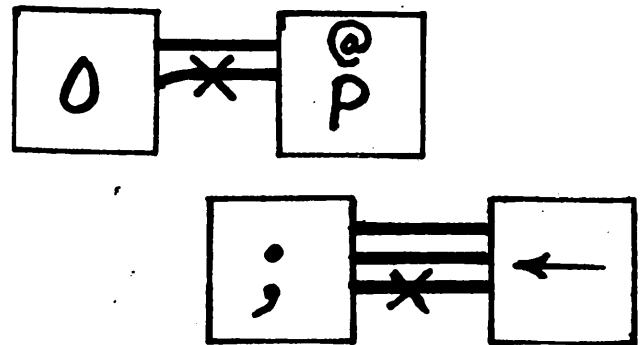
SCALE APPROX. 2:1

7. On the bottom side of the board, cut the PC etch between 23R and 36L. Also, cut the PC etch next to 37L.

8. Check that continuity no longer exists between the following pairs of points:

    23L and 24L
    23R and 26L
    23R and U5-31
    37L and U5-30

9. Use a fine tip grounded soldering iron to add the following jumper wires on the bottom side of the board:

    37R to 23L
    24R to 23R
    35L to 36L
    38R to 37L

10. Check all work carefully, then replace the four keytops, and put the MM5740 back in its socket. Plug in the keyboard, and turn on power. Try all functions and all keys, including the new characters (see below).

11. If everything is OK, remove power again, remount the keyboard in the case, and re-install the Apple in its case. Get all screws started before tightening any of them.

Your Apple-II keyboard can now generate the full 64-character ASCII set, including the three new printing characters as follows:

[	(left bracket)	Shift K
\	(backslash)	Shift L
__	(underscore)	Shift O

In addition to these, Control L will now generate a Form Feed code, Control K will generate a Vertical Tab code, and Control Shift O will generate the 31 code (decimal) which sets the 5 characters per inch expanded print mode in the Centronics Microprinter.

```
100 REM THIS ROUTINE MAY BE USED TO
    CLEAR GR SCREEN TO ANY COLOR

110 REM IT IS EQUIVALENT TO CALLING
    CLRTOP AT $F836

120 REM        BY MARK CROSS

200 REM  ROUTINE TO POKE MACHINE
    LANGUAGE INTO MEMORY

210 DIM A$(60):A$="300: A0 27 84 2D
    A9 00 20 28 F8 88 10 F8 60"

220 A$( LEN(A$)+1)=" N E88AG"
230 FOR I=1 TO LEN(A$): POKE 511
    +I, ASC(A$(I)): NEXT I
240 POKE 72,0: CALL -144: REM
```

```
300 REM ROUTINE TO CLEAR SCREEN TO
    EACH COLOR

310 GR : FOR C=0 TO 15
320 POKE 48,C+16*C: CALL 768
330 CALL -936: VTAB 23: PRINT " COLO
    R = ";C
335 NEXT C: GOTO 350
340 FOR I=1 TO 500: NEXT I: NEXT
    C
350 TEXT : END : REM

400 REM FOR VARIETY ADD LINE 335
        "335 NEXT C : GOTO 350"
```

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