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MINNEAPOLIS APPLE II USERS GROUP NEWSLETTER   OCTOBER   1978

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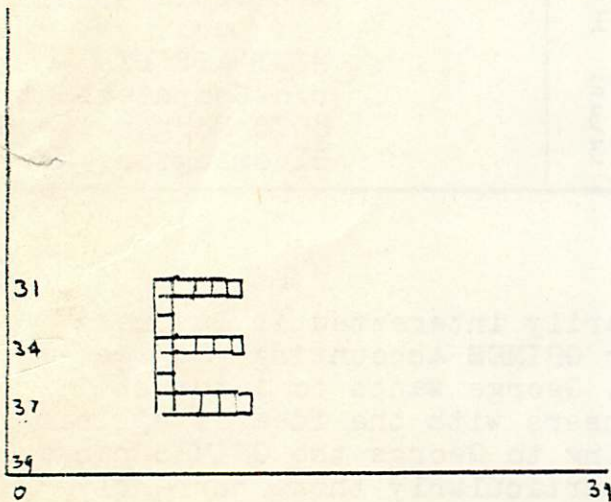|		
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USERS GROUP MEETING—October 11th 1978

1. Meeting was attended by 11 people.
2. George OTIS, an Apple II owner primarily interested in Business systems proposed that the North Star GRIMES Accounting package be modified to work on Apples Basic. George wants to interest several potential general Business users with the idea of splitting the cost of this conversion. According to George the GRIMES package is superiorto other canned systems particularly those currently available on the Ap ple. By the way George OTIS's telephone no is 835-4271 not as shown in Sept newsletter.
3. Computerland received 5 of the 20 backordered disks last month.
4. The new Apple Software bank was described.
5. It was pointed out that the poor attendance at this and the last meeting might be attributable to lack of knowledge of when the monthly meeting was being held. 2 suggestions were put forth to improve attendance
   - a) The newsletter will be mailed out to all Apple II owners in the twin cities area .   Mailing will take place during the week preceeeding the meeting.
   - b) A short topic will be chosen for each meeting in advance and some person will lead that topic. If possible the topic will involve actual use and demonstration on an Apple. People with ideas for topics and those willing to chair a topic should make themselves known to D.Buchler.
6. To finance the mailing of the newsletter and to help defray the printing costs, a disk of MINI'APP'LES contributed programs will be maintained along with the Apple Software Bank Disks. Computerland will levy a 1 dollar per program copy charge on these programs, that money being used to defray the postage and printing costs as described above. Note that Computerland charges $2 to copy Aplle sup plied Contributor programs. Both charges are very reasonale. Everyone please try to contribute a program. Contributed programs will be listed in the monthly directory the format of which has been previously published.
7. Rob Wentworth gave the first topic /demo about his HIRES graphic compatible character generator which provides Upper case, lower case, italic characters and user generator-able characters in the HIRES display area.
7. Keith Madonna received his Applesoft II ROM in Sept. His ROM supports the SHAPE subroutine . This is not the case with the earlier Aug delivered ROMS.

NEXT MEETING: WEDNESDAY OCT *Nov* 8th 7:30 pm COMPUTERLAND STORE

GRAPHIC DISPLAY OF LARGE LETTERS & NUMBERS

I have written a program in which letters and numbers are displayed in low resolution graphic mode in the graphic display area i.e. within the 40 X 40 matrix of colored squares. Each letter or number is comprised of a 5 X 7 matrix of colored squares , all of the same color.   Example:-

The following technique provides an easy way of generating the letters and numbers in upper case. Other type styles may easily be substituted.

Each character is represented by 5 bytes of memory, each byte representing the 7 components of a vertical slice through the character. The low order or rightmost bit of the byte is for the top component of the slice. This coded information may easily be entered by selecting MONITOR mode and entering the adress at which the table of characters starts followed by the corresponding 5 bytes for each character. Example for letter A:-

  *900:7E 09 09 09 7E

The values of a format for upper case letters and numbers are contained in the table at the end of this article.

The following BASIC subroutine will display one alpha character from the table assuming that the table starts at $900 = 2304$_{10}$

```
    KO=color of letter
    T =co-ordinate of top of character
    B =T + 6
    L = co-ordinate of left edge of character
    R = L + 4
    A$= charcater to be displayed
```

subroutine starts at 100

```
    100 P = (ASC(A$ )-ASC("A"))*5 + 2304:
        FOR X = L TO R :
        C = PEEK(P)
    120 FOR Y = T TO B
        COLOR = (C MOD 2 * 0) * KO :
        PLOT X,Y :
        C = C / 2 :
        NEXT Y
    130 P = P + 1 : NEXT X   :   RETURN
```

A similar technique may be used for digits substituting the following line for stmt 100

```
    100    P = N + 2304 + 26 * 5
```

where N is the digit O through 9 to be displayed.

Note that BASIC is not conducive to rapid execution. I am working on an assembly language version of the above.

Byte table for a Texas Instrument UPPER CASE character set to be used with character display subroutine described elsewhere in this newsletter.

HEX ADDR	CONTENTS	CHARACTER
900	7E 09 09 09 7E	A
905	41 7F 49 49 36	B
90A	3F 41 41 41 22	C
90F	41 7F 41 41 3E	D
914	7F 49 49 49 41	E
919	7F 09 09 09 01	F
91E	3E 41 49 49 39	G
923	7F 08 08 08 7F	H
928	00 41 7F 41 00	I
92D	20 40 40 40 3F	J
932	7F 08 14 22 41	K
937	7F 40 40 40 40	L
93C	7F 02 0C 02 7F	M
941	7F 02 04 08 7F	N
946	7F 41 41 41 7F	O
94B	7F 09 09 09 06	P
950	3E 41 51 21 5E	Q
955	7F 09 19 29 46	R
95A	22 45 49 51 22	S
95F	01 01 7F 01 01	T
964	3F 40 40 40 3F	U
969	07 18 60 18 07	V
96E	3F 40 38 40 3F	W
973	63 14 08 14 63	W
978	63 04 78 04 03	Y
97D	61 51 49 45 43	Z

HEX ADDR	CONTENTS	DIGIT
982	3E 41 41 41 3E	0
987	00 42 7F 40 00	1
98C	72 49 49 49 46	2
991	22 49 49 49 36	3
996	18 14 12 7F 10	4
99B	27 45 45 45 39	5
9A0	3C 4A 49 49 30	6
9A5	01 71 09 05 03	7
9AA	33 49 49 49 33	8
9AF	06 49 49 29 1E	9

This writer takes no reponsibility for the accuracy of this table. However the characters should be recognizable even if there are some errors and they are easily corrected !

New names for the Apple Users List

Larry Hille   571-5736

Chuck Buckholz   729-8653

PREVIOUS EDITIONS OF NEWS LETTER:
If you have'nt seen the August or September issues of the MINI'APP'LES newsletter, be advised that there were such issues. AUGUST edition contained: User Names; Minutes; High Resolution Color- Supplement to Apple 11 Manual; HIRES Display - more details;HIRES Operating Subroutines- more details. SEPTEMBER edition contained: User names ; INVERSE & FLASH in Integer Basic.

OTHER APPLE USER GROUPS:
To 4 Apple User Groups at both ends of USA, selected at random, were sent copies of Augs Newsletter and a letter introducing ourselves and stating that we had some users who might be interested in supporting the development of some good quality general purpose Business packages.

LOCAL CONTRIBUTED PROGRAMS:
Per item 6 in minutes overleaf, 2 programs have been added to the Bank of local contributed programs-

1. BIKE--16K Integer Basic   You can be EVIL KNEIVEL for a few moments and ride up a ramp and over or into a row of Buses. Use HIRES graphics.

2. CREATE SHAPE
    -- 16K Integer Basic   This is the Utility that appeared in July Creative Computing mag. Allows one to create HIRES SHAPES using the APPLE keyboard. Shapes can be saved on tape and then reloaded for subsequent display with Apple SHAPE subroutine

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Nov

▶ <u>NEXT</u> <u>MEETING</u> <u>WEDS</u> ~~OCTOBER~~ 8th, 7.30 PM   COMPUTERLAND STORE   ◀ ◀

▶ CHUCK THIESFELD HAS KINDLY VOLUNTEERED TO LEAD A TOPIC DISCUSSION ON   ◀ ◀

▶   COMPUTER COMMUNICATIONS   ◀ ◀

Topic will include information on MODEMS,   COMMUNICATION INTERFACES,
SOFTWARE REQUIREMENTS, REMOTE PERIPHERAL COMMUNICATION, etc

WANTED   WANTED   WANTED   WANTED   WANTED   WANTED   WANTED

Suggestions and Volunteers for other TOPICS. List to date of topics(not
volunteers) includes:-
       APPLE II IDEOSYNCHROSIES
       BUSINESS SYSTEMS   } Topics should be backed up
       VOICE SYNTHESIS   where practical with actual
       HIRES GRAPHICS and HOW TO IMPLEMENT demonstrations.

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