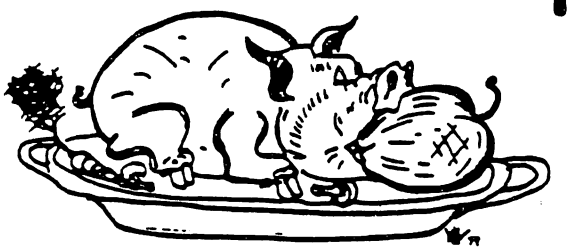

H.A.A.U.G.

HOUSTON AREA APPLE USERS GROUP

THE APPLE BARREL

VOLUME 5 NO. 5 JULY 1982

PRESIDENT, MIKE KRAMER VICE PRES., BRIAN WHALEY

EDITOR, MIKE KRAMER

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Houston Area Apple Users Group
APPLE BARREL
2218 Running Springs
Kingwood, TX 77339

CLUB NOTES

The HOUSTON AREA APPLE USERS GROUP is an Apple user club, not affiliated with Apple, Inc., or any retail computer store. HAAUG is a member of the International Apple Core and supports its publications and purposes. General membership meetings are held on the second Thursday of each month in the rear chapel of Memorial Lutheran Church, 5800 Westheimer, between Chimney Rock and Jungman Library, beginning at 6:30 P.M. An additional general meeting is held at 2:00 P.M. the last Saturday of each month at the University of Texas School of Public Health in the Medical Center at 6905 Bertner at Holcomb. This meeting features tutorials, problem-solving sessions, and access to the HAAUG software library. The meeting is held in the main floor meeting room to the left of the entrance. Bring your Apples!!

---==*==---

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---===*===---

APPLE HOTLINE

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The APPLE HOTLINE has been established to provide an easy means to learn of meeting topics, news, etc. It can also be used to obtain answers to puzzling Apple - related questions. If you get a recording, leave your name, date, and time. You should get a return call within 24 hours.

---===*===---

MEMBERSHIP INFORMATION

Dues are $20 per 12-month period for regular memberships, $10 for students through high school where no adult member of the family is an Apple user. Please make checks payable to Houston Area Apple Users Group and mail to Lee Gilbreath, 3609 Glenmeadow, Rosenberg, TX 77471.

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SPECIAL INTEREST GROUPS

Members who share interests are encouraged to join or form Special Interest Groups to more fully explore their fields. These groups meet separately from the regular meetings at times convenient for the members. If you would like to become involved in a special interest group, either call the HOTLINE. Lists of members with specific interests can be generated on request from the HAAUG MEMBERSHIP SURVEY data base.

SIG CHAIRMEN

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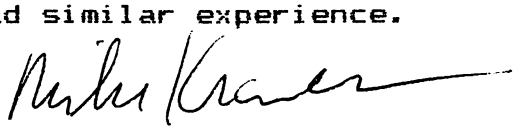
THOUGHTS FROM THE PRES

Many nice things are happening in HAAUG. The membership is growing at a steady pace, the Apple Barrel is steadily improving thanks to the many good articles and the support of a growing number of advertisers, a beginners' BASIC course is in full swing, special interest group activity is picking up, and more and more volunteers are stepping forward to help satisfy the growing needs of the group. In spite of the progress, the club has a long way to go before it becomes a great one. The steering committee recognizes this and will attempt to develop a plan during the next few months. To assist the committee with this task the membership is requested to submit in writing what direction they think HAAUG should take to better satisfy the needs of the organization. Where appropriate, the respondant should indicate their willingness to help in implementing what he or she has suggested. Suggestions should be sent to the Apple Barrel.

At the risk of sounding negative, I find it necessary to discuss a few things that are wrong in HAAUG. The first is the flagrant copying of copyrighted software that is going on at the Saturday meeting. Whether the program being used is COPYA or LOCKSMITH, it is against the rules of our organization to copy any but public domain software at the meetings. This is the rule in the main meeting room, in the halls, in the library, or wherever. When confronted with this rule, a young man at the last Saturday session felt it sufficient to turn off the monitor on his Apple. When pressed, he and his group found a room in the library to use. When the group saw they had been discovered, they moved to an upper floor, which brings to mind the fact that HAAUG has permission to use only the main meeting room and may not use the upper floors. The UT School of Public Health lets HAAUG use the main meeting room at no cost, so we should all observe the rules.

My next gripe concerns the dishonesty of certain individuals who attend our meetings. I don't know if I'm the only one who gets ripped off at the meetings, but I'm getting tired of losing things to people with sticky fingers. My first loss was about a year ago when a person wanted a copy of a disk I had and apparently took it after being told he couldn't copy it. The next loss was a pair of expensive wire strippers taken from the joystick building session which I coordinated. The strippers were bought by me with my money for use by the group. I never got to use them. The most recent loss was at the last Saturday meeting. My wife and I brought a new HP 7470 plotter belonging to my employrer and several new programs belonging to her employer, including PFS:Graph, Choplifter, and Master Type, to demonstrate to the group. While she was showing someone how to use the plotter, someone else grabbed Master Type out of the disk drive. Fortunately she gets an employees' discount, so we only lost $25 rather than the $40 retail price of the disk. Each time I something is stolen from me, I say I won't bring my stuff to the meetings any more. Maybe that was the last time. I'd like to know if anyone else has had similar experience.



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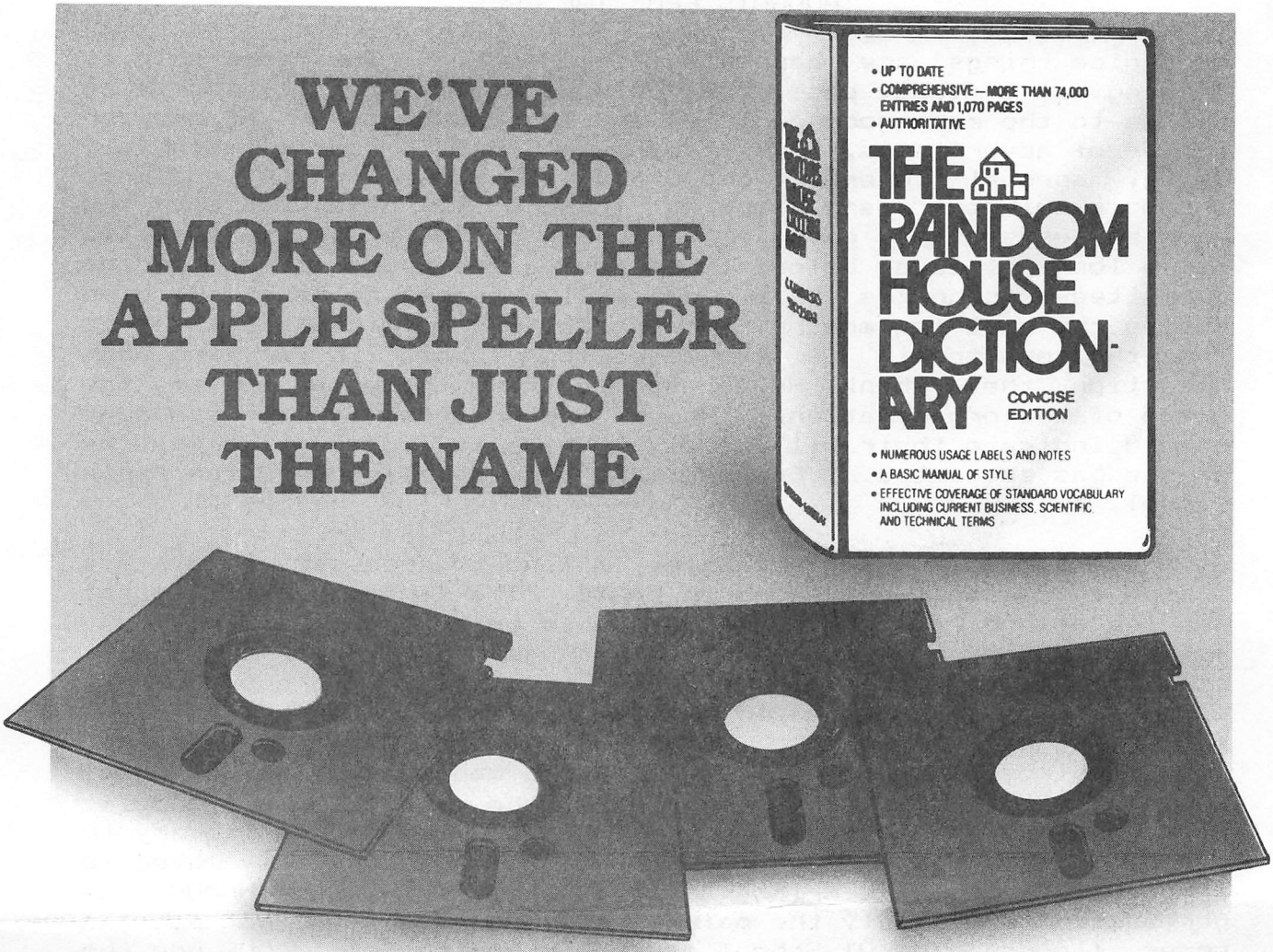

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SUPER LABEL PRINTER

BY

CLARK JOHNSON

A new utility program is being made available for the club library which will help you tidy up those messy labels you've been putting on your disks. The program is also useful for printing mailing labels, return address labels labels, etc. The program "SUPER LABEL PRINTER" was written by myself to cover all the possible options that I could dream up for a label. While the printer control codes are set up for the Epson printers (with or without graphics), it should be fairly easy to change the control codes to suit your printer.

Mike Kramer's original label printer, "EPSON LABEL PRINTER", is already in the library. His program is a good one and I did use a small part of his logic in my program. However, "SUPER LABEL PRINTER" is a substantial improvement over the "EPSON LABEL PRINTER".

The main advantage of SLP is in its set-up of default labeling parameters and in its ease of changing these default conditions. Also, options are available to assist in justification, margins, repeat copies, and more. When you run SLP, the screen appears as shown in Figure I below. These are the default conditions, set up by a DATA statement (Line #xxx) in the program. If you desire different default conditions, it would be very easy to change the DATA statement.

```
                SUPER LABEL PRINTER
=========================================
= #CH/LIN 40    D W 1ST   Y  JUS LCR   C =
= #LIN/LB  8    D W OTH   Ø  UNL 1ST   Y =
= #COPIES  1    D W ALL   N  NBR LAB   N =
= #PR LIN  4    CHG OR RET   EMP ALL   Y =
=========================================
    ENTER LABELS OR 'ESC', ^R, ^N#
1^
```

FIGURE I

Figure I will look somewhat different on your screen because of the use of 'INVERSE' to highlight the default values and other areas. The following table outlines the definitions of the elements of Figure I.

#CH/LIN - The maximum number of regular size characters that will fit on your label.

A 4" label will fit 40 characters. 5" labels (50 characters) are the maximum size that will fit on your disk and may be necessary if you have a great deal of info to put on a label. I normally use 4" labels for disk labeling and 3" labels for address labels. My practice is to put a disk information label at the top and a personal name and address label down the side (for security reasons).

#LIN/LB - The maximum number of horizontal lines that will fit on a label.

The 4" and 5" labels will usually fit 8 lines. The 3" address label that I use will fit 5 lines. One additional line space is used to separate each blank label, but do not count this line in #LIN/LB.

#COPIES - The desired number of copies of a specific label.

It is usually best to leave this at a value of '1' until the label is exactly as you want. Then change this value to print out as many labels as you wish.

#PR LIN - The number of lines you will actually print on a label.

D W 1ST - Will the first label line be double-width?

A 'Y' will cause the first label line to be printed in the double width mode, for greater emphasis. (On the Epson, the control code for this mode is CHR$(14)). An 'N' will put regular width on the first line, unless overridden by D W ALL.

D W OTH - Line number of another line to be double-width.

This parameter requires either a zero (0) or a line number that you wish to be double width. For example, by using 'Y' for D W 1ST and '2' for D W OTH, both the first and second lines of the label will be double width.

D W ALL - Should all label lines be double-width?

A 'Y' will cause all lines to be in the double width mode, and will override any commands given in D W 1ST or D W OTH.

Remember that a double width line will fit only

1/2 the number of characters on that line (in this example, only 20 characters).

CHG OR RTN - This is the entry and exit point for changing the labeling default conditions. More explanation follows later.

JUS LCR - Justify label left, center, or right?

This parameter sets the justification mode for the labels. 'L' left justifies all lines, 'C' centers each line separately, and 'R' right justifies all lines.

You may add a number (from 1 to 9) in front of the letter to provide a margin offset. For example, a '5L' will left justify all lines , giving a margin of 5. A '6C' will center each line but only after allowing 6 "unused spaces" to the left of the label. A '4R' will right justify with a right margin of 4.

NBR LBL - Assign a label number to the disk?

A 'Y' indicates that you wish to assign a disk number on the label. (A disk number could have been entered on any of the label lines. However, using NBR LBL will cause the label number to be printed in the upper right hand corner of the label.) The number will be printed on Line 1 of the label, right-justified with a margin offset of 3.

Note: Do NOT count the line used by the label number as part of the count used by #PR LIN. This will be counted separately by the program.

UNL 1ST - Underline the first line on the label?

A 'Y' will cause the first label to be underlined with the hyphen character. The hyphen was chosen because it will give a better separation between the label name (the first line) and the rest of the lines. The use of this option also takes a line on the label, but as before, do not include it as part of the #PR LIN count.

If you input 'Y' only, the underline will start 1 space from the left side of the label and end 1 space from the right side. But entering, for example, '5Y', will cause a margin offset of 5 on both sides. Entering '1Y' (a special case) will cause the underline to be printed exactly under the characters in the first line.

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Note on line count: You cannot specify more printed lines (#PR LIN) than you have available lines (#LIN/LB). Also, you must make allowance for UNL 1ST and NBR LBL. For example, if #LIN/LB is 8, and both UNL 1ST and NBR LBL are specified for use, then the maximum printed line count (#PR LIN) will be 6. If more than 6 is specified, an error message will be given, to enable the user to correct the situation.

EMP ALL - Print the label in the emphasized mode?

A 'Y' will cause all parts of the label to be printed in the emphasized mode for better quality of print. This will probably be the usual mode of operation. However, if you were printing 500 return address labels, you might wish to cancel out EMP ALL to speed up the printing.

The line below the default parameter section is the prompt line. It will contain information on what action(s) the user may take next. It will also give error messages. In Figure I, the prompt line reads 'ENTER LABELS OR 'ESC', ~R, ~N#'. This is the prompt given when the program is first run. If you are satisfied with the default values shown, then simply begin entering the information for the labels. The '1~' indicates the program is ready for Line 1 info. Simply enter that information, press Return, and continue on down for Line 2, etc.

When the designated number of lines has been entered, the prompt line will read 'SPC TO PRINT -- RTN TO CHANGE'. This indicates that if all the info that you entered is correct, you would hit the space bar and the label will be printed. However, if you wish to change one or more lines, press Return to recycle back through the line entry.

The preceding instructions assumed that all the default conditions would be used. Usually, however, you will want to change one or more default conditions. Therefore, back at the point of the original prompt line, hit the ESC key after the '1~'. You will now enter the "change parameter" mode. The screen will appear as in Figure II.

```
                SUPER LABEL PRINTER
=========================================
= #CH/LIN 40   D W 1ST  Y  JUS LCR  C =
= #LIN/LB  8   D W OTH  0  UNL 1ST  Y =
= #COPIES  1   D W ALL  N  NBR LAB  N =
= #PR LIN  4   CHG OR RET  EMP ALL  Y =
=========================================
  I,J,K,M MOVE CURSOR  <RET> ACCEPTS
```

FIGURE II

Notice the prompt line now reads 'I,J,K,M TO MOVE CURSOR - RTN TO ACCEPT'. Also, notice the arrows around the line 'CHG OR RTN'. Pressing Return at this point would put you back into the original mode of entering label info. But to change a default parameter, use the standard Apple II cursor keys (I,J,K,M) to move the arrows to the data item you wish changed.

When you reach the item desired by using the cursor keys, press Return. You may now enter the new value. If it is a one-digit entry (example - Y or N), enter that value and press Return. If it is a two-digit entry (example - 5L), pressing Return will not be necessary. In either case, the arrows will come back to the 'CHG OR RTN' point. If you wish to change more items, use the cursor movement keys as before. If all values are OK, press Return to get back to the "label entry" mode.

'ESC' can be entered on any line number, not just Line 1. For example, if you had entered info after the '1~' prompt, and then decided that you wanted to change a parameter value, enter the 'ESC' on Line 2 or 3, etc.

Now back to the original prompt line - (ENTER LABELS OR 'ESC', ~R, ~N#). We've discussed the use of 'ESC'. ~R (the ~ stands for CONTROL) is a method of repeating previous labels. Actually there are three ways of repeating labels. One method is to use the #COPIES option. However, there will be cases when you don't really know how many labels you need until you actually see the results of a label. For example, when you first set up the printer for a label, the first printed label may not have been aligned properly. You would then correct the situation and press ~R for a repeat of the same label.

Another use of ~R would be to repeat all following parts of a label. If only the first line of a label would be changed from the previous label, enter the new line after the '1~' prompt and then press ~R after the '2~' prompt. The rest of the label would be identical to the previous label.

At this point, it would be best to discuss the third method of repeating previous labels. This is done by simply pressing Return after each line prompt number. This method is most useful for altering a label when one or more lines should be changed. As an example, let's say that you had entered a six-line label and had received the 'SPC TO PRINT -- RTN TO CHANGE' prompt but then noticed that line 3 was incorrect. An easy method of altering would be to press Return to get back to the '1~' prompt, press Return twice to duplicate the previous first two lines, enter the new info on Line 3, and then press ~R to repeat the rest of the label. Sounds complicated but very easy when you've done it a few times.

As an added aid, each time you press only the Return key after a line number prompt, the previously entered info for that line will be

displayed. Likewise, pressing ^R will display all subsequent line info of the previous label.

If you actually want to include a blank line on the label, just hit the space bar once and then press Return.

The discussion has digressed somewhat from the original explanation of the ^R function, but the timing was proper for a description of the entire mechanism of repeating all or parts of a previous label.

The final item on the prompt line is the ^N# option. This is one of the most important features of SUPER LABEL PRINTER because the number of printed lines on a label is the item most often changed. ^N# is a shortcut way of changing #PR LIN. Instead of using 'ESC' to get up to the default changing mode, simply enter ^N# after any line number prompt and the count of #PR LIN will automatically be changed. The '#' is actually a number, from 1 to 9. Example - you're on line 2 and then realized that you want 5 lines instead of the 4 shown by #PR LIN. Simply enter ^N5 (press the Control key and the 'N' key simultaneously, then press the '5' key - don't hit Return). #PR LIN will now show '5' to allow 5 lines. The cursor still rests on Line 2 for label input info.

You can use this option to reduce the number of lines. Assume you're on Line 4 and #PR LIN is set at 6. But then you realize that only 4 lines are needed. Simply change the count to 4 and then enter the label info for Line 4.

The label number option - NBR LBL - was previously discussed. More explanation of its use is beneficial. For example, hit the 'ESC' key after any line prompt to jump to the "change parameter" mode. Go to NBR LBL and change the parameter to 'Y'. When you hit Return to get back to the label entry mode, you will notice that the first prompt is not a line number, but instead reads 'LBL NBR^'. Input any number from 1 to 999 here and press Return. The '1^' prompt now shows on the next screen line. The 'ESC', '^R', or '^N#' options will all still work. Also, all of the options that are used after the line number prompts will work after the 'LBL NBR' prompt. Experiment with these options to get the hang of it. You will see that their use is very logical and very easy to to learn.

Horizontal formatting of the labels has been discussed in the 'JUS LCR' section. The program also has a built-in feature to vertically format the lines on the labels. This feature purposely does not center the label exactly, because usually the label looks better if the lines are printed closer to the top than at exact center. But the label doesn't look good if the lines are all printed starting at the very top. The compromise is to have a system which places more 'skips' at the bottom than at the top of the label. For example, on a 8-line label with 3 printed lines, the system used will skip 2 lines , print the 3 label lines, and then skip 3 more lines. If you want to change the method used, it is located at Lines 2100 to 2140.

Another aid is placed in the program to line up the labels for the first time. You first line up the labels as best you can with the the eye. Then type TEST after the '1^' prompt. The program will

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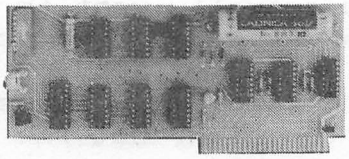

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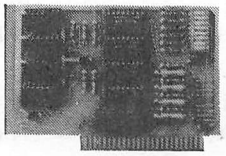

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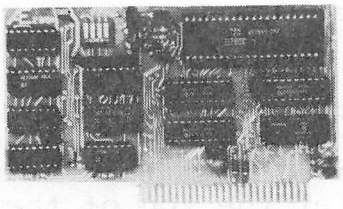

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automatically print a pattern on the label that will cover both vertical and horizontal alignment. Re-align if necessary and TEST again if you wish.

Some parts of the program logic itself are interesting and warrant more discussion. For example, the program uses an "input anything" routine (lines 4120-4180) to enable the user to input commas, quotes, colons, or other "forbidden" characters in the labels. These characters are not accepted by the normal 'INPUT' statement. Also, an additional method is used in the input routine used in this program. That is -- the first character of each line is inputted using the 'GET' statement. The remaining characters on each line are inputted using the 'input anything' routine. This system is used to allow quick entry of the 'ESC', ^R, and ^N functions. You will notice that it is not necessary to press Return when using these functions. The Get statement acts on these options immediately. There is, however, one drawback to this system. You cannot backspace over the first character on each line to change it. You can backspace over any other following characters. If you make a mistake on the first character, just press Return, finish the rest of the label, and come back to that line for editing.

Another interesting feature of the program logic is the method of moving the cursor arrows by using the I,J,K, and M keys. The section of the program that handles this is included in Lines 3100 through 3360. There are two major parts of this approach. First, the actual movement of the arrows is done by "reading the keyboard" (line 3080), checking to see which direction to go (lines 3110-3140), and then actually printing the arrows around that parameter. The second major function is to remember which parameter you just left in order to "blank out" the arrows around it. Lines 3150-3190 accomplish this task.

There certainly are other methods to accomplish the cursor movements (maybe some more exotic), but I found this approach fairly easy and logical.

In summary, I hope you find this program useful. I am in the process of conceptualizing SUPER LABEL PRINTER II which will have more options (compressed printing mode, label borders, etc.). Also, I plan to include as part of SLP II (or an auxilliary program) a system to automatically read the catalog of a disk, format, and then print out a label giving the disk's contents. But that will take several months, so use SLP I for now.

---------*---------

SUPER LABEL PRINTER LISTING

```
100  REM    INITIALIZE THE VALUES AND SET UP THE PARAMETER BLOCK

110  DIM HD$(12),DF$(12),LINE$(100):D$ =  CHR$ (4)
120  FOR I = 1 TO 12: READ HD$(I): NEXT
130  FOR I = 1 TO 12: READ DF$(I): NEXT
140  FOR I = 2 TO 12:DF$(I) = " " + DF$(I): NEXT
150 UL = 0:NL = 0:ER = 0:DW = 0:DA = 0:
160  GOSUB 4000: GOSUB 4130: GOSUB 330
170  TEXT : HOME : INVERSE : PRINT "           SUPER LABEL PRINTER
     ";: NORMAL
180  FOR I = 1 TO 40: PRINT "=";: NEXT
190  HTAB 3: PRINT HD$(1) SPC( 6)HD$(2) SPC( 6)HD$(3)
200  HTAB 3: PRINT HD$(4) SPC( 6)HD$(5) SPC( 6)HD$(6)
210  HTAB 3: PRINT HD$(7) SPC( 6)HD$(8) SPC( 6)HD$(9)
220  HTAB 3: PRINT HD$(10) SPC( 6)HD$(11) SPC( 3)HD$(12)
230  FOR I = 1 TO 40: PRINT "=";: NEXT
240  INVERSE
250  VTAB 3: HTAB 11: PRINT DF$(1);: HTAB 24: PRINT DF$(2);: HTAB 37: PRINT
     DF$(3)
260  HTAB 11: PRINT DF$(4);: HTAB 24: PRINT DF$(5);: HTAB 37: PRINT DF$(6)

270  HTAB 11: PRINT DF$(7);: HTAB 24: PRINT DF$(8);: HTAB 37: PRINT DF$(9)

280  HTAB 11: PRINT DF$(10);: HTAB 37: PRINT DF$(12)
290  NORMAL : VTAB 3: FOR I = 1 TO 4: PRINT "=";: HTAB 40: PRINT "=";: NEXT

300  POKE 34,7
310  GOTO 1010: REM      GO TO BODY OF PROGRAN
320  REM
 INTERPRET THE INPUT PARAMETERS

330 MG =  VAL ( LEFT$ (DF$(3),1)):JUS$ =  RIGHT$ (DF$(3),1)
340 UT$ =  LEFT$ (DF$(6),1):UL$ =  RIGHT$ (DF$(6),1)
350 DW$ =  RIGHT$ (DF$(2),1):DA$ =  RIGHT$ (DF$(8),1):DO =  VAL ( RIGHT$ (
    DF$(5),2))
360  IF DW$ = "Y" THEN DW = 1
370  IF UL$ = "Y" THEN UL = 1:
380  IF DA$ = "Y" THEN DA = 1
390  IF  RIGHT$ (DF$(9),1) = "Y" THEN NL = 1
400 CL =  VAL (DF$(1)):LL =  VAL (DF$(4)):NCOP =  VAL (DF$(7)):PL =  VAL (
    DF$(10))
410  RETURN
420  GOTO 1020

430  REM
   SOME MISCELLEANEOUS SUBROUTINES
440  FOR L = I TO PL: PRINT L"^";LINE$(L): PRINT : NEXT : RETURN
450 TL = PL + UL + NL: IF TL > LL THEN  INVERSE : HTAB 1: VTAB 8: CALL  -
    868: HTAB 6: PRINT "ERROR -- TOO MANY PRINTED LINES";: PRINT  CHR$ (7
    ) CHR$ (7) CHR$ (7);: FOR K = 1 TO 1500: NEXT : HTAB 1: GOSUB 480: NORMAL

460  RETURN
470  INVERSE : HTAB 1: VTAB 8: CALL  - 868: HTAB 3: PRINT "ERROR -- TOO MA
    NY CHARACTERS FOR LINE";: PRINT "";: FOR K = 1 TO 1500: NEXT : GOSUB
    480: NORMAL : RETURN
480  PRINT : CALL  - 998: HTAB 1: CALL  - 868: VTAB 8: HTAB 6: INVERSE : PRINT
    "ENTER LABELS OR 'ESC', ^R, ^N#": NORMAL : RETURN
1000  REM

          ** PROGRAM MAIN BODY **


1010  GOSUB 480
1020 LN = PL
1030  IF  NOT NL THEN 1130
1040  REM
     GET LABEL NUMBER OR CHECK FOR EXIT CONDITIONS

1050  HTAB 1: VTAB 9: CALL  - 868: PRINT "LBL NBR^";: GET L1$: IF L1$ =  CHR$
    (13) THEN  HTAB 9:L$ = XL$: PRINT L$: GOTO 1130
1060  IF L1$ =  CHR$ (27) THEN  HOME : GOTO 3010
1070  IF L1$ =  CHR$ (18) THEN  HTAB 1:L$ = XL$: PRINT "LBL NBR^";L$: PRINT
    :A$ =  CHR$ (18):I = 1: GOSUB 440: GOTO 1370
1080  IF L1$ =  CHR$ (14) THEN  GET DF$(10): PRINT DF$(10);:DF$(10) = " " +
    DF$(10): GOSUB 400: VTAB 6: INVERSE : HTAB 11: PRINT DF$(10);: NORMAL

1090  IF L1$ =  CHR$ (14) THEN  GOSUB 450: GOTO 1050
1100  PRINT L1$;: INPUT "";L$:L$ = L1$ + L$
1110 XL$ = L$
1120  IF  VAL (L$) < 1 OR  VAL (L$) > 999 THEN  PRINT  CHR$ (7);: CALL  -
    998: HTAB 1: CALL  - 868: GOTO 1030
1130 BG = 1
1140 LN = PL
1150  REM
     GET LINE LABELS OR CHECK FOR EXIT CONDITIONS

1160  FOR I = BG TO PL
1170  HTAB 1: VTAB (9 + (2 * NL) + (2 * (I - 1))): PRINT I"^";
```

```
1180  GET A1$: IF A1$ =  CHR$ (27) THEN  HOME : GOTO 3010
1190  IF A1$ =  CHR$ (18) THEN  HTAB 1: GOSUB 440:I = LN: NEXT : GOTO 1370

1200  IF A1$ =  CHR$ (21) THEN A1$ = "": REM    A RIGHT ARROW WILL NOT BE
    COUNTED
1210  IF A1$ <  > CHR$ (13) THEN  PRINT A1$;
1220  IF A1$ =  CHR$ (13) AND  LEN (LINE$(I)) > 0 THEN  HTAB 3: PRINT LINE
    $(I): PRINT : GOTO 1330
1230  IF A1$ =  CHR$ (14) THEN  GET DF$(10): PRINT DF$(10);:DF$(10) = " " +
    DF$(10): GOSUB 400: VTAB 6: INVERSE : HTAB 11: PRINT DF$(10);: NORMAL

1240  GOSUB 450
1250  IF A1$ =  CHR$ (14) THEN  HTAB 1: VTAB (9 + (2 * NL) + (2 * (I - 1))
    ): CALL  - 868: IF I > PL THEN  CALL  - 998: CALL  - 868:I = LN: NEXT
    : GOTO 1370
1260  IF A1$ =  CHR$ (14) THEN  GOTO 1170
1270  CALL 768,A$:A$ = A1$ + A$: REM  CALL 768 IS INPUT ANYTHING ROUTINE
1280  IF A$ = "TEST" THEN I = LN: NEXT : GOTO 5010
1290  VTAB (10 + (2 * NL) + (2 * (I - 1)))
1300  IF (((I = 1 AND DW = 1) OR (DA = 1) OR (I = DO)) AND  LEN (A$) >  INT
    ((CL - MG) / 2)) THEN  GOSUB 470: GOTO 1170
1310  IF  LEN (A$) > (CL - MG) THEN  GOSUB 470: GOTO 1170
1320  IF  LEN (A$) > 0 THEN LINE$(I) = A$
1330 TI = I
1340  IF I >  = PL THEN I = LN
1350  NEXT
1360  IF TI < PL THEN BG = I: GOTO 1140
1370  VTAB 8: HTAB 6: INVERSE : PRINT  CHR$ (7)"'SPC' TO PRINT, 'RTN' TO C
    HANGE";: NORMAL : PRINT
1380 M =  PEEK ( - 16384): IF M > 127 THEN AS = M - 128: POKE  - 16368,0: GOTO
    1400
1390  GOTO 1380
1400  IF AS <  > 13 THEN 2020
1410  HOME : GOTO 1010
2000  REM

          BEGIN LABEL PRINTING


2020  GOSUB 4070
2040  PRINT  CHR$ (27)"E";
2060  FOR N = 1 TO NCOP
2080  IF NL THEN  HTAB (CL - ( LEN (L$) - 1)): PRINT L$
2100 SK =  INT (.5 * (LL + 1 - PL - NL - UL)) - 1: REM  SKIP SOME LINES TO
    'CENTER' THE LABEL
2120  IF SK > 0 THEN  FOR KK = 1 TO SK: PRINT : NEXT : GOTO 2160
2140 SK = 0
2160  FOR I = 1 TO PL
2180  IF JUS$ = "L" AND MG = 0 THEN MS = 1
2200 M = 1: IF ((I = 1 AND DW = 1) OR (DA = 1) OR (I = DO)) THEN M = 2
2220  IF UL AND I = 2 THEN  HTAB 3: FOR JJ = 1 TO (CL - 3): PRINT "=";: NEXT
    JJ: PRINT
2240  IF JUS$ = "C" THEN  POKE 36, INT (.5 * (CL - M *  LEN (LINE$(I))))
2260  IF JUS$ = "L" THEN  POKE 36,MG
2280  IF JUS$ = "R" THEN  POKE 36,(CL - MG - M *  LEN (LINE$(I)))
2300  IF I = 1 AND  NOT NL THEN  PRINT " ";
2320  IF M = 2 THEN  PRINT  CHR$ (14);
2340  PRINT LINE$(I)
2360  NEXT I
2380  FOR I = 1 TO LL - PL - UL - NL - SK + 1
2400  PRINT
2420  NEXT
2440  NEXT
2460  GOSUB 4100: HOME : GOTO 1010
3000  REM

ENTER THE DEFAULT BLOCK TO CHANGE THE PARAMETERS

3010 V = 6:H = 24: VTAB V: HTAB (H - 9): PRINT ">";: HTAB (H + 2): PRINT "
    <";: HTAB H
3020  PRINT : GOSUB 3390
3030  GOSUB 330
3040  IF ER = 1 THEN 3070
3050 TL = PL + UL + NL: IF TL > LL THEN  INVERSE : HTAB 1: VTAB 8: CALL  -
    868: HTAB 6: PRINT "ERROR -- TOO MANY PRINTED LINES";: PRINT "";
3060  IF TL > LL THEN  FOR I = 1 TO 1500: NEXT : HTAB 1: CALL  - 868: NORMAL
    :ER = 1: GOSUB 3390: GOTO 3010
3070 VX = V:HX = H
3080 M =  PEEK ( - 16384): IF M > 127 THEN AS = (M - 128): POKE  - 16368,0
    : GOTO 3110
3090  REM
      MOVE CURSOR ARROWS WITH I,J,K,M

3100  GOTO 3070
3110  IF AS = 73 THEN 3220
3120  IF AS = 77 THEN 3240
3130  IF AS = 74 THEN 3260
3140  IF AS = 75 THEN 3280
```

```
3150 NR = (3 * V) - 8 + (H - 11) / 13: IF NR = 11 AND AS = 13 THEN  HTAB 1
     5: PRINT " ";: HTAB 26: PRINT " ";: GOTO 3370
3160  IF AS = 13 THEN  HTAB H: PRINT "  ";: HTAB H: GET DF$(NR): PRINT DF$
     (NR);: GET XX$
3170  IF AS > < 13 THEN 3070
3180  IF  ASC (XX$) > < 13 THEN  PRINT XX$;:DF$(NR) = DF$(NR) + XX$: INVERSE
     : HTAB H: PRINT DF$(NR);: NORMAL : HTAB (H - 9): PRINT " ";: HTAB (H +
     2): PRINT " ";: GOTO 3010
3190 DF$(NR) = " " + DF$(NR): INVERSE : HTAB H: PRINT DF$(NR);: NORMAL : HTAB
     (H - 9): PRINT " ";: HTAB (H + 2): PRINT " ";: GOTO 3010
3200  GOTO 3070
3210  REM
       CURSOR MOVEMENT CONTROL

3220 VX = V:V = V - 1: IF V > 2 THEN  GOSUB 3300: GOTO 3070
3230 V = V + 1: PRINT  CHR$ (7);: GOTO 3070
3240 VX = V:V = V + 1: IF V < 7 THEN  GOSUB 3300: GOTO 3070
3250 V = V - 1: PRINT  CHR$ (7);: GOTO 3070
3260 HX = H:H = H - 13: IF H > 7 THEN  GOSUB 3300: GOTO 3070
3270 H = H + 13: PRINT  CHR$ (7);: GOTO 3070
3280 HX = H:H = H + 13: IF H < 40 THEN  GOSUB 3300: GOTO 3070
3290 H = H - 13: PRINT  CHR$ (7);: GOTO 3070
3300 NR = (3 * V) - 8 + (H - 11) / 13:NX = (3 * VX) - 8 + (HX - 11) / 13
3310  VTAB VX: HTAB HX: IF NX > < 11 THEN  INVERSE : PRINT DF$(NX);: NORMAL

3320  HTAB (HX - 9): PRINT " ";: HTAB (HX + 2): PRINT " ";
3330  VTAB V: HTAB H: IF NR <  > 11 THEN  INVERSE : PRINT DF$(NR);: NORMAL

3340  HTAB (H - 9): PRINT ">";: HTAB (H + 2): PRINT "<";
3350 ER = 0:UL = 0:NL = 0:DW = 0:DA = 0
3360  RETURN
3370  REM
3380  HOME : GOTO 1010
3390  INVERSE : VTAB 8: HTAB 4: CALL  - 868: PRINT "I,J,K,M MOVE CURSOR  <
     RET> ACCEPTS": NORMAL : VTAB 6: HTAB 24
3400  RETURN
3410  DATA         #CH/LIN,D W 1ST,JUS LCR,#LIN/LB, D W OTH,UNL 1ST,#COPIE
     S, D W ALL,NBR LAB,#PR LIN,CHG OR RET, EMP ALL: REM  PARAMETER NAMES
3420  DATA           40,Y,C,8,0,Y,1,N,N,4,X,Y: REM  DEFAULT VALUES

4000  REM
     EPSON SLOTFINDER ROUTINE
4010  FOR SL = 1 TO 7
4020 SM = SL * 256 + 49152
4030  IF  PEEK (SM) = 24 AND  PEEK (SM + 1) = 176 AND  PEEK (SM + 2) = 56 AND
     PEEK (SM + 3) = 72 THEN SL$ =  STR$ (SL): GOTO 4060
4040  NEXT SL
4050 SL = 1: REM  ACCEPT SLOT 1 IF NOT FOUND
4060  RETURN
4070  PRINT D$;"PR#";SL: REM       ACTIVATE PRINTER
4080  PRINT "";
4090  RETURN
4100  PRINT D$"PR#0"
4110  RETURN
4120  REM  STRING INPUT ROUTINE - ACCEPTS COMMAS, COLONS, QUOTES, ETC
4130  FOR XX = 768 TO 838
4140  READ BYTE: POKE XX,BYTE
4150  NEXT XX
4160  DATA   32,190,222,32,227,223,36,17,208,5,162,163,76,18,212,133,133,1
     32,134,165,184,164,185,133,135,132,136,32,44,213,173,0,2,201,3,208,3,
     76,99,216,169,0,133,13,133,14,169,0,160,2,32,237,227,32,61,231,32,123
     ,218
4170  DATA   165,135,164,136,133,184,132,185,32,183,0,96
4180  RETURN
5000  REM
            TEST PRINTOUT ROUTINE
           TYPE "TEST" ON LINE 1 TO ACTIVATE

5010  GOSUB 4070
5020  FOR K = 1 TO CL:CL$ =  STR$ (K):CL$ =  RIGHT$ (CL$,1): PRINT CL$;: NEXT
     : PRINT
5030  FOR K = 2 TO LL: PRINT K;: IF K < LL THEN  PRINT
5040  NEXT
5050  FOR K = 2 TO CL:CL$ =  STR$ (K):CL$ =  RIGHT$ (CL$,1): PRINT CL$;: NEXT
     : PRINT
5060  PRINT
5070  GOSUB 4100: GOTO 1030
```

A COMMENT ON ERROR TRAPS

by Nick Fotheringham

You have finally gotten all of the bugs out of that special program that has kept you in seclusion for the past several weeks. It does exactly what you want it to do, and you are ready to impress someone with it. You beg your boss to take time from his busy schedule for a session with your Apple, and after ten minutes of routine data entry, your program is nearing its flashy finale. The next question appears: "How many sides on an octogon?" As your boss enters "e..i..g...", you stiffle "Not that key, you dummy, the '8'". Too late... The Apple has already responded with a "TYPE MISMATCH" message and shut your program down.

One purpose of an "error trap" or "error handling routine" is to help prevent such embarrassing situations. Your Apple's BASIC interpreter already has several built-in error traps which were designed to protect the system from your unreasonable requests, such as attempts to divide by zero or to exceed the system's capacity ("STRING TOO LONG", "OVERFLOW", "FORMULA TOO COMPLEX", "OUT OF MEMORY"). Fortunately for many applications, these traps can be avoided by using the ONERR GOTO.....POKE 216,0 commands. ONERR GOTO... disables the system's internal error handling routine and, upon encountering an error, transfers program processing to a statement defined by the GOTO statement, typically a replacement error handling routine of your design. The POKE 216,0 command reinstates the system's error handling routine.

For many beginning programmers, disabling the system's error handling routine, only to replace it with one that you must design and which uses some of your precious RAM memory seems like lunacy. The major reason for doing so is that most of the errors to which the system reacts need not be fatal to your run. The computer views these errors as fatal because the contexts in which they may occur are so diverse that the only general solution that ensures protection to your computer is to terminate your run. However, within your program the context within which an error may occur can often be much more narrowly defined, and nonfatal solutions may be developed. Some of these solutions are described below.

One of the most common applications for error traps is to guard your program against typing errors during data entry from the keyboard. Most such errors can be resolved without aborting your program by designing the program to receive all input as a string variable, say A$. Because A$ will accept input from nearly every key (except RESET) without a TYPE MISMATCH error, it is preferable to A or A% as an input variable. You may then test the input to see if a RETURN has

been entered (A$=""), to see if a number has been entered (ASC(A$)>47 AND ASC(A$)<58). If the desired numerical input has been entered, you may then convert the input to its numerical equivalent (A=VAL(A$) or A%=INT(VAL(A$))) and then test to see if this value is within the range that you expected as an answer to your question (A%>0 AND A%<5).

One of the great advantages of owning your own computer system on which you run programs interactively is that you can usually train the system to come back to you for help when it has a complaint instead of just dying. When a "fatal" problem is encountered, such as an attempt to divide by zero, an error trap can be used to print an error message of your choosing and then give you an opportunity to change the denominator to a non-zero number and continue the calculation or to abort that program segment (e.g. return to the menu).

Good programs should never "crash". Even when they fail to complete the task for which they were designed, they should reach a controlled ending which provides a detailed description of what went wrong and an opportunity to fix it before ending. Since most of us write programs with the expectation that others will run them, we should get in the habit of using error traps routinely, and we should insist on such programming style in the commercial software we buy.

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APPLE SLICES

Steve Knouse

This month starts what I hope to be a regular column in the Apple Barrel. APPLE SLICES will offer hints, tips and techniques for programming, hardware or software modification, program usage, printer activation, etc. In otherwords what ever you'd like to see.

This month I'll discuss some software modifications I've had to make to programs I use and tricks I've discovered in using other programs. None of the items started out to be articles; they just came up.

Everyone has done the same thing. Every problem you've solved, every trick you've come up with is needed by at least 10 other people.

So send in those tips, tricks and techniques! Type written material is acceptable; machine readable form is preferable (i.e. in a standard text or binary file from your word processor).

Let's not leave out those of you with a question. Send those in too. If I can't answer them someone in the club can.

Send everything to:

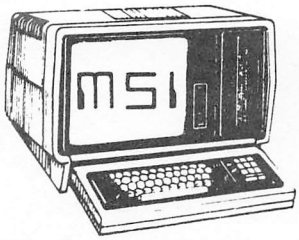
Steve Knouse
14150 Limerick Lane
Tomball, TX 77375

Submissions will be returned if accompanied by a self addressed stamped envelope.

Tips on Using Apple PIE

Apple PIE was one of the first programs I bought. It is an excellent word processor with capabilities I've yet to use. Here are some techniques I use with the program.

Tabbing to the next word is done by setting the search string to a space (press ESC, the space bar and CTRL-Z). This can be done at the start of an editing session. If there is no text the search will fail but the string will be set up. Then each time you press +SCH (CTRL-Z) you will go to the next word; -SCH (CTRL-Q) takes you back to the previous word.



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  - (5) Income Statement
  - (6) Prior Year Comparative Income Statement
  - (7) Department Income Statements

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- Account Number
- Description
- Account Type
- Balance Sheet Column Code
- Current Amount
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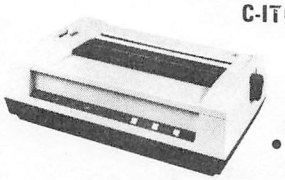

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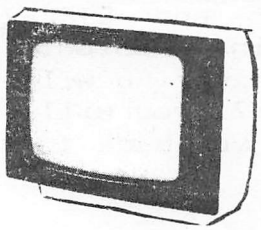

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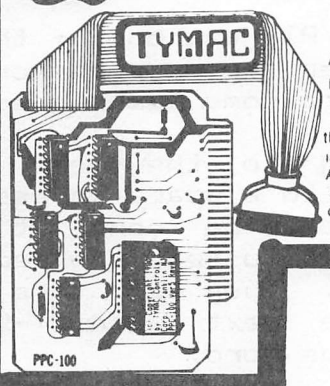

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Apple PIE does not have the capability of creating macros or key strokes which type a set of characters. For example in typing this section it would be nice to have one or two key strokes type Apple PIE. I get around this by typing AP any place I want to Apple PIE to appear in the final text. When I'm done editing I go to the top of the text and do a global replacement of AP with Apple PIE (ESC AP ESC Apple PIE CTRL-W CTRL-X). It is important that the two characters you use are unique, else APPLE will come out Apple PIEPLE; but this will usually be obvious when you proof read.

Imbedding printer control characters is done by using the QUOT key (CTRL-SHIFT-M) followed by the control character. It will appear as a flashing character on your display. Here are some examples of codes I use with my MX-80 (which has Graftrax):

Function	Type
Set condensed print	QUOT ESC SHFT P
Cancel condenced print	QUOT ESC SHFT Q
Set emphasized print	QUOT ESC SHFT E
Cancel emphasized print	QUOT ESC SHFT F

QUOT is a CTRL-SHIFT-M on an unmodified keyboard layout. ESC is the normal escape key on the Apple keyboard. SHFT is the right arrow key. (This is needed as the P, Q, E & F are uppercase characters.) For more information see Section 14.0, Character Translations, on page 63 of the PIE Text Editor User's Reference Manual (PIE Manual).

You probably noticed a mention above of modifying the keyboard layout. This does not mean changing the layout of the letter keys but changing which control keys perform which commands. This is very briefly mentioned in Section 18.0, Command Tables, on page 71 of the PIE Manual. There is a much better explanation, with examples, in Charles Rusch's "Notes From A Novice: Customizing Apple PIE" in the January 1982 issue of CALL -A.P.P.L.E., page 51.

At the end of Rusch's article he tells how he sets up blank, formatted forms for the different types of letters he writes; business, personal, memos, etc. He does this by taking a fully formatted letter, stripping all the text with the DEL key (CTRL-SHIFT-N) and then adding small reminders like "date", "address", etc. which he types over when he starts a letter. This is a trick I use also. Its bad enough figuring out the first time what format commands I need; no sense in doing it twice.

I do something similiar to reuse particularly tricky bits of formatting (e.g. creating lists). I save the formatting commands in a text file so that later I can append them to a file I'm working on. Saving a range of lines to a text file is done from the PIE Command level by typing (begin,end)>filename, where begin and end are the begining

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and ending line numbers of the format commands (get this from the prompt line of the editor); filename is the name of a text file to save them in. To append the text file containing the commands type <<filename from the PIE Command level. For more information on these commands see pages 85-88, Outputting a Portion of a File, and page 91, Appending Data to a Text File in Memory, in the PIE Manual.

Centering Floating Titles with Apple III Business Graphics and the HP7470A PLOTTER

Business Graphics has a command to put horizontal or vertical titles any where on the graph. For example to put a horizontal title at position 30, 40 (where 30 is the X coordinate and 40 is the Y coordinate) type SET HORIZONTAL FLOATING TITLE "any text" 30 40. If the X and Y coordinates are left off, the title can be positioned with the arrow keys. When using a plotter pressing the F key shows the area the title will take. Pressing RETURN or ENTER will draw the title.

This works well most of the time but is nearly useless for centering titles. By playing around with the program I came up with the following formula to compute the X coordinate necessary to center any length title on an HP7470A:

X = -.44 * Number_of_Characters + 50

For example to center a title 10 characters long the X coordinate is 45.6 (-4.4+50=45.6).

The following items will help you decide on the Y coordinate. The bottom of the title drawn by the SET TITLE command is at Y=94.4. Using a Y coordinate 3 less than the one above it will give nicely spaced lines.

As an example I use a Y of 89 when specifying my first sub-title. This sets it off nicely from the main title. On subsequent sub-titles I use Y values of 86, 83, 80 etc. (i.e. 3 less than the preceeding title).

Modifying Computer Station's Enhanced Paper Tiger Graphics Dump for use with the SSM AIO

At work I have an SSM AIO which I use in the serial mode to drive an IDS 560G Paper Tiger printer. The AIO does not normally supply a line feed with carriage return so I set my Paper Tiger to do so. This worked fine for everthing except Computer Station's Enhanced Graphics Dump program. I was getting double spaced graphics. Turning off the auto-linefeed switch on the Paper Tiger fixed it but I had to change it back before I printed any text. Since I didn't

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like changing the switch everytime I wanted to print graphics I snooped around and found the following code:

```
1     LDA #$14  ;send an ADV-2 without carriage return
2     JSR $1CE7
3     LDA #$0D  ;send a carrige return
4     JSR $1CE7
```

The ASCII $14 in Lines 1 and 2 is a graphics linefeed character which advances the paper but does not do a carriage return. Then the printer sees the carriage return, which is sent in lines 3 and 4, and dutifully supplies another linefeed causing the double spacing.

There is another command to tell the Paper Tiger to do a graphics linefeed with a carriage return; an ASCII $0E. I used this to modify the code as follows:

```
1     LDA #$0E   ;Send an ADV-2 with carriage return
2     JSR $1CE7
3     NOP        ;NOP the rest
4     NOP
5     NOP
6     NOP
7     NOP
```

To apply the patch, Boot your DOS 3.3 System Master disk, put a COPY of your Computer Station disk in the drive, and type the following:

```
BLOAD TIGER460.OBJ
CALL -151
1DFA: 0E
1DFE: EA EA EA EA EA
3D0G
UNLOCK TIGER460.OBJ
BSAVE TIGER460.OBJ,A$1800,L$738
LOCK TIGER460.OBJ
```

This problem has been fixed on Computer Station's new Combined Enhanced Graphics Software (CEGS).

Now its your turn. Has anyone figured out how to make the program load a Hi-Res screen on the page you have selected on the menu rather than the page it was saved from? Has anyone figured out to make the program display only binary files when it does a catalog?

Please note that I do not consider these last two items to be bugs. They are in the "Wouldn't It Be Nice" category. Without getting into a full blown review let me say that Computer Station's graphics dump programs are excellent programs. They are well written, easy to understand, easy to run, have no bugs (other than the one described above) and are not copy protected.

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Where <name>, <addr> and <length> are as follows:

<name>	<addr>	<length>
IDS-560-S.D	9A03	182
IDS-560-S-LF.D	9A03	182
IDS-560-S-DW.D	9A2B	1B5
IDS-560-S-LF-DW.D	9A2B	1B5
IDS-560-S-TW.D	9A16	1A9
IDS-560-S-LF-TW.D	9A16	1A9

You can now rename it VISIPLOT.DRIVER and move it to your Visiplot disk using FID so it can be used with Visiplot.

Printer Control with Visicalc

A common question is "How do I get my printer into (out of) compressed print when I'm using Visicalc?" This is done in the printer command (/PP) by typing a " to send setup characters to the printer. Then to send a control character type ^C followed by the control character; to send an escape sequence type ^E followed by the character(s); to send an ASCII code type ^H followed by the hexadecimal number of the ASCII code.

For example on the MX-80 with Graphtrax:

Function	Type	Sent to Printer
Set condensed print (16.5 cpi)	^EP	ESCAPE P
Cancel condensed print	^EQ	ESCAPE Q
Set emphasized print	^EE	ESCAPE E
Cancel emphasized print	^EF	ESCAPE F
Set 8 lines per inch	^E0	ESCAPE 0
Set 6 lines per inch	^E2	ESCAPE 2

And on the IDS 560G:

Function	Type	Sent to Printer
Set 10 characters per inch	^H1D	ASCII 29 (Hex 1D)
Set 12 characters per inch	^H1E	ASCII 30 (Hex 1E)
Set 16.8 characters per inch	^H1F	ASCII 31 (Hex 1F)
Set 8 lines per inch	^EB,6,$	ESCAPE B , 6 , $
Set 8 lines per inch	^EB,8,$	ESCAPE B , 8 , $

For more information see the Setup String subsection of the Print Command in your Visicalc Manual (pages 3-44 thru 3-46 in the Apple II version).

Modifying the Visiplot Serial IDS 560G Drivers for use with SSM's AIO

I also ran into a problem with Visiplot's serial IDS 560G graphics dump routines. The documentation said they would only work with Apple's serial and communications cards. Sure enough they didn't work with my AIO. I could print my graphs, but the first line had some trash on it which caused the first part of the title to be displaced to the right.

Once again I had to poke (peek) around in the code. The problem was in the initialization routine; it wasn't setting up the AIO properly. The code was:

```
LDA #$00      ;Set character count to prevent
STA $06F8,X   ;  a carriage return
LDA #$E0      ;Disable Apple's video
STA $07F8,X
```

It was changed to:

```
LDA #$FF      ;Prevent carriage return
STA $0678
LDA #$80      ;Disable Apple's video
STA $0578,X
```

I still don't understand how the original routine worked with the communications card. In looking at the comm card documentation it seemed that the code was incorrect for it also; but I've been assured by a friend who has the comm card and Visiplot that it does work. Nor am I sure why only the first part of the first line was messed up when using my AIO. But then there was no point in overworking the problem once I had it fixed.

There are six IDS 560G routines; for single, double or triple width graphs, with or without linefeed. They all load at $98C3 and have an entry point at $98D5 which in turn does a jump to the main routine. The main routine calls the initialization subroutine which we will patch. The address to patch depends on which routine you are using.

Before patching a routine make a copy of it using FID. (Apply the patch to the copy!) Then Boot your Dos 3.3 System Master, insert the disk with the copy of the routine to be patched and type the following:

```
BLOAD <name>
CALL -151
<addr>: A9 FF 9D 78 06
:A9 80 9D 78 05
3DOG
UNLOCK <name>
BSAVE <name>,A$98C3,L$<length>
```

Monitor Interference with the Apple ///

The Apple /// is designed to have a monitor sit directly on top of the computer. In fact Apple's Monitor /// (a Hitachi) is designed so to do so.

But the high voltage power supply of some monitors so placed can interfere with the built in disk drive causing disk I/O problems. One of the reasons Apple chose the Hitachi is that it does not have this problem (see exception below).

If you experience disk I/O problems with the internal drive move the monitor off the Apple and retry the operation.

Note that the Monitor /// has the same problem if the metal cover over the internal drive has been left off. I found this out when a local computer store's technician returned one of our Apple ///'s after replacing the built in drive but failing to replace the disk's cover. Luckily she trashed several of her diagnostic disks while checking out the unit and we were able to identify and correct the problem. This saved us from doing the same to any of our Visicalc storage disks.

The moral to this story is: If you are going to buy a monitor other than the Monitor /// check it out carefully!

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ATTENTION PASCAL USERS
BY
MILTON KOSTNER

Recently I discovered that the Pascal data files generated in my programs were excessively long, compared to the data being shoved out to them. A test using the DISKIO program supplied by Apple on the APPLE3: disk indicated that the data file generated included a 131 byte header and 137 bytes per record, although the program called for a total record length of 128 bytes. A letter to Cupertino, Ca. was answered months later by a call from the Dallas Apple Software Support Office.

David Raymond of Apple advised me that in the resulting P-code of compiled Pascal, strings are set on an even boundary, with extra padding provided by the compiler. Each string in the file consists of a length leader followed by the ASCII characters plus padding. In the case noted, the length and padding added nine extra bytes to each record. By itself nine bytes is not much, but it becomes significant with record counts in the hundreds or thousands.

How do you minimize wastage in Pascal data files? David advised using odd lengths for all strings to eliminate padding (in addition to minimizing the allowed string lengths in variable declarations).

You can contact David or one of the five customer support Sales Analysts at 214-245-Ø228 or write to Apple at 1Ø5Ø Venture Court, Carrolton, Tx. 75ØØ6 to get help where Apple documentation is sparse, as it is in Pascal's Bios disk system.

My next contact will be to clear up what's in the file header!

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FOR SALE: Qume Sprint 5 letter quality printer plus tractor feed, 1 year old, $19ØØ. Call Mitzi Craddock at 358-4441.

FOR SALE: VisiCalc 3.3 $15Ø, Desktop Plan II $2ØØ, DOS 3.3 Controller $75, Silentype Printer, $3ØØ. Call John Williams at 652-5435 between 7:ØØ AM and 3:ØØ PM.

ADVANCED TOPICS GROUP FORMING

New members are great - they are the lifeblood of HAAUG. But after a year or so, you begin to get a sense of deja vu when meeting topics and questions at meetings are mostly things that you have already conquered. So.....
"we" (Dewayne VanHoozer and Tom Murdock) are announcing the formation of an advanced topics group. We would like to hear from you if you would be interested in these sessions. We don't know exactly what topics might be covered - and in fact are going to plan the first few meetings around the suggestions we will extract from you when you call to express interest. Where we will go from there is anybody's guess right now - we can only promise that our discussions will NOT include "an introduction to Basic programming". If we present topics that are "new" to some folks, then those meetings will assume a fair knowledge level of the Apple. We know you're out there - so call Dewayne at the hot-line number 668-8685, or Tom at 495-8495.

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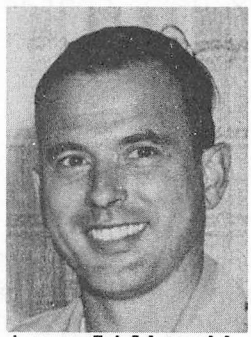
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HOME ACCOUNTANT (A REVIEW) by Tom Murdock

After some polite arm-twisting, I volunteered to write an article or two for the AB. Just as I sat down at the trusty typewriter, however, the May/June issue of Peelings II arrived, and they had stolen my thunder by reviewing Home Accountant, by Continental Software. If you would like the complete review, then they have done a good job, and I agree with most of their comments, but I will summarize it here, and add a few things of my own:

Peelings rates Home Accountant a "C" for software and a "D" for Documentation, and I agree. The documentation is worse than the software, since it leaves out many of the options and things that you must do to make this system function well. The software is mediocre. It does the job, but appears to be written in straight Basic, without any performance enhancements which would make the package spectacular. The constant loading of program modules and extended reading of data files is particularly annoying. The reports and graphs are good, however, so all is not lost. Frankly, I am very surprised that this package is rated #1 by Softalk in the Home category. My only conclusion is that it fills a need, and the price is reasonable.

Now, having been somewhat critical, lets look at the plus side of the ledger (no pun intended). Home Accountant goes far beyond the plethora of checkbook balancer and home money minder type of packages on the market. First, and foremost, it allows 100 budget categories, which is significantly better than the checkbook packages, or the TRAC system that Nibble has been touting for the past few months. The authors have also attempted to give you a double entry accounting system so that you can produce a personal income statement and balance sheet. Notice, I said "tried". It was a good effort, but they missed the mark slightly. I have been using the system since January, 1982, and it is doing a fairly good job of helping me track my personal finances, and although I would like it to have been written better, it does the job, and I don't feel that I got ripped off for my $74.95. There are several little tricks that you must do when using this package to really make it work for you. They are too detailed to describe here, but if you would like more information, call the hotline, and Dewayne will put you in touch with me.

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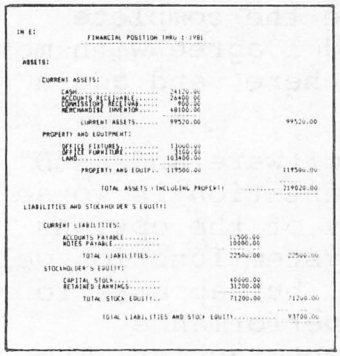

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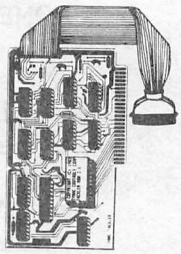

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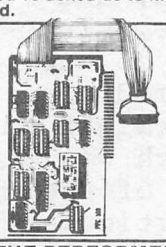

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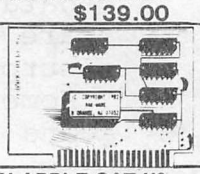

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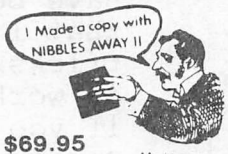

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A Review
of
Super Disk Copy

by
Guy Neill

Super Disk Copy is most likely the one utility every Apple owner should own.

Now, that is a fairly strong statement, but the features offered by this program from Sensible Software comes the closest to deserving it than anything else I have run across. A look at the menu from SDC shows the beginning:

<A>LPHABETIZE & PURGE DELETED FILE
<B>OOT
<C>OPY
<D>ELETE
<I>NIT TARGET DISK
<F>IX FILE SIZES
<L>OCK/UNLOCK
<N>EW SLOT/DRIVE/DOS-VERSION
<R>EPLACE ILLEGAL CHARACTERS
<U>NDELETE
<V>IEW CATALOG

Looking at this menu only tells part of the story, though. For instance, if you use SDC to initialize a disk, you end up with a disk without DOS, which may be just the ticket for a data disk. I use disks of this sort for storing Magic Window and other text files which I will never access without another program, which normally must be booted to run. Therefore, I can store more data on the disk and not have to try to squeeze one or two more sectors after filling the disk to save a complete data file.

Also, if you have not encountered any difficulties with a program that you have revised several times and which has ended up shorter than it was at an earlier revision, then you do not truely appreciate the Fix file size feature. What happens is that the Apple does not first delete a program before saving it. Thus, if you had originally saved a six sector Hello program and later shortened it so that it may only occupy four sectors, six sectors will still be allotted to it unless you first delete the old Hello and then save the new version. Quite frankly, this is a pain to remember to do. Super Disk Copy reads the directory and track/sector listing with the Fix file sizes option and adjusts the VTOC (Volume Table of Contents) to show the true size of the program. Admittedly, most of the time programs grow rather than reduce, but it is nice to occasionally go through a disk and let SDC free up any sectors you didn't know you had.

Super Disk Copy will work as a Muffin/Demuffin program with the New slot/drive/DOS command. It is much quicker and simpler to use than the Muffin program supplied on the System Master. SDC will work with either one or two disk drives, which may be in different slots if desired.

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Of course, the real forte of Super Disk Copy is its ability to copy files. I find SDC much superior to the FID program on the System Master for ease of use. I like to arrange my programs of similar type on one disk, if at all possible and SDC allows this faster and easier than anything else I have encountered.

When you choose the Copy option you are given a secondary menu asking if you wish to copy <F>iles, <D>OS or <E>ntire Disk. Upon choosing the Files option you may then enter the name of the file you want copied, or you may specify either of two wildcard characters. A '?' wildcard character results in copying all files on the source disk with prompts. That is it sequentially goes through the directory, one program at a time and copies those you tell it to with a 'Y' or RETURN (default yes). If you respond with a 'N' than it passes over that file and queries you about the next one.

Alternately, you may, at the beginning, instead of the '?' wildcard, specify the '=' wildcard. This copies all files on the disk without asking you. This amounts to a quicker copy of the files if you want all of them, but for whatever reason do not wish to copy the DOS as you would with the Entire disk option. Note, in checking the documentation, DOS is not copied with the entire disk copy option, but is reserved for the DOS copy option. Also, you cannot copy DOS 3.2 to a DOS 3.3 formatted disk or vice-versa.

While I don't know if it is a real advantage or not, Super Disk Copy also packs files as it copies them. What it does is place all the sectors from a files adjacent to each other (T22/SF, T22/SE, T22/SD, etc) instead of the perhaps random disarray of the Apple file handler, at least if it is a well used disk you are copying from (one with many additions, deletions and such). This is indicated with the disk map given by SDC through the View catalog option. If you view the original and look at the map, and then copy the files, and then view the copy map they will differ due to the packing feature. There will be no difference if the Entire disk option copy mode is used.

And speaking of the Entire Disk copy mode, when this option is chosen you get another sub-menu asking whether you want a <Q>uick copy, <C>ontiguous copy or <B>rute force copy. The quick copy mode duplicates the entire disk, resulting in the same map as the original. The contiguous copy I haven't used, but I will guess (and I just confirmed it by looking at the SDC documentation) that it copies the entire disk, but packs the files much like the Files copy option. Frankly, I don't know which would be the better to use. I will have to spend some time comparing them.
The DOS copy mode is what I use mostly when initializing disks. I usually make all my disks Masters (it doesn't take up any more disk space in 3.3) and the process is less labor intensive than using the Apple routines. First off, use the SDC option <I>NIT to initialize the target disk. You will be asked to insert a source disk in drive one (assuming a two drive system - or be given appropriate messages for a one drive system) and press return. The target in drive two (see above assumption) will then be initialized without DOS. Once the initialize function is complete, choose the copy DOS option (assuming the source disk has the DOS version compatible with the format used to initialize the target) and DOS is copied. If the source was a Master, then the target is

now a Master. There is no need to resort to the Master Create program from Apple's System Master.

I suppose I had better stop here. Most of the features of Super Disk Copy have been covered, at least the major features. I highly reccomend you obtain Super Disk Copy as I believe you will find it your most used utility.

Super Disk Copy's latest revision is 3.8, but I ca see no obvious difference from the older 3.6 version. It probably has some cleaned up coding or debugging, but they both work great. Incidentally, SDC is written in machine language, so it works with considerable speed. Look for it at your local dealer or contact Sensible Software, 6619 Perham Drive, West Bloomfield, Michigan 48033 313-399-8877. Price is $30.00.

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APPLE'S DAVE REED SPEAKS

HAAUG was honored to have Dave Reed, Sales Support Analyst from Apple's Dallas office, as the principal speaker at the July 8 evening business meeting. Dave presented a program that was both entertaining and informative, spicing his presentation with comments that he maintained were his thoughts, not Apple's.

Dave's principal focus was a demonstration of the Apple Logo System, a programming language (actually an environment) for computers which has a very small number of words and grammatical rules. Suitable for teaching programming, angles, recursion, and logic to 5 year olds (Dave's niece), Logo has appeal to adults as well (Dave). Logo uses the concept of Turtle Graphics similar to that in Apple Pascal, where a "turtle" is used to draw patterns on the high resolution screen. Although usually associated with graphics, Logo also provides arithmetic, logical operations, and control of program flow, looking much like beginners' Pascal.

Dave reviewed some of the history of Apple, including the unfortunate early days of the Apple ///. Dave was one of the early purchasers of the /// and went through the early agonies. He has a new Apple /// and swears he isn't biased when he says it's the finest personal computer available. Dave reviewed the software currently marketed by Apple for the /// and indicated that several new ones are being developed, including a new data storage and retrieval program.

Although unable to discuss hardware futures, Dave did indicate that the Super IIc would be released in 4th quarter. Although noncommittal on the Super IIc's specifics, he did say that whatever what we may have read was probably not true. The only specific thing mentioned was that there will be no slots in the back for cables in an effort to reduce RFI radiation. Although not stated, it was implied that there would be connectors on the back similar to the Apple ///. Responding to a question about

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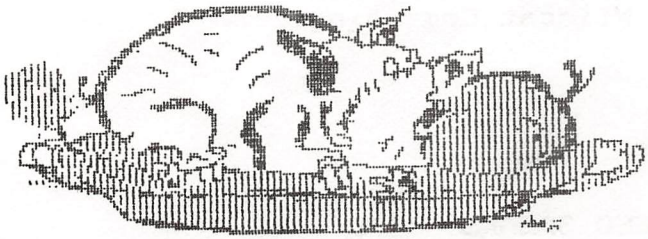

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