the correspondent™

By Roger Wagner

SDS the correspondent

SUMMARY OF THE SCROLL MODE COMMANDS

COMMAND KEY	DESCRIPTION	PAGE REF.
A	Toggles address mode — Line/Page	16
B	Jump to the beginning of the file.	6, 16
C	Enter mode to copy block of text.	17, 38
	Use Control B, E and D to set beginning and end of source, and beginning of destination.	
D	Dos command mode entry.	27
E	Jump to the end of the file.	6, 16
F	Enter FIND mode. (ESC, F for disk).	23, 35-37
G	Get a file from disk.	11, 20
H	Help. (S for scroll, E for edit, N for notes).	12, 25-27
J	Jump to another location in the file.	16
L	Scroll down one page.	6, 8, 16
:	Scroll up one page.	6, 8, 16
M	Enter move mode.	17, 39
	(Same parameters as COPY.)	
N	Save current screen as a note page.	25
Q	(Quit) Soft exit for immediate return.	28
S	Save file to disk.	10, 19
X	Exit The Correspondent.	28
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Control-B	Set beginning of file.	22
Control-D	Special Display Mode.	8, 18
Control-E	Set end of file.	22
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Control-O	Output to printer.	11, 44
Control-P	Page edge toggle: left-right edge.	8, 29
Control-R	Remove one line of text.	8, 17
Control-S	Set page # offset factor.	16
Control-W	Set/clear frozen window at top of screen.	18, 38
Control-Y	Case display conversion.	24
Control-Z	Erase (zap) the entire file.	11,27
	(Sets End = Beg.)	

SUMMARY OF THE EDIT MODE COMMANDS

COMMAND KEY	DESCRIPTION	PAGE REF.
Control-A	Toggle for cursor vs. screen left/right scrolling.	30
Control-C	Center the current line.	9, 32
Control-D	Duplicate last character.	33
Control-E	Word move on/off, left margin release	7, 33
Control-F	Flashing mode.	31
Control-I	Insert one character at the cursor.	9, 30
Control-J	Scroll down one line.	8, 29
Control-K	Scroll up one line.	8, 29
Control-L	Set left margin. (see Ctrl-E)	33, 39
Control-N	Normal mode.	31
Control-O	Optional character key.	32
Control-P	Page edge toggle.	8, 29
Control-Q	Clear all tab stops.	31
Control-R	Remove one character at the cursor.	9, 30
Control-S	Set/Clear tabs.	31
Control-T	Jump to next tab stop.	31
Control-V	Math mode key. (Value)	54
Control-W	Inverse text mode. (White)	31
Control-X	Exit edit or find mode.	6, 29, 33
<ESCAPE>	Twice shifts upper<——>lower case. Once shifts only the very next character to the opposite case.	7, 30

SPECIAL CONTROL CODES

Control-F, Control-N		
	File Link Flag	34
Control-J, Control-F		
	Justify Flag (on/off)	47
Control-Z	Find/Printer Pause Flag	23, 50

the correspondent

By Roger Wagner

REFERENCE MANUAL

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** THE CORRESPONDENT **
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DISCLAIMER

INTRODUCTION

The Correspondent is, at the very least, a very unusual package. It is more than a single program. It is an entire series of files and utilities that has evolved over a period of time. The program was first created to write the set of screen instructions for another program, ROGER'S EASEL. After that, a number of enhancements were added to make it useful for printed documents as well.

It was originally marketed as a program in its own right in 1980, and was intended to fill a unique spot in the software market. It was to provide an inexpensive, yet suitably powerful text editor for the casual user with an occasional letter to write. As with many programs, as successful as this was, there were immediately comments of "That's really a good program, but if only it did...". On any program this is an endless process, and on a program like The Correspondent the additions are seemingly infinite.

Version 3.0 of The Correspondent is the result of all those suggestions and opinions sent in by users of the earlier versions. I have incorporated as many of those suggestions as possible within the constraints of the desire for an affordable package, and the finite memory capacity of the Apple II.

I think you will find this version to meet that goal. It offers an unusual degree of sophistication for its price, and a large number of supporting and related utilities. I hope you will enjoy using The Correspondent as much as I have enjoyed creating it.

Roger Wagner

P.S. And for those who can't help but ask: "Yes, but what editor did he use to produce the manual?", the answer is, of course... "The Corrspondent!"

OVERVIEW

The Correspondent diskette when CATALOGed, can be seen to be
made up of several sections.   The first contains the primary
programs and files that make up The Correspondent editor. CORLOAD
is what is actually EXECed by the user, and CORRESPONDENT and
COR II are the Applesoft programs run by that file for the actual
operation.

Remaining sections contain additional utilities and demonstra-
tion files, and a number of MOD files for configuring The Corres-
pondent to your particular needs with a minimum of effort.

SAMPLE CATALOG OF THE CORRESPONDENT DISKETTE

```
DISK VOLUME 104

*A 016 THE CORRESPONDENT

*T 003 CORLOAD
*A 012 CORRESPONDENT
*A 034 COR II
*B 003 COPY.OBJ
*B 007 COR.OBJ.ROM
*B 006 HELP.SCROLL
*B 006 HELP.EDIT

*A 002 ^--------> UTILIITES <-------^

*A 003 DOS REMOVE
*B 002 DR.OBJ
*T 002 DOS 3.3 CAT MOD
*B 002 CAT.OBJ
*B 002 CAT.OBJ.2
*T 002 PG.2 PROTECT
*B 002 SCROLL.OBJ
*A 011 LETTER CARRIER
*A 007 FILE LINK 3.3
*A 026 FORM LETTER DRIVER

*A 002 ^-------> DEMO FILES <-------^

*B 043 NEW FEATURES! (.40)
*B 019 SAMPLE TEXT
*B 011 PHONE.40
*B 008 DATABASE.40
*B 005 AUTO MEMO.40
*A 016 SCROLL EXAMPLE
*T 008 LETTER FILE SAMPLE
*T 002 DATA FILE SAMPLE
*B 016 EPSON MX-80 SAMPLE
*B 016 CENTRONICS 737 SAMPLE
```

```
*A 002 ^--------> OPTIONS <---------^

*T 006 LOWER CASE MOD
*T 005 NO LOWER CASE MOD
*T 003 PARALLEL MOD
*T 002 SERIAL MOD
*T 003 LF OFF MOD
*T 003 LF ON MOD
*T 003 MASK SWITCH
*T 003 DRIVE SWITCH MOD
*T 003 SLOT SWITCH MOD
*T 002 CLR SCRN MOD
*T 002 LG FILE MOD
*T 006 MATH MOD
*T 003 MATH CANCEL MOD
*T 003 VIDEX MOD
*T 003 SMARTERM MOD
*T 003 PW
```

In actual use, the overall concept of The Correspondent is fairly simple. The Apple screen will act as a "window" onto a 40 to 80 column page, on which you are typing or editing text. As you type, this window will move with you as is appropriate to your position on the page. You can at any time take direct control of the window to view any portion of the page you wish.

There are two main levels of operation. One is the SCROLL mode, wherein operations that apply to the file as an entire unit are done. You can read through the file by scrolling up or down through the lines of text, load or save files, print them out, move and copy large blocks of text, and other functions.

The EDIT mode is the other main level, and is as its name implies, the level at which most text is actually entered. It is very easy to move back and forth between these two modes.

The main thing to keep in mind is that The Correspondent will print your page EXACTLY as you have typed it in - what you see is what you get!

The remainder of this manual is set up to make using The Correspondent as easy as possible. The first section is a very basic tutorial on how to accomplish the most fundamental operations such as would be used in writing a letter. This section does not explain every feature of the program, but does cover enough to allow you to start using the program with confidence immediately.

The second section is a more detailed description of ALL the commands available within the program. These should be tried as need suggests, and are the "extras" that make the program that much more powerful in its operation. As much as possible, each command is a single key that has a logical relation to its operation, such as 'G' for Get a File, or 'S' FOR Save a File.

A summary of these commands is provided on the last several pages of this manual for easy reference.

The third section is a series of practice examples to show how the different commands can be combined to accomplish specific objectives.

The remaining sections deal with specific supporting programs, and also with individual modifications you may need to make to The Correspondent to suit your particular requirements. These include printer modifications and provisions for the display of lower case text on your Apple.

HOW TO LOAD AND RUN THE CORRESPONDENT

As you go through the examples in this section, you should use a BACKUP copy of The Correspondent. If you have not yet made your backup, go to that section at the end of this manual, and follow the instructions there. Then proceed with the following instructions using your backup. This assures that any errors that may occur cannot prove fatal to your original purchased diskette.

There are only two ways to get The Correspondent up and running. If you have already booted on a DOS 3.3 Master Diskette, then simply insert The Correspondent diskette into the drive and type in: EXEC CORLOAD

If booting the diskette, place the diskette in your primary drive and turn the power on, or if power is already on, type in:

PR#6   (or PR#n where n is the appropriate slot number)

In all of these cases, the screen will clear and a number of Applesoft prompts (]) will appear on the screen. After these, the title banner will appear. For now, press the '6' key (RETURN not required), and the words "CLEARING WORKSPACE" will appear on the screen and the drive will come on again. When the cursor returns, the screen will appear blank with a dotted line going across the center.

What you are looking at is the top left corner of the page onto which you are going to type. The dotted line represents the top of the page. The asterisk to the right shows the center of the page. A usual page is 80 columns across, and 66 lines from top to bottom. Using a margin of 7 columns on either side gives a final text width of 66 columns. Because the margins are always blank, they are not displayed on the screen. The asterisk appears in column 33.

When using The Correspondent, the cursor always stays on the center line of the screen. This line is called, appropriately, the EDIT LINE. In the upper left corner of the screen is a display of the current position of the Edit Line within your current document. To the right is the indicator that you are in the SCROLL MODE of operation of the program.

BASIC MOTIONS - SCROLL MODE

        In the Scroll Mode, you can carry out operations relating to
the file as a whole. The first thing we'll consider is scrolling
the text up and down. If you press the right arrow key, the text
will scroll up one line.   The left arrow will scroll down one
line.   If you want to scroll a large distance, just move over to
the left on the keyboard and use the 'L' and ';' keys. The 'L'
will scroll down 22 lines, while the ';' scrolls up an equal
amount. Try these now.

        To return to the beginning of your file, press the 'B' key.
The page will instantly return to line 1. The 'E' key jumps to
the end of the file, although at this point, they are the same
location, since no text has been entered yet.

CHANGING MODES - SCROLL/EDIT

        To enter the Edit Mode, just press the space bar. This tells
The Correspondent that you want to begin entering text. The word
SCROLL at the upper right of the screen will change to EDIT. You
will also notice that the Line/Page display changes to the
current column position of the cursor.

        To return to the Scroll Mode, just press the CTRL key and the
X key together. Control-X is the Return to Scroll Mode command.

        Try switching modes several times. Then enter the Edit Mode
again, and proceed with entering this sample text, starting on
line one of the file.

ENTERING TEXT

        What you want to do is type in the following "paragraph",
starting on line #1 of your page:

        This is a sample paragraph, typed onto the first line of a
file using The Correspondent.

        To indent the paragraph, use the space bar, or the arrow keys
to move the cursor to column 5. This can be set as a Tab Stop,
but that will be described in a later section.

Capitalization

The first concern is how to capitalize the 'T' in 'This'. The Correspondent always begins with the shift set to lower case. To capitalize a letter, simply press the ESCAPE key once before pressing the letter key. That letter will be capitalized, and succeeding letters will revert back to lower case. Pressing ESCAPE once always capitalizes the very next letter typed. Pressing ESCAPE twice switches and locks the case until ESC is pressed twice again. If you do not have a lower case display board the capital 'T' is shown in inverse. See Lower Case Modifications for more details.

Word Overflow

As you type in the line, pause briefly just before typing the 't' in the word 'typed'. The cursor should at that point be in column 33. This is the mid-page position. When you enter the 't' the text will immediately shift to display the right side of the page. If you use the left and right arrows here you will notice that the page shift occurs as the cursor crosses the midpoint.

If you make a mistake as you are typing, just use the left arrow key to go back to the mistake, and the retype it. That's the beauty of computer typing - no erasing!

When you get to the end of the first line, observe what happens as you start the word 'file'. Normally, this word would "overflow" onto the next line, leaving the letters "fil" at the end of the first line. However, in The Correspondent, words that overflow are automatically captured and moved to the next line, without a conscious effort on your part. This means that you can keep right on typing at the end of each line without having to press RETURN. If you do press RETURN, just as on a normal type-writer, the display will return to the left side, with the cursor on the next line.

If you wish to hyphenate a word, simply put the hyphen in and keep right on typing. The program will automatically move just that portion of the word following the hyphen. If you should decide to back up from a previous line, the first word of the lower line will be moved back to the end of the top line, providing the necessary space is available.

If you wish to turn off the word move, simply enter a Control-E while in the Edit Mode. The asterisk (*) next to the word EDIT at the top of the screen will disappear, telling you that the function is turned off. This is useful when constructing charts, or other occasions where you don't want characters to be moved automatically. Control-E will turn the function back on also.

Finish the line, then press RETURN to bring the cursor to the left margin.

IMPORTANT: Control-E is also used as a "margin release" to allow the cursor to get back to column one after setting a new left margin. See page 33 for more details.

Basic Cursor Motions - Edit Mode

As you enter text you will want to be able to move the cursor to whatever part of the text suits your current purpose. You have already used the left and right arrows to move horizontally. If you move far enough to the left, you will back up onto the end of the previous line. Far enough to the right and you will move to the beginning of the next line. Pressing RETURN advances the edit line down through the text more quickly. Try pressing RETURN several times now. Now back up using the left arrow onto a previous line and notice that pressing RETURN here moves you to the next line and also returns the window to the left side of the page.

For vertical motion, Control-K will scroll the text up one line, without effecting the column position. Control-J scrolls down one line. This is useful if you want to back up and correct a word in a previous line. The easiest way to use these is to hold the CTRL key down with the little finger of your left hand, and to then press the J or K key several times in a row with your right hand.

Viewing Entered Text

Reading what you have typed in can be done in two ways. The first is to use the Control-P function (for Page). Entering this in either the Edit or Scroll mode will switch the window back and forth between the left and right sides of the page. This is a good way to make a quick check of what you said at the beginning of a sentence that may be temporarily out of view.

The other is done from the Scroll Mode. Exit the Edit Mode with the Control-X command, and place the Edit Line on line one. This should correspond to the beginning of the sentence you typed in. Now press Control-D (for Display). The screen will instantly reformat to display both sides of the page in a more readable form. The word SCROLL has also been replaced by an inverse 'D' to indicate this new mode. The arrow and L/; keys still allow you to scroll to read the text, but no other functions are available from this mode. Pressing RETURN will restore the display to normal.

Inserting/Removing Lines

Now, let's make room for a title for this paragraph. First make sure you are in the Scroll Mode, and then use the arrow keys to move the Edit Line to line one.

Now press Control-I. A new blank line will appear above the line you typed in earlier. Pressing Control-I several times will insert a number of new blank lines into the text. To remove a line, just press Control-R. To insert or remove lines, just place the cursor on the spot you wish to change, and use the Control-I or R, from the Scroll Mode. Lines cannot be added or deleted from the Edit Mode. Finish your experimentation here with three blank lines above the two lines of text.

Centering Text

If we wanted to provide a title for something, or center some other material in a document, it can be done very simply. First type in the title, anywhere on the line. Usually just starting in column one as you would for normal text is as easy as anything else. On line 2, type in: ** TITLE ** (Don't forget you've got to be in the Edit Mode!)

To get the equivalent of a shift lock, just press the ESCAPE key twice before typing in the word 'TITLE'. This will lock the case shift to upper case. When you've finished the word, press ESCAPE twice more to return to lower case. The general rule is that one ESCAPE makes the next letter the opposite case, two ESCAPEs switch the case entirely.

After you've typed in the last asterisk, just enter Control-C (for Center) to center the title. The word will instantly move to the middle of the page. Remember that since we are only looking at the left side of the page, the centered position will be to the right of the "window".

Centering text can be done at any time. All that is required is to put the cursor on the same line as the material to be centered, then press Control-C. The words will be centered, and the cursor will automatically move to the next line. This is so that if you wish to center several consecutive lines at once, it can be done by simply repeating the Control-C command. Centering can only be done in the Edit Mode.

Inserting/Removing Characters

From time to time you will want to re-write a line inserting or removing certain words. To do this, you can use the Insert/Remove function. For instance suppose we wanted to re-write the line we typed in as:

This is a sample paragraph, typed onto the first line of a a page on The Correspondent.

To do this, use the Control-J and K keys, along with the arrow keys to move the cursor to the 'f' in the word 'file' of the sentence to be changed.

Now press Control-I 5 or 6 times to create space for the new words. Notice that the text to the left of the cursor automatically moves one space for each Control-I entered. Now type in the new words 'a page', over-writing the old text. To remove the remaining extra spaces, now use a Control-R to bring the text back into its proper position.

When inserting letters in the middle of a paragraph, words at the end of the Edit Line will automatically flow onto the next line as new spaces are inserted. If spaces are removed, words on the line below will move onto the end of the Edit Line. This sometimes has the appearance of moving the entire text to the left or right below the edit line, but is actually a result of all the combined overflows. The appearance of the text can be restored after the new words are entered by adding or removing spaces elsewhere in the text, usually on the blank line at the end of the paragraph.

In the Edit Mode, Control I and R insert and remove single characters. In the Scroll Mode, they operate on entire lines.

SAVING A FILE TO DISK

Because The Correspondent diskette is already nearly full, you should remove it from the drive and insert a previously pre-pared data diskette on which to save your files. This will also minimize the chances of accidentally ruining your working copy. See the section on Making Backup Copies for further details on making data diskettes.

Before saving the file, you may wish to confirm the beginning and end of file by using the 'B' and 'E' keys. The data saved to a file is always taken between these two points, even if other text appears outside the actual file. Because the Beginning and End of File can be set manually, this is important.

To save a file, make sure you're in the Scroll Mode, then press the 'S' key (for Save a file). You will get a CATALOG of the diskette currently in the drive. Enter the name you wish to save the file under.

If you have previously loaded a file, that name is remembered and you may enter just a slash (/) to repeat the previous name. After the save is complete you will return to your original spot in your file.

Normally you can hold about five pages of text in memory at once, and a diskette will hold about twenty five pages in total combined files. You can recognize the end of the workspace by the dotted line just above a region of inverse or flashing char-acters. Unless specifically altering memory as described in the special section at the end of this manual, you should never type beyond the dotted line.

CLEARING THE WORKSPACE

When you are done with a particular file, and wish to edit another one, the current file can be erased. First make sure that you're in the Scroll Mode, and then jump to the beginning of the file with the 'B' command. Now enter Control-Z (for Zap!). The program will ask you to confirm your intentions. Reply 'Y' (any other response aborts the Clear operation). The file will then be erased. The file in memory can only be erased from the Scroll Mode. This does not effect any files on the diskette.

LOADING A FILE FROM DISK

After clearing the workspace, put The Correspondent diskette back in the drive, and load the file SAMPLE TEXT from the demonstration section. Loading a file is done by pressing the 'G' key (for Get a file) while in the Scroll Mode. As in the save operation, the CATALOG will be displayed and the file you want to load asked.

Because of the large number of files on The Correspondent diskette, another feature of the package will be of interest here. When The Correspondent is first run, it modifies the normal Apple DOS catalog function.

When a CATALOG is done, if the list of files is so long that it cannot all be displayed on the screen at once, the list will pause after each page is listed, waiting for a key press to go on with the list. If you press the space bar for instance, the next 20 titles will be shown. If instead you press RETURN, the catalog listing will stop there, and you can then enter the file you wish to load. This is useful, since otherwise you would have to remember the exact spelling of the file name, once it had scrolled off the screen.

For this example, after the catalog is first displayed, you will have to press the space bar once for the second group, then press RETURN to stop the list. Now enter the name SAMPLE TEXT as the file to load.

PRINTING OUT A FILE

Once a file has been created, it can be output via your printer using the printer command. Once you have loaded the SAMPLE TEXT file, make sure your printer is turned on. If the following procedures do not seem to work to your satisfaction, (or particularly if your printer is not in Slot #1), see the section on PRINTER MODIFICATIONS at the end of this manual.

NOTE: If you have previously made the LOWER CASE modification to
your copy of The Correspondent, be sure to convert the SAMPLE FILE
before   printing   it   out,   using   the   Control-Y   (Case   Convert)
function described in the section on file case conversions (p 24).

     To   start the print-out, enter Control-O (for Output) from the
Scroll   Mode.   It will then ask "LEFT MARGIN? (DEF=7)".   Since the
displayed text shows no margin, this must be added when doing the
print-out.   As   mentioned   earlier,   for   an 80 column page with 66
columns   of   text,   7 is a good margin.   This value can be entered
by   pressing   RETURN   alone.   If   you   have   entered   Control-O   by
mistake, you may back out of the print-out by entering a slash (/)
at this point.

     The   next   question   asked   is   "#?".   This is for the number of
copies   you   wish   to   print   out.   Pressing RETURN alone defaults to
one   copy.   If   you   are   printing   several   copies   of   a   document, it
is   recommended that you read the section on Printer Notes & Modi-
fications later in this manual.

     The   last   question   is   "JUSTIFY?   (DEF=N)".   This refers to
the   alignment   of   the   right edge of the printed text.   For now,
don't   justify,   indicated   by   either   a   reply   of   'N', or just
pressing RETURN alone.

     At   this point the printer should come on and the page will be
printed   out.   During   a   print-out, you may pause at any time by
pressing   any key on the keyboard.   Once stopped, pressing any key
again   will   then   resume   the   printing.   If you wish to stop the
print-out in the middle, just press the ESCAPE key twice.

     When   the printing is complete, the program will return to the
Scroll Mode at its previous position.

                              HELP PAGES

     If in the course of using The Correspondent, should you forget
the   various   commands   available,   there   are two ways of quickly
viewing the list of commands.   The first list is found at the very
end   of   the   manual,   and   shows both the command letter, and the
overall   function.   There   is   also   a   key to which pages of the
manual contain comments on that command.

     The   other   quick way is to press the 'H' key (for Help) while
in   the Scroll Mode.   The program will respond with "S/E/OTHER" in
the   upper left corner.   If you want a list of the Scroll commands,
enter   'S', and press RETURN.   If you want the Edit commands, enter
'E'.   Pressing   RETURN   alone backs out of this, should you press
'H'   by mistake.   In the section specifically on the HELP command,
later   in   this   manual,   you can find out how to make up your own
HELP or NOTE pages, and how to move these pages from your original
Correspondent diskette to your various data diskettes.

COMMON DISASTERS
----

1) Wrong   Command.   Should   you   press the wrong key by mistake,
    almost   every   command can be backed out of by pressing RETURN
    alone.

2) RESET.   If you press the RESET key by mistake, you can return
    to the program by typing in:

    GOSUB 2100: GOTO 185   (Returns you to your file).

GENERAL COMMENTS

     The   next section of this manual is a list of all the commands
available   on The Correspondent.   The commands are divided between
those   available   in   the Scroll Mode, and those in the Edit Mode.

     The   general   operations   are listed in the Table of Contents,
and   are   also   indexed   by   the   command charts at the end of the
manual.   It   is   suggested   that   you   lightly skim through these
sections,   and   then   return to them when you find you have a need
for the individual commands.

When The Correspondent is first run, the title banner appears, and pressing '6' automatically sets up a 66 column page. If instead of pressing '6' you press the space bar, or almost any other key, you will get the Main Format Menu.

This menu allows you to set up the page appearance and file type as you wish. This is usually used when you want to create a page unlike the usual 66 line form. On all questions, pressing RETURN alone will default to the most often used value.

The first question asked is "PAGE WIDTH?". 66 is the most common choice as mentioned earlier. However, you may elect to set it at 80, or any other value. If you want to avoid having text outside the window, set the width at 40. When working on Text Files (mentioned below), 40 is the recommended width.

"PAGE LENGTH?" refers to the number of lines on each sheet of printed paper. Some printers (such as the Anadex) may vary though, and can have 65 lines per page. Check your own equipment to find out. This can also be set to the length of whatever forms you are using with The Correspondent.

"NEW FILE?" is an option used only when trying to recover a file still in memory after the program has developed an earlier problem. It is not impossible that in typing in a file, something might happen to interfere enough with DOS or the operation of the program to necessitate re-running the program. In fact, you can even re-boot on The Correspondent diskette. When the menu asks "NEW FILE" reply 'N' and memory will not be cleared before going to the workspace. Normally however, you will always want a new file. Press RETURN alone or enter 'Y' to clear the workspace.

"FILE TYPE?" gives the option of determining what type of file you want to use to store your completed document. The Correspon-dent is designed to operate using the Binary file as the primary file type. These files are indicated by a 'B' in the diskette Catalog. When in the Binary mode, you will not be able to read any file that does not have the 'B' identifier in the catalog.

If you wish to save your data as an actual Sequential Text File (and in this usage I mean as in Apple's normal DOS text files), enter '2' as your choice. This is useful mainly for two purposes. The first is for creating EXEC files. These are files which can control the Apple just as if the file contents were being typed in directly. See the Apple DOS manual for more information on text files. These files are always SEQUENTIAL text files (as opposed to RANDOM). You may wish to examine the EXEC files on The Correspondent diskette in this mode.

The other use for the text mode is for examining the data files of other programs. Many database type programs store their information in Sequential Text Files. These files (and the EXEC files) are preceded by a 'T' in the diskette catalog. Operating in the Text Mode, you can examine, edit and/or transfer files of this type.

MOST OFTEN YOU WILL WANT THE BINARY TYPE OF FILE, SO PRESSING RETURN ALONE HAS BEEN SET TO GIVE THE BINARY MODE.

IF you have a lower case board and have EXECed the LOWER CASE MOD, it will then ask "MASK INVERSE ON PRINT-OUTS? (Y/N)". If you want inverse characters to be ignored during print-outs, reply 'Y'. (This is handy for notes on forms, etc.). Otherwise press RETURN and inverse characters will print out as capitals.

Once you have answered these questions, the "CLEARING WORK-SPACE" statement will appear, and the program will proceed as it did when just the '6' was used.

FAST-RUN OPTIONS

Whenever you run The Correspondent, and the title banner appears, you may skip the format questions by typing in either 4, 6, 8, or T. The values shown in the table below will then be automatically set, and the workspace cleared.

Since most of the time you will be using the same few file types, a number of abbreviations have been set up at the title banner. You already have used one of them by using the '6' earlier. Here are the options originally set up:

Key Pressed	Col. Width	Pg. Length	File Type
4	40	66	BINARY
6	66	66	BINARY
8	80	66	BINARY
T	40	--	TEXT

Lines 36 to 44 of the program CORRESPONDENT contain the abbreviations and their associated values. You may wish to alter these lines to create your own abbreviations, although the most common usages have already been anticipated and provided for.

NEW FEATURES! (.40)

From time to time, various new features may be added to The Correspondent which are not described in the current manual. Your Correspondent diskette contains a special file entitled (surprisingly enough) NEW FEATURES! (.40) which will demonstrate the features not covered elsewhere in the manual. To view this file, boot The Correspondent and press '4' at the banner, and then press 'G' to get the file. When asked 'WHICH FILE TO LOAD ?' type in NEW FEATURES! (.40) exactly as shown.

** SCROLL MODE COMMANDS **

(^ indicates a Control character)

GENERAL SCROLLING / JUMPS WITHIN THE FILE:
(CMDS: <-, ->, L, ;, ^P, B, E, J)

The right and left arrow keys will scroll the text up and down, respectively. To move larger distances, the 'L' and ';' keys may be used. Note their analgous position to the arrow keys. To move many lines or pages, these keys may be used with the REPEAT key. For larger jumps within the file, pressing the 'B' key will jump to the beginning of the file. Pressing 'E' will jump to the end. If you press the 'J' key, you will be asked (depending on the address mode, see below) either what address to jump to, or to what line and page. Pressing RETURN alone will exit the jump routine if you are in the address mode. If you are in the line & page mode, enter a comma alone (,) to exit unaffected.

THE ADDRESS MODE / SETTING THE PG. OFFSET:
(CMDS: A, ^S)

When the program first runs, and is in the Scroll Mode, the line and page number of the Edit Line is indicated in the upper left corner.

                         L=1   PG=1

This would indicate the current edit line was on line 1 of page 1.

The only exception to this is when editing Apple DOS sequential text files. When editing these, only the line number is displayed. This is because these files are usually edited in the 40-column display mode where the lines are compressed anyway, and the page number is not applicable.

The address mode is toggled by the 'A' key. This will switch the display in the upper left corner between printing out the the line/page number, and the actual address in memory where that character is being stored. The pure address mode is something of an "extra" and is useful mainly for looking around at the raw contents of memory on your Apple. See the practice example on Viewing & Altering Memory later in this manual.

If you have loaded something other than the first file in a series of linked files however, the actual page number might be '11' instead of '1'. To adjust for this there is a PAGE OFFSET command. To use it enter Control-S (for Set) while in the Scroll Mode. The program will ask "PG. OFFSET?". In the case just mentioned, we would enter '10' as the offset. Now the line/page display at the top of the screen will be correct. All future jumps will also be done with this offset factor in mind.

LINE INSERT/REMOVE:
(CMDS: ^I, ^R)

To insert a blank line into the text, simply enter 'Control-I' as the command code. This will cause one blank line to be inserted at the edit line, moving the current edit line and all that follows down one line.

To remove a line of text, press 'Control-R' as the command. This will remove the current edit line from the text, moving everything below up one line.

BLOCK COPY/MOVE/DELETE:
(CMDS: C,M - ^B, ^E, ^D, ^X)

A larger aspect of the line insert/remove function is the block move. This allows you to move an entire block of text from one point in the file to another. When the move is done, the source block of text is inserted at the set destination, and disappears from the text at its old location.

To execute the move, press 'M' while in the Scroll Mode. An inverse M should appear at the top of the screen. You are now in a special sub-mode. The arrow keys will move you through the text, and the 'L' and ';' keys also still work. First set the beginning of the source block by pressing 'Control-B'. The words 'SOURCE BEG. SET' should appear at the top of the screen. Now set the source end by moving the edit line to the desired line and pressing 'Control-E'. The words 'SOURCE END SET' should appear. Now finally set the destination by positioning the edit line where you want the data to be moved to and pressing 'Control-D'. The words 'DESTINATION SET' should appear. There will be a momentary pause, and then the revised text will reappear.

If during the MOVE routine, you press 'Control-X' instead of 'Control-D' for destination, the entire block will be actually removed from the body of the text instead of moved. This can be used to remove a number of paragraphs from the text. The surrounding area will close in to fill the area left by the block deletion.

The block copy works in a very similar fashion. The only real difference is that the source block is not removed from the text after the move. To enter the copy mode, press 'C' while in the Scroll Mode. An inverse 'C' should appear on the status line.

There are a few fine points to this operation. First, the actual setting of parameters may be temporarily delayed by exiting the mode by pressing RETURN alone. As long as you do not do a line or character insert or remove, the basic parameters already established for the move will be remembered.

This is useful when you want to temporarily exit the MOVE mode so you can go to a specific line and page number. You can then re-enter the MOVE mode to finish setting your parameters.

This   also means that once the beginning and end of the source
have been established, the copy itself may be repeated many times
by just entering with the 'C' command, and then indicating the new
destination.   It is recommended that you work through the sample
exercises later in the documentation to get the feel for this.

                    FREEZING THE TOP WINDOW:
                         (CMD: ^W)

     Sometimes when entering data it is desirable to have some sort
of a heading at the top of the page. For example you might have
'month, day, year' as a header. As you move down through the text
though, this usually disappears off the top of the screen. To
avoid this you may make use of the window freeze option. To
freeze whatever data is currently at the top of the screen, just
press 'Control-W' (for window)   The program will then ask 'HOW
MANY LINES TO FREEZE?'. You have a choice in the range of 1 to 9.

     This will freeze that number of lines of text at the top of
the screen so that it will remain visible even as the remainder of
the text scrolls up and down. You will notice that the header
will remain synchronized in motion in terms of the horizontal
movement of the text.

     The window freeze is also useful when you want to type in some
particular information, while still keeping the text from an
earlier page in view.

                     SPECIAL DISPLAY MODE
                         (CMD: ^D)

     By pressing Control-D while in the Scroll Mode, you can com-
press text greater than 40 columns into a more readable display.
This compressed display is always 1/2 the normal width. For this
reason, page widths should always be set to an even number of
columns.   40, 66, 80, etc. are all acceptable. A value of 65 or
67 would not work as well.

     While in this mode, you can scroll through the text using
either arrow keys or the L and ; keys. To exit, press RETURN
alone.

SAVING & LOADING FILES
(CMDS: S,G,C)

SAVING FILES:

To save a created file, press the 'S' key while in the Scrolling Mode. The current diskette will be cataloged and the program will ask 'FILE NAME TO SAVE UNDER?'. If you change your mind and do not want to save at that time, pressing 'RETURN' alone will return you to your file. Entering 'C' for the file name will catalog a diskette again, useful if you want to check several diskettes for a particular file. If you enter a slash (/) as the file name to save under, the name of the file last loaded (or saved) will be used.

Normally, if there is more than one screen-full of catalog names, the listing will pause for each page, waiting for a key press before listing the next page of data. This is nice, but if the title you want is early in the catalog, it requires that you accurately remember the spelling of the title, since that information will be scrolled off the screen as the catalog continues. The Correspondent however solves this problem. If instead of pressing any key when the catalog listing pauses, you press 'RETURN', the listing will immediately end, thus allowing you to view that part of the catalog while entering the name. This modification will stay with your machine until you either turn off the machine, or re-boot DOS.

When files are saved, the range of material saved is from the beginning-of-file pointer to the end-of-file pointer. Thus, if you want to save just part of a file, scroll to the appropriate parts and set the beg. & end of file points.

In particular, when saving text files it is advisable to make sure that the end of file is in fact immediately after the last line of text to avoid saving out a number of blank lines to the text file. In general it is a good idea to always confirm the end -of-file point by pressing 'E' before saving any file.

IMPORTANT: If you get a DISK FULL error when attempting to save a file, you must assume that the file on the disk at that point has been destroyed by the partial save. YOU MUST either delete other files on the diskette to make room for the new save, or use another data diskette with sufficient room on it for your file. If the name you attempted to save under is still on the first diskette, you should also delete the file from that CATALOG.

A data diskette (with DOS removed - see section on special features) will hold approximately 20 pages of text done in the 66 by 66 format, stored in binary form.

In most cases, text files will be somewhat more efficient in terms of storage because spaces following 'return's are not stored. This is not to be taken as a recommendation to write files as text files where avoidable, but just a note on space usage on the diskette.

LOADING FILES:

To load a previously saved file, press the 'G' (for GET a file) key. As before, the program will catalog the current diskette, and ask for the file to load. Again, pressing 'RETURN' alone will terminate the multiple paging of the catalog function, or if on the 'FILE TO LOAD?' question, will return you to the Scrolling Mode without loading a file. 'C' will work here also.

LOADING IN TEXT FILES:

When loading in text files, you will always be asked how many records you would like to read in. This is to prevent problems with trying to read in a file that may be too long for the available amount of memory. The default on this question is to input every record in the file. If you should happen to try to input too many records for the available space, the program will give the message "OUT OF MEMORY" and return to the Scroll Mode.

Normally you can safely load text files up to 70 sectors or more in size.

One important aspect of text files is that each record or line of the file is terminated by a carriage return. When displayed on the screen, these will appear as a flashing 'M'. Also, if you are in the line/page mode for the upper left display, lines counted will be in terms of carriage returns, not actual screen lines. (However, the 'jump' command will still jump with respect to absolute screen lines.)

Usually when working on text files, 40 columns is a good setting, since the final appearance of an output file is not of real importance. (Such as when building EXEC files). This will conserve memory by eliminating unused spaces at the end of each line. In fact, if you have a really large text file that won't load at the 40-column width, you can even go to say 20 columns. This is a bit harder to view, but may make the difference between being able to load the file or not.

CHANGING FILE TYPE

Occasionally after working on a file of one type, you may wish clear the workspace and load a file of a different type. You could just re-EXEC CORLOAD and set the new values there, but if you care to, this short-cut is provided. Simply use the 'Q' command to do a soft exit from The Correspondent. Then just type in one of the following to change the value of the variable 'FM' (file mode) to the appropriate value.

        FM = 0   (for a binary file)

        FM = 1   (for a sequential text file)

After the change, just re-enter The Correspondent with the 'GOTO 185'. Remember, this will only change the type of file which can be loaded and saved. It will not alter the contents or formatting of the file in memory at that time.

CHANGING THE COLUMN WIDTH:

Once a file has been created at one particular column width, it is not very practical to try to convert it to another one, such as going from 66 to 80 columns. When switching from working on one file to another however, it may be necessary to change the workspace setting. Again, this may be done by re-EXECing CORLOAD, but this short-cut may be used.

Use the 'Q' command to do the soft exit, and then type in:

POKE 249,n

where 'n' is the new column width you want. For instance, if you were working at a column width of 40 and wanted to go to 66, you would type in: POKE 249,66

Then place The Correspondent diskette in your drive and type in: EXEC PW   (a special file for changing Page Width)

A number of prompts will appear, and finally the workspace will reappear at the new width. Any file left in memory will applear to be disarranged, so usually you will want to clear the workspace (Ctrl-Z) before using this function.

CONVERTING A BINARY FILE TO TEXT

If you wish to save a file you have created in the binary mode to a text file (for instance to send over a phone line with ASCII EXPRESS II or to use in the FORM LETTER DRIVER) just add the suffix .TEXT to the name you want to save the file under. The file will be automatically converted to a text file as it is saved, as evidenced by the 'T' preceeding the catalog title, and the word .TEXT at the end of the name. This will not in any way affect any binary file that you may have saved under the name not bearing the .TEXT suffix.

If you want each line in the file right justified, you will
have to turn on the justify mode by placing a flashing JF on one
of the early lines of the file, since the justify question is not
asked during a .TEXT save. See the section on printer output if
unsure of the justification operation and/or use of the JF flag.

CONVERTING A TEXT FILE TO BINARY

Converting text files to binary is more tedious, and generally
not very practical, but it can be done. Basically what has to be
done is to: 1) Load the text file as you normally would, 2)
exit with the 'Q' command and change the variable FM to FM=0.

3) Re-enter with the GOTO 185 and finally 4) use the FIND
routine to replace every flashing 'M' (carriage returns) with a
blank space.

Additionally, if the text file was done with appearance in
mind, such as in letter, you may have to load the file at a width
greater than it was originally done in. (To allow for the extra
carriage return at the end of each line.) For instance a width
of '67' might be needed for a text file created at '66'. Like I
said, not fun, but it can be done.

Also, you may wish to see Practice Exercise 12.0, presented
later in this manual.

SETTING THE BEGINNING & END OF FILES
(CMDS: ^B, ^E)

Much of the file handling by The Correspondent uses two
pointers which indicate the beginning and end of the file being
worked on. Any file saved is in terms of these points, and the
editing functions such as insert, delete, move, copy, etc. all
make use of these same indicators. The beginning-of-file point is
always set automatically when you first start the program. It
does not change after that point unless deliberately altered by
the user. The end-of-file point on the other hand is more mobile.

In normal use, the end-of-file point is incremented as you
type in any new text. Whenever you type something in, the program
checks to see if the current end-of-file is before that cursor
location. If it is, it adds 256 to your current position (about
3-4 lines) and sets the end-of-file to that value. Therefore, if
you jump to some relatively distant (from the beginning of the
file) point and type in anything, the end-of-file will remain at
that area, even if you return to the earlier part of the text for
the remainder of your data entry.

To manually set the beginning-of-file, just position the edit line at the desired point. Then press Control-B (for beginning). You will hear a double beep verifying that the beginning has indeed been reset. From then on, all file saves will begin at that point in the file.

Setting the end-of-file is done in a similar way. Again just position the edit line at the desired point. Now press Control-E (for end). The double beeps will confirm the operation. Remember that the end-of-file point will only remain at that point as long as you do not enter text beyond that point (or of course manually reset it again). This is of importance not only in terms of what is saved out to disk, but in terms of what amount of text is carried along during block moves, etc. Controlling this point with this knowledge in mind can be very handy at certain times. See the section on practice exercises for examples of this.

THE FIND ROUTINE
(CMD: F or ESC,F)

This is in terms of use, one of the most useful routines within The Correspondent. To use it, you merely press 'F' (for Find) while in the Scroll Mode. At the top of the screen you will be asked what string you wish to search for. Entry of this search string is done in the same way as normal text entry. That is to say that the upper/lower case shift functions and normal/ inverse/flashing toggles still work.

After the string is entered, press RETURN. There will be a very brief pause, at which point the screen will refresh with the word sought on the edit line, with the flashing cursor resting on the first character of that word. At that moment you are within the Edit Mode, so that you may make any changes or additions to the text at that point that you wish. When you are done modifying that area, simply press RETURN. Instead of clearing to the end of the line as is usual for the Edit Mode, no clearing will be done and the search will automatically resume for the next occurrence of the search string. This is also useful when you do not want to alter the first 'n' occurrences of a string. Just press RETURN as each occurrence is found to skip to the next one. Entering Control-X will exit the Find/Edit Mode and return you to the Scroll Mode. (Use ESC, RETURN to exit in pure Edit Mode.)

If no find is made, or when you press RETURN after the last find, the screen always returns to where you started the search from.

As an additional aid, the Find routine will ALWAYS stop at a Control-Z (flashing Z) in the text. This is the same character used for an unconditional stop by the printer routine. This feature is useful when designing files for use by other persons where you want to give instructions during a data search, such as to switch diskettes, or to enter a new search string.

This is how the database function of this program is utilized. Any information within a file can be searched for and found very quickly. This is very useful for writing down information within files just as you would on a piece of paper. As long as report generation is not essential (i.e. performing math functions on the data or just printing out selective portions of it via logical functions.) this is an excellent way to store what would normally be delegated to scraps of paper. Using The Correspondent, all information is reduced to a few diskettes. If you take advantage of this idea, you might set aside several classified diskettes such as 'letters','personal files', 'business files', etc.

In this way you can quickly and efficiently retrieve and search any files you may wish to create. See the section on Practice Exercises: Database Applications for a further discussion of this aspect of The Correspondent.

DISK SEARCHES:

In some instances you may wish to be able to search multiple files for the occurrence of a string. Because any corrections you might make during this sequence are not automatically saved, this mode is useful primarily for database applications. Because the search itself is nearly instantaneous, the only time factor will be the time required to load into memory each file in the series.

To initiate a disk search, press ESCAPE first, and then the F key. In this case, when the search of the current file is finished, the program will look for the next file name in the series, as indicated by a "file link" name at the end of the file.

If you are unsure of how to link files, see the section on this technique later in the manual (listed in the Table of Contents).

FILE CASE CONVERSION
(CMD: ^Y)

If you have produced a number of files without a lower case display chip (i.e. using inverse for capital letters, normal for lower case) and then later upgrade your system, it will be desirable to convert the display format to your new system capabilities. To do this there is a built in 'case convert' function.

To use this, press Control-Y while in the Scroll Mode. The program will ask 'I OR L?'. This refers to whether you want the lower case representation converted to inverse ('I') or the inverse representation converted to lower case ('L'). The latter will probably be the most likely to be used. A quiet exit from this routine (if you enter it accidentally) can be accomplished by pressing RETURN alone.

HELP/NOTE PAGES
(CMDS: H,^N,N - S,E)

Another feature of The Correspondent is the ability to store a page of notes for future reference. This is done by entering the text of the note as you normally would. When you have created the note page, position it on the screen exactly as you want it to appear when retrieved. Then press 'N' (for note page) to save the image out to disk. You will be asked what name to save it under. It is recommended that you use short, easy to remember titles, since in the interest of speed, the diskette will not be cataloged during retrieval.

One of the most effective uses for this is to store a list of your printer control characters such as the codes for elongated characters, underlining, etc. This way the information is always available when you want to imbed these special codes in your text.

If at any time during the operation of The Correspondent, you should forget some of the command codes, just press 'H' (for Help) while in the Scroll Mode. At the top of the screen the prompt 'S/E/OTHER?' will appear. If you want to see the list of scrolling commands, press 'S'. 'E' will display the Edit Mode commands.

If you have previously saved your own note page, enter the name under which the page was saved. If you change your mind, pressing RETURN alone will return you to your file.

After the note page retrieval, pressing RETURN will refresh the screen, thus erasing the help or note page when you are done.

TRANSFERRING NOTE PAGES

Occasionally you may wish to move a note page from one diskette to another. This is most easily done by calling up the note page, and then immediately re-saving it to the new diskette with the 'N' command.

For example, to transfer the Scroll commands you would:

1) Place the Correspondent diskette in the current drive and from the Scroll Mode press H for Help. Then enter 'S' and press RETURN. The note page should then appear.

2) Replace the Correspondent diskette with the diskette you want the help page on.

3) Now press 'N'. When it asks the title, enter 'SCROLL' and press RETURN. When the cursor returns the transfer is complete.

To transfer the Edit commands, enter 'E' instead of 'S' in step 1) and use the name EDIT in step 3).

For your own notes, use the appropriate names of your own pages when asked in steps 1) and 3).

Please note that the help and note pages always have the characters HELP. added to them when you save a file. Similarly this prefix is expected by The Correspondent when retrieving the page.

DO NOT use this prefix when saving or retrieving your files. The program will automatically add it when accessing the files. This mention of the prefix is made only to save you from any confusion when examining the CATALOG of your Correspondent related diskettes.

Note pages cannot be normally loaded and viewed as you would your own data files. They can only be loaded via the Help command. See the next section on editing note pages for details on how to get the information into a "standard" format.

EDITING NOTE PAGES

After saving a note page, you may want to edit the contents at some later time. To capture the note page into the workspace, use the command Control-N. For example, if you wanted to edit and re-save the HELP list for the Scroll Mode, you would:

1) Make sure the top-of-file line is out of view above the top of the screen. This is because the incoming note page will be captured into the text beginning at the top of the screen. You want to make sure you don't put data before the beginning of the workspace.

2) Place the Correspondent diskette in the current drive and press the H key.

3) Enter 'S' and press RETURN to retrieve the help page.

4) When the page is retrieved, press Control-N. The page is now captured into the workspace. You may now edit the page as you would any other text.

5) When ready to save the new page, place the diskette you want the new page on into the current drive. For this example, it is recommended that it NOT be the master Correspondent diskette, since this would overwrite the original HELP page).

6) Position the note page on the screen exactly as you want it to appear when retrieved, then press N (Scroll Mode) and give it a name. The page will then be saved. (The 'S' command IS NOT used to save note pages.)

SUMMARY OF HELP/NOTE PAGE COMMANDS:

N   Saves current screen image as a note page. You
        supply the name.

^N   Captures current screen image into workspace. Be
        careful not to overwrite top-of-file line. Used
        to recapture existing note pages.

H   Help request. Program responds with S/E/N?

S   Scroll Mode command list.

E   Edit Mode command list.

OTHER   User created note page. You must give name of the
        page you want to retrieve.

EXECUTING DOS COMMANDS
(CMD: D, ^A)

If you wish to issue any DOS commands from The Correspondent
(such as CATALOG, DELETE, etc.) press the 'D' (for DOS) key while
in the Scroll Mode. The current diskette will be cataloged, and
then you will be asked what command you want to execute. Enter
the command and press RETURN. The command will be executed, and
you will usually be returned to your file. If the command used
was 'CATALOG' however, the image will be held until you press
RETURN before returning to your file. This option is useful to
lock or delete various files while still in the program. As an
added convenience, pressing Control-A will switch the current
active disk drive back and forth between Drive #1 and Drive #2.
You will hear one or two "beeps", as appropriate, depending on
which drive is enabled.

If you have two disk drives, each with its own controller
card, then COR II can be modified by inserting The Correspondent
diskette and typing in: EXEC SLOT MOD   This will configure the
Control-A command for a Slot 5/Slot 6 switch. The mod may be
reversed by typing in: EXEC DRIVE MOD

ERASING THE ENTIRE FILE
(CMD: ^Z, Y*)

If you want to erase the entire file, such as before loading
another file or starting a new one, enter Control-Z (for 'ZAP!!')
as the command code. The program will double check your intent to
carry out such a drastic action. If you then insist that it
proceed, it will clear the file between the beginning and end of
file points. It will then set the End-of-file point equal to the
beginning point. This is equivalent to re-initializing the file.

These pointers may be selectively set by the user to clear
just a large block within the file, such as several pages, and
then the pointers reset to the actual values after the clear.

If you have linked a number of files together using the File Link described later in this manual, it is occasionally convenient to be able to go to the next file in the series. By replying 'Y*' to the question "CONFIRM CLEAR? (Y/N)", the current file will not only be erased, but the next file in the series loaded, if so indicated by a file link flag at the end of the file.

EXITING THE CORRESPONDENT
(CMDS: Q,X)

TO END PROGRAM: (X)

Press 'X' (for 'EXIT') in the Scroll Mode. It will then ask "CONFIRM? (Y/N)". A 'Y' response will then end the program. Any other response (including RETURN alone) will return you to your file. If you should still happen to exit and then decide you want to go back to your file, you can re-run CORRESPONDENT by going through the EXEC CORLOAD procedure, pressing the space bar at the banner, and then replying 'N' to the "NEW FILE?" question.

FOR TEMPORARY QUIT: (Q)

If you wish to temporarily exit The Correspondent, press 'Q' (for Quit). This will exit the program without losing your file. This is useful for changing file types as described earlier, or for executing commands not normally within the ability of the program.

As long as you don't define new variables or alter program lines, you may re-enter the program with all of your file intact by typing in:

GOTO 185

The workspace should re-appear just where you left it when you used the 'Q' command.

One suggested use for the Q command is for doing many DOS commands, such as unlocking or deleting many files. This could be done from within The Correspondent, but for more than 2 or 3 files it's usually easier to exit with the 'Q' command, perform the necessary changes directly, and then return to your file with the 'GOTO 185'.

IMPORTANT NOTE:

Remember that the modified CATALOG function will remain part of your operating system until you either power down or re-boot DOS. This modification resides in the area normally taken up by the INIT routine. It is therefore not possible to INIT new diskettes without re-booting DOS.

** EDIT MODE COMMANDS **

The Edit Mode is entered by pressing the space bar once while in the Scroll Mode. You will be aware of the transition because the word 'SCROLL' in the upper right corner will change to 'EDIT'.

While in the Edit Mode, text is entered simply by typing in the desired characters. Whenever you press RETURN the line will be cleared to the right margin and if in a column width greater than 40, the window returned to the left edge. If you do not want to clear to the end of the line, or if you are in a text file and do not want a carriage return placed there, press ESCAPE before pressing RETURN. To exit the Edit Mode, enter Control-X as the command code. While in the Edit Mode, all commands are executed by using control characters, as described in the following sections.

The following discussion will assume a page width greater than 40. If a width less than 40 is being used, the only difference will be that all of the text will always be visible, and the left-right screen scrolling will not take place.

BASIC SCREEN/CURSOR MOVEMENTS
(CMDS: ^J,^K, <-, ->, ^P)

On the usual text page size of 66 columns by 66 lines, the screen may be thought of as a 40 column by 24 line window through which the text is viewed. Although all of the text is never visible at once, any portion of the text may be viewed by moving the window to the appropriate spot.

Scrolling the text up and down has already been mentioned in the earlier section on the Scroll Mode. Since in the Edit Mode the arrow keys are used for moving the cursor, scrolling up and down (other than the automatic line feeds done by a RETURN) is done with a Control-J to move the text down one line, and a Control-K to move the text up one line. Because a Control-H is equivalent to the left arrow, and Control-U to the right arrow, you will notice that if you place the little finger of your left hand on the CTRL key, 4-directional motion of the cursor and text can be accomplished by just depressing the H & U and J & K keys with just your index finger of the right hand.

The other major text movement is from left to right. This is automatically done whenever the cursor reaches either the left or right margin, or when it crosses over the half-way point in the middle of the text. This action can be done manually by pressing Control-P while in either the Edit or Scroll Modes.

If for some reason you wish to scroll the screen left or right one space at a time, enter Control-A as the command code. An asterisk (*) will appear at the top of the screen to indicate you are now in the screen-scroll Mode. Now depressing either of the arrow keys will cause the screen to move to the left or right instead of the cursor. Pressing Control-A a second time will restore you to the original mode. Control-A works as a 'toggle', switching modes each time it is used.

This mode is useful primarily for checking the appearance of the center of tables or charts, or other semi-graphic type text.

Entering Control-P will restore the screen to the closest margin if the special left-right scrolling has left it in an un-usual position. This mode is automatically cleared when you exit the Edit Mode.

CHARACTER INSERT & REMOVE
(CMD: ^I, ^R)

When in the Edit Mode, pressing Control-I will insert one space at the cursor each time the key is pressed. All text following this point will move to the right one character. Words which are at the end of the line will begin to move onto the next line in the file.

Pressing Control-R will remove the character at the current cursor position from the text, causing all following characters to move to the left one space.

Because both insert and remove functions move text with respect to the first blank line, you may wish to occasionally insert a temporary blank line to restrict the motion to a given set of lines. When finished with the editing, just remove the extra blank line to restore the text to its original appearance.

SHIFT FOR UPPER/LOWER CASE
(CMD: ESCAPE)

While entering text, pressing ESCAPE twice will switch and lock cases. If you were in lower case, you will shift to upper. If you were in upper case, you will change to lower. Pressing the ESCAPE key once at any time will cause the next and only the next character to be in the converse case. Thus, if you are typing along in lower case and wish to capitalize the first letter of the next word, just press the ESCAPE key once to make the first letter a capital.

Remember that if you do not have the lower case display chip, lower case letters will be displayed in normal text, and capitals in inverse.

SETTING & CLEARING TABS
(CMDS: ^S, ^T, ^Y)

When The Correspondent first runs, the tabs are automatically set to every 10 spaces. Pressing Control-T (for Tab) will cause the cursor to jump from where it is to the next occurring tab stop.

To back up, just press the left arrow key before tabbing with the Control-T command. This will reverse the tab direction until a key other than Control-T is pressed.

Tab stops may be set by entering Control-S (for Set). If the tab is set you will hear one beep. If the tab has already been set at that position, then Control-S will clear that tab in which case you will hear two beeps. Entering Control-Q clears all previously set tab stops. If you should clear the tabs accidentally, exit first with the 'Q' command, the type in: EXEC PW
The file will re-appear with the tabs reset. This will not harm any file that might currently be in memory.

Tab stops are displayed on the dotted line at the beginning of the workspace by '+' marks. If you wish to keep this on the screen, this line may be frozen on the screen by putting the cursor on line #10 (Scroll Mode) and press Control-W, followed by entering '1' (carriage return). For more insight on freezing portions of the workspace, see the section on Freezing the Top Window, in the Scroll Mode commands portion of this manual.

NORMAL/INVERSE/FLASHING TEXT
(CMDS: ^N, ^W, ^F)

If you have a lower case display board, then as a general rule all the text you enter will be in Apple's "NORMAL" mode, that is, not inverse or flashing. These characters can be generated however by the commands discussed below. Whenever you enter the inverse or flashing mode, you can always return by pressing Control-N (for Normal).

You may enter the inverse mode by entering Control-W (for white) as the command code. Control-N will restore text output to normal text. Inverse characters always print out as capitals.

NOTE: If you do not have a lower case display board, normal text will always be interpreted as lower case letters, with inverse characters representing capitals. It it not necessary to use the Control-W/N commands to move between upper/lower case. This is done with the ESCAPE key as described elsewhere in the manual. The ^W/N commands are provided as an overide function, or in the event that you have the lower case mod in effect, and still wish to use inverse text in your file.

The flashing mode is entered by using Control-F (for flashing) as the command. In all configurations, alphabetic flashing characters are converted to control characters when output. Numbers, etc. go out as normal text. Control characters are usually put in the text to control various operations of the printer. Note that control characters are never visibly printed by the printer.

CENTERING A LINE OF TEXT
(CMD: ^C)

At any time you wish to center a line of text, just enter Control-C (for Center) as the command code. This will automatically center the characters on that line.

For printers that offer elongated characters, centering text will have to be handled a little differently. For most cases it is usually sufficient to type the text in so that the last character of the title, etc. is direcly below the mid-page asterisk (on dotted line at beginning of file). This may occasionally take a bit of adjustment, depending on the title and page width.

Remember when centering text that control characters do not print out, thus you will have to move the centered title one space to the right for each control character to the left of the title.

OPTIONAL CHARACTERS
(CMD: ^O)

Generating the characters [ ] \ _ and <ESCAPE> is possible by using the Control-O key in the Edit Mode. The 'O' can be thought of as standing for 'Optional character function'. (Or as related to the printer Output command 'Ctrl-O' if you prefer.)

These characters are generated by entering Control-O and then immediately pressing either the < > - / or ESCAPE keys. What you get in your text is shown here:

APPLE KEY		UPPER CASE		LOWER CASE	
60	<	91	[	123	{
62	>	93	]	125	}
45	-	95	_ (underline)	127	(rubout)
47	/	92	\	124		
27	<ESCAPE>	27	<ESCAPE>	27	<ESCAPE>

The number to the left in each column is the ASCII code number for each character.

Remember that ONLY the VERY NEXT key pressed after the Control-O will be treated as an optional character. Use the Control-O/special key again, or the Control-D described next when more than one special character is desired.

Note that although Control-O is not required, a tilda (~) is generated by entering a lower case shift-N (^).

These characters are useful not only for their immediate value, but also because many printers recognize certain escape codes which can only be put in the text by using these special characters. See your printer manual for more details on escape sequences.

DUPLICATING A CHARACTER
(CMD: ^D)

When using the optional characters such as the underscore, typing several in a row would ordinarily be inconvenient. To alleviate this, the command Control-D (for Duplicate) repeats the last character actually printed. This makes it easier to produce long underscore sequences for forms. Also, because cursor moves do not "erase" the last character printed, the repeat even works when typing in vertical columns of special characters, such as when creating semi-graphical text.

LEFT MARGIN SET
(CMD: ^L)

When entering columnar data and indented paragraphs such as outlines, it is useful to have the cursor automatically tab to some particular position after each RETURN. This can be set within the Edit Mode by placing the cursor at the desired position and pressing Control-L (for Left margin). This new position is indicated by a carat (^) above the beginning-of-file line.

From now on the cursor will always return to this position when you press RETURN. To reset this to column 1, first turn off the word-move if necessary by pressing Control-E (asterisk will be "off"). Then use the left arrow or reverse tab to bring the cursor back to column 1, and press Control-L again. You may then press Control-E once more to turn the word move back on (asterisk "on") if you wish. The Control-E can almost be thought of as a 'Margin Release' in this instance. Applications for this feature are discussed in Practice Exercises: Columnar Text (Charts and Indexes).

EXITING THE EDIT MODE
(CMD: ^X)

Pressing Control-X at any time while in the Edit or Find Mode will exit that mode and return you to the Scroll Mode.

Multiple files can be linked together on The Correspondent by putting the name of the next file in the series at the end of the file, preceded by a special pair of control characters. This is used to link files so that an entire document can be printed out in one run. It is also used to tie together multiple files for searches when using Correspondent files as a database.

Linking is done by putting the flashing characters 'FN' (for File Name) immediately followed by the name of the next file to load and print out. This has the general appearance of:

FNNEXT FILE

Where 'FN' is in flashing text and is the file link flag, and the words 'NEXT FILE' form the title of the next file (not in flashing) to be output in the series. THE FILE NAME MUST ALWAYS BE IN CAPITAL LETTERS OR 'FILE NOT FOUND' ERROR WILL RESULT.

It should be emphasized that the 'FN' MUST be on the last line of the file. To verify that all is correct, when you press E in the scroll mode, the cursor should appear directly below the flashing 'F' in the 'FN'. If this does not happen, manually set the end-of-file point using the Control-E (Scroll Mode) command.

This same link can be used by the Disk Find routine and the Control-Z file clear routines. For additional information see the section on these respective functions.

Another special feature can be invoked during printouts to display the name of the file being currently printed. When the Control-O command is used, the last question asked before the printing starts is "JUSTIFY (Y/N) (DEF=N)". Also, by adding a asterisk to your response (Y* or N*), the name of each file will be printed as the first line when printing linked files. This is handy when you edit the finished document and aren't sure in which file in the series a particular page was found.

1.0 DATABASE APPLICATIONS

    The Correspondent may be used as a database program where the
files created replace the various scraps of paper that usually
accumulate with their various messages, etc.

    As a first example, run The Correspondent in the 40 column
width and load the file 'DATABASE.40'. This is a sample file of
all the articles in the January, 1980 issue of the magazine 'CALL
A.P.P.L.E.'. An actual file would contain the entire year of
issues, or perhaps even several years.

    The general format of this particular file is to list the
title of the article and the page on which it is found. In some
cases a parenthetical note as to the subject of the article is
also listed.

    Suppose you were interested in all the articles on graphics.
To find all such articles you would press 'F' for Find while in
the Scroll Mode. Then enter 'GRAPHICS' as the string to find and
press RETURN. The screen should immediately refresh with the
cursor on the 'G' of 'GRAPHICS' in the article 'UNDERSTANDING
HIRES GRAPHICS'. To go to the next occurance, just press RETURN
alone. If there is a next occurance the screen will refresh
again with the cursor on the new item. If no occurance is found,
the cursor will return to the left hand margin in the Scroll Mode.

    Once you have located the item you were looking for, entering
Control-X will exit the Find/Edit Mode and return you to the
Scroll Mode. (ESC, RETURN will exit to the Edit Mode.)

    The database included could be made more memory-efficient by
removing blank lines between titles, and/or encoding the title
data in a more concise way. Usually you can easily hold at least
one year of a given magazine, and often more.

    Now let's look at the phone list variation on this theme. Use
Control-Z to clear the work area. Now jump to the beginning and
load the file 'PHONE.40'. This is a list of a few manufacturers
of items for the APPLE II.

    The best part about this type of a database is that we are not
limited to searching by first characters or specific fields. You
just enter WHATEVER you want to find. Looking up a particular
name is very straight forward. Just enter the search string as
described above, pressing RETURN for any finds that are not the
one you're looking for. (Such as if you entered 'JOHN' as the name
to look for.) An occasion where this is handy is on such things
as a telephone bill. If you are billed for calling a number you
do not remember calling, just ask the program to find that number
(assuming you have entered your own personal phone list into a
file) and then see what name accompanies it.

Notice that looking up someone's phone # is easy because you can enter either their first or last name, or even just part if you're not sure exactly how to spell it.

The ability to enter text in normal, inverse and flashing characters also makes keying possible. For example, suppose you wanted to call everybody on your list who was in the local Apple User Group. Press 'F' and when it asks what string to find, do the following. First, press Control-W, or if you don't have the lower case modification, press ESCAPE twice, to enter the inverse mode. Then enter 'AG' as the search string and press RETURN. The first find will be for John Doe. You can see an inverse 'AG' has been used to code this name. Pressing RETURN again will go to the next person, Mary Smith. This technique allows you to use your phone number database to access groups as well as individuals. (You will probably want to restore the text to normal with a Control-N or ESCAPE key shift when done.)

The more creative you can be in your coding and formatting of the data, the more powerful and useful the resulting file will be.

Although The Correspondent is not directly set up to handle data in the usual record & field format, this can be duplicated to a certain extent. For example, re-run The Correspondent using the 40 column width and 5 as the number of lines per page. Now when the PHONE.40 file is loaded and viewed, you will notice that the 'PAGE #' corresponds to what would normally be called the record number, and each line number is equivalent to a field number. The part that calculates line & page can be found on line 210 in the program 'COR II'. Also notice that the routines start-ing at line #1700 have the express function of taking the lines stored in memory and converting them to actual Applesoft strings (i.e. IN$).

The routine called FRMT (for format) takes the part of memory pointed to by locations 26 & 27 and formats it into a string, justifying, converting inverse to capitals, normal to lower case and flashing to control characters, depending on which bits of location 227 are set true. This routine may be used by the user along with the pg./line calculation to allow The Correspondent to handle record/field format data. Because The Correspondent was designed primarily as a text processor, this possibility is mentioned only as a potential, rather than specifically put in the package.

2.0 USING FORMS

It is also possible to not only design, but fill out forms using The Correspondent. To see an example of this, clear the workspace with a Control-Z, go to the beginning of the file, and then load the file 'AUTO MEMO.40'.

This form was done with the phone message memo form in mind. The general idea for this type of form is that when someone calls, this supplies a ready made note pad which includes the more common messages. Now let's see how easy it can be to enter data onto such a form using The Correspondent. You will notice that at the beginning of each data field there is an inverse space character. We will use this as a target string for the find routine. It has the advantage that if we want to print out the form, the inverse spaces do not show up on the print-out.

To quickly fill out a form designed this way, press 'F' for the Find Mode. Then switch to the inverse mode with either the ESCAPE key or Control-W. Now just enter one space as the search set, and before pressing RETURN, go back to normal with a Control-N (if necessary).

After you do press RETURN, the program will jump the cursor to the first character of each field. Try entering some sample information such as name, date, time, etc. on the form. All the Edit commands (shift, etc.) apply while in the Find/Edit Mode, so you may enter data at the point of each find, just as you normally would while in the Edit Mode. If you want to skip over a particular entry, just press RETURN. The Correspondent will automatically jump to the next item on the form. For the action choices at the bottom, just press RETURN until you get to the comment you want, then enter an 'X' or equivalent to mark that box.

This same Find/Edit technique with the inverse markers can be used to efficiently fill out any kind of form. After the form is completed on the computer, it may then be printed out. If at any point you wish to stop altogether, remember Control-X terminates the Find/Edit Mode.

3.0 JUMPS TO MARKERS IN THE FILE

The preceding may have suggested to you a way of jumping to set markers within a file. If there is some part of the text that you wish to be able to jump to there are two basic ways. The first is to just remember either its absolute address or its line and page position. The other way is to use the inverse and flashing characters. For example, you could put an inverse '1' in the file. Now whenever you want to get to that part of the file quickly, you just enter an inverse '1' as your search string, using the Find/Edit Mode to quickly locate it.

REMEMBER: Flashing characters will be sent to the printer as control characters. Characters such as numerals will go out as their normal counterparts in either flashing or inverse modes.

4.0 COMPARING SECTIONS OF TEXT

For this exercise, keep the PHONE.40 file in memory. To gen-
erate our sample text, we will use the copy routine. First press
'B' while in the Scrolling Mode to jump to the beginning of the
file. What we will do is copy the data for the Apple Computer Co.
to the end of the file, and then verify that the copy was
accurate. To enter the copy mode, press 'C'. The cursor should
already be on the 'A' of 'APPLE'. Press Control-B to set the
source beginning point. Now use the right arrow to advance the
cursor to the line beginning '(408)... ' and press Control-E to
set the source end.

Our objective is to copy the block to the end of the file. We
could use the right arrow and repeat key to move to the end, but
there is an alternative method. Press RETURN to temporarily exit
the copy mode. Then press 'E' to jump to the end of the file, and
put the cursor on the line right after the dotted line ending the
file. If you do not execute a character or line insert or remove,
the program will remember all the parameters for the copy. When
we re-enter the copy mode by pressing 'C' again, we need only to
press Control-D to set the destination. There will be a pause,
and the screen should refresh with the block properly copied.

Now to the actual object of this exercise. It happens that
the window freeze command can be used to aid in comparing two
blocks of text. To verify that the block has been accurately
copied, put the first line of the second block of text directly
below the status line. Then press Control-W and freeze one line.
Now jump back to the beginning. (press 'B'). The cursor should
again be on the 'A' of 'APPLE'. To do the comparison, first
confirm that the line at the top of the screen is identical to
the edit line. Now press Control-R to remove that line. The line
should disappear and be replaced by the one below it. You should
also notice that the line at the top of the screen has also
changed to the new line. Again confirm the match, pressing
Control-R until all of block #1 has been removed. The reason this
works is because when you freeze a line at the top you are not
actually freezing the display of a fixed line, but rather just a
particular position in the file.

5.0 COLUMNAR DATA (CHARTS & INDEXES)

Often when preparing charts or tables, the same pattern of
characters must be repeated on several lines. A common example of
this is the table of contents, such as is found at the beginning
of this documentation.

Move to a clear area of the file and let's see how this is
done. For our example, first type in this line:

"item. . . . . .0"

This is the basic form of each line in an index. Rather than retype the dotted line many times, we will use the copy routine to save some work. First enter the copy mode by pressing 'C'. Now set the cursor on the 'i' in 'item' and press Control-B. Scroll down one line and press 'Control-E'. Remember that Control-B always sets the source beginning to the first character of the edit line, and Control-E to the last character.

Finally, scroll back up one line to 'item'. Press Control-D for destination to finish the copy. The lines will be copied and inserted in front of themselves. (This is why the blank line was included in the source, since a blank line accompanies each dotted line.) Because the source beginning and end are remembered, we can do this many times to create the table. Try it by pressing 'C' followed by Control-D several times.

Once we have copied a few of the original lines there is also the option of resetting the source end pointer and copying say, four lines at a time. This really makes it go fast!

All that remains now is to type over the 'item' and '0' with what we want. Control-T for tab could be used to skip from left to right without altering the dotted lines, but there are two better ways to enter columnar data.

USING THE FIND/EDIT MODE:

The first way is to use the Find Mode. Enter 'item' as the search set. Then at each occurance, type in the appropriate text. Repeat again using '0' as the search set to fill in the page numbers. When doing any kind of columnar data you can construct the basic rows with search characters on one line, repeat the line to create the columns, and then use the search function to fill them in.

USING THE LEFT MARGIN SET:

The other way is to set the left margin and fill in the columns vertically one at a time. In the case of the index you would first type in the entry for each line at the word 'item', then just press RETURN to fill in the next line. When you've completed the left side, exit the Edit Mode and scroll back up to the top of the page. The press the space bar to re-enter the Edit Mode, and put the cursor on the '0' of the first line, and press Control-L to set the left margin. You'll hear a beep confirming this has been set. Now when you press RETURN the cursor will automatically return to this position to enter successive lines.

6.0 BLOCK MOVES TO SWAP LINES OR PARAGRAPHS

The copy routine literally copies a block. Because the move routine actually removes and re-inserts the block, swapping concurrent sections of text is easy.

First we'll swap two lines in the PHONE.40 list. Go to the beginning of the file and press 'M' to enter the move routine. Put the '10260' of the address on the edit line and press Control-B and while staying on the same line, Control-E. Now put 'APPLE' on the edit line and press Control-D. The lines should exchange places. This is because on a move the data is always inserted just before the edit line, and everything from that point on moved down. This technique therefore would not have worked in the reverse direction, i.e. using 'APPLE' as the source block. You must move the 2nd block to in front of the 1st to accomplish the swap.

To exchange paragraphs, we just enlarge the source block to encompass a number of lines. Put 'CORVUS...' on the edit line and press 'M' followed by a Control-B. Move to put the phone # '(408)...' on the edit line and press Control-E. Now move up to put 'CALL A.P.P.L.E. - MEMBERSHIP...' on the edit line, and press Control-D. The two records will exchange places.

NOTE: Remember that block moves require as much free space between the end of the file and the end of the workspace point as the size of the block to be moved. Attempts to move blocks larger than this will result in a NO BUFFER AVAILABLE error.

7.0 MERGING FILES

To merge files, put the edit line wherever you want the next file to load in at. Then go through the loading procedures.

Remember that this will overwrite whatever data might already be at that point. If you are inserting a small amount of text, it may be most efficient to load it in at the end of the file and then use the move routine to put it where you really want it.

8.0 VIEWING & ALTERING MEMORY:

So far in all our operations with The Correspondent, we have fairly well stayed within the boundaries of the normal workspace. We can however use it to view the internal workings of the Apple.

A few examples: Run The Correspondent at the 40 column width. Then do a jump to the address 39500. The area displayed on the screen now is the string storage area. By alternating pressing the left and right arrows, you should be able to see new inverse 'U's and 'H's added to the area. This is because the arrows correspond to Control-U and -H. Then type in a line or two of text back in the normal workspace, and return to the string area. You should see the text written backwards here. Also of interest is to run The Correspondent without clearing the file after running some other Applesoft program that uses a lot of strings. (such as a database, etc.) You can see all the old data still in memory and how it is stored.

Another wrinkle on this is the ability to modify DOS commands. This time jump to 43600. Just above the edit line you will see all the DOS commands. Notice that the last character of each command is in normal text, while the rest of the word is in flashing. Now for the trick! Set the end-of-file pointer with the Control-E. Because so much of the text is in the flashing mode it would be difficult to try to edit the material directly. The way to do it is to now enter the Find Mode and enter the word 'CATALO' in flashing text, and return to the normal mode with Control-N before hitting RETURN. The screen will refresh with the cursor on the 'C' in 'CATALOG', but it won't be visible because everything around including itself is also flashing. However, we can continue by just pressing 'C' once (you should see the 1st character of the word 'CATALOG' change accordingly). Now press Control-X to exit the Edit/Find Mode and press X to exit from The Correspondent. Now whenever you type in CATALOG, you'll get a 'SYNTAX ERROR'. 'C' alone will catalog the disk however.

9.0 JUMP TO END OF LINE

While entering text, it is occasionally useful to be able to jump directly to the end of the current sentence being edited. If the word move is on (asterisk "on"), then this can be done by pressing ESCAPE, the RETURN, and then the left arrow. To demonstrate, type in this sentence:

This is a test of a feature of The Correspondent.

After completing the word "Correspondent", use the left arrow or reverse tab to move back to the word "feature". Now press ESCAPE, and then RETURN. The cursor should now be on the next blank line in the first column. Now press the left arrow. The cursor should immediately move the the second space after the 't' in "Correspondent".

10.0 AN EASIER INSERT FOR A CHARACTER OR TWO

If you have to insert just a character or two in the middle of a sentence, there will often already be enough room at the end of the sentence to accomadate the extra letter. To avoid the wrap-around, try inserting an extra blank line. Type in these lines:

This is an example of a long sentence that takes up two complete lines of text on the screen when using 66 columns.

To enter extra spaces with a minimum of editing, place the cursor (Scroll mode) on the second line and press Control-I to insert a temporary blank line. Now use the left arrow to move back up to the first line. Press the space bar to enter the edit mode an use Control-I again to insert one or two spaces in the line.

You'll notice that the blank line keeps the motion restricted to just the line you're on. After inserting a few spaces, exit with Control-X, move down one line, and then remove the temporary line with Control-R. After getting the hang of it, this is often a time saving way to do minor editing (such as spelling or typographical errors) to a line with minimum trouble.

11.0 MOVING A COLUMN TO THE LEFT OR RIGHT

In The Correspondent, it is very easy to move a block of lines up or down with just a few keystrokes. It is much more difficult to move a column of text to the left or right, but it can be done.

Enter this sample text:

```
DESCRIPTION     PRICE

WIDGET #1       $19.95
WIDGET #2        24.95
GIZMO             4.95
----------      ------
TOTAL           $49.85
```

(Note: text is originally at columns '5' and '20').

Now suppose that you find that the PRICE would be better if set at column 22. To move it to the right, follow these steps:

1)   Put a blank line between all lines not already separated, using the Control-I (Scroll Mode) command.
The easiest way to do this is to start at the bottom and alternate pressing Control-I and the left arrow key. When you're done, it should look like this:

```
DESCRIPTION     PRICE

WIDGET #1       $19.95

WIDGET #2        24.95

GIZMO             4.95

----------      ------

TOTAL           $49.85
```

Now go into the Edit mode and put the cursor one space after the end of the word "DESCRIPTION". Now press Control-I twice, followed by Control-K twice. You should now be in line with the next item of text. Repeat the two Control-I's, two Control-K's and continue until you've moved the last line of text to the right.

To finish the process, restore the text to normal by starting at the top of the chart with WIDGET #1 (Scroll Mode) and pressing Control-R, then the right arrow. Repeat the pair until you've moved down through the text and completed removing the extra spaces you put in at the beginning of the exercise.

To move text to the left, just use the Control-R function after inserting the temporary blank lines. This will remove a space in front of the second column and move it to the left.

12.0   ANOTHER TEXT TO BINARY CONVERSION TECHNIQUE

Although rather slow in operation, this technique is entirely automatic, and allows the user to convert a previously created standard sequential text file to The Correspondent's own binary format. The basic theory is to EXEC the existing text into the workspace. To illustrate, let's convert the file LETTER FILE SAMPLE on The Correspondent diskette back into a binary file. To do this, follow these steps:

1) Get The Correspondent up and running in the normal manner, using the '6' fast-run option. When the workspace appears, use the 'Q' for quit command to exit.

2) Enter MON I,C,O (plus RETURN) and then re-enter the program with the usual GOTO 185.

3) Decision time: If you have a lower case display board and the program has be configured using the LOWER CASE MOD file, you'll have to enter the Edit Mode long enough to use the ESCAPE key to shift into the locked capitals mode, and then return to the Scroll Mode. If you don't have lower case, then just leave the program in its default of lower case text entry. The important thing is to have the program in such a state so that if you were to enter text yourself, the letters would appear as 'normal' text on the screen.

4) Now use the 'D' (for Dos command - Scroll Mode) to catalog The Correspondent diskette, and enter EXEC LETTER FILE SAMPLE. The text of the letter should now start to be automatically entered. If you don't have lower case display, don't worry at this point if much of the text appears as "garbage".

5) After some time, the process will end and you'll have to manually return to the Scroll Mode. At that point, if you don't have lower case you'll have to use the Control-Y command to convert the file to the Inverse display mode before saving.

NOTE: To use this method, the first character of the file should be a space character to trigger the entry into the Edit Mode. Also, EXEC files CANNOT be stopped - be patient!

PRINTER MODIFICATIONS

     Depending upon which type of printer you have, different types
of characters may have to be sent out when the printer is first
turned on. Several configurations have been anticipated, and
MOD files appropriate to this have been included on the diskette.

     It is suggested that you try printing out the SAMPLE TEXT
file included on The Correspondent diskette, before attempting
any of these modifications. Only in the event of an unsuccessful
print-out should you use any of the MOD files.

     It is also recommended that you make these changes on a back-
up diskette only, so that if things get really confused, you can
always just re-LOAD and SAVE the original version of COR II and
CORRESPONDENT of the purchased diskette.

     To use any of the MOD files, you simply place The Correspon-
dent diskette to be modified in your drive and type in:

                    EXEC <FILENAME> MOD

where <FILENAME> is the name of the appropriate file for the modi-
fication you desire. Each MOD file has a complementary file
which will reverse any changes it may make to The Correspondent
diskette.

     In all situations, if these MOD files do not produce the
desired results, LOAD the program COR II and re-write line 1705
to look like the printer turn-on proceedure in your own programs.
This line is very simple, and The Correspondent does nothing very
fancy during the actual print-out. After you have made your own
changes, type in:

     UNLOCK COR II

     SAVE COR II

     LOCK COR II

     NOTE: There is no need to load or save any program when
'EXEC'ing the MOD files. They will automatically load, modify,
save and lock the appropriate files.

     The Correspondent is originally set up to be compatible with
most parallel interfaced printers. This includes the Anadex,
Malibu, some NEC spinwriters, Microtek, Paper Tiger series, and a
number of others. This original set-up can always be restored by
typing in: EXEC PARALLEL MOD

     If you have a serial printer such as the QUME or Silentype, or
if the characters "81N" appear at the beginning of each printout,
type in: EXEC SERIAL MOD

CENTRONICS PRINTERS

If you have a Centronics printer, there are several subtle differences between these and other printers. The first of these is that they do not recognize a simple PRINT or PRINT "" statement. You must send them at least a PRINT " ". Note the space included between the quotes.

The other common feature of Centronics printers is that they often have a fixed Line Feed status. A Line Feed is the operation which advances the paper one line each time a carriage return is sent to the printer. Even if this is not clear to you, the results will be. If the printer and parallel card are not matched with respect to line feeds, several things can happen.

1) Print-out is all on the same line. Cause: Program has sent a Control-I, K to the parallel card, and the printer does not supply its own line feed. EXEC LF ON MOD to fix.

2) Print-out is on every other line. Cause: Program did not send a Control-I, K and the printer is also supplying its own line feed. EXEC LF OFF MOD to fix.

TOP-OF-FORM OPTION

The top-of-form option is a function on many printers that allows you to automatically advance the paper to the beginning of the next sheet before starting a print out. This is nice, but also means you go through a lot of blank sheets.

If you desire a top-of-form character sent at the beginning of each print out, then you can put a flashing 'L' as the first character of a file. This is the TOF control character for most printers.

PRINTER NOTES

Printer output is the part that relates to producing a so-called 'hard copy' of a given file. To make sure that you have met the basic requirements in terms of compatibility with your own equipment, make sure you have read and understood the section entitled 'PRINTER MODIFICATIONS' earlier in this documentation.

The basic considerations when doing the printer output are:

a) Overall format (including margins).
b) Whether to justify or not.
c) Special control characters for your printer.
d) File linking for lengthy documents.

The overall format considered here basically consists of two elements. The width of the printed material itself, and the size of any desired margin on either side of that text.

The width of the printed material itself is determined when the file is first started. After that point it is for all intents and purposes impossible to change. For most applications, a width of 66 columns is quite usable. This particular documentation was prepared using 66 as the text width.

The margins are determined in two ways. The paper in the printer can be physically moved so that the printed line starts at a given distance in from the left edge. This is usually easy on printers, where the paper feed area is usually much wider than the paper in use. On other printers where the paper is relatively immobile in terms of left-right position, and the first character printed on a line is at the far left, a different approach must be used. In this instance a number of blank spaces can be added to the beginning of each printed line to create the margin. The right margin is created by whatever room is left at the end of each printed line.

When The Correspondent is directed to the printer output, it will ask for the left margin size. For 80 column paper with 66 column text, the value of '7' usually gives good results. If however you are moving the paper to get the left margin, a value of '0' may work better. You will have to experiment to find out what is best for your printer.

During the printout, pressing any key will alternately stop and continue the printing process. Pressing ESCAPE will end the printout at its current point.

On printers with a large character buffer, there may be a considerable delay after you press a key until the printing stops.

MULTIPLE COPIES

When you start to print out a letter or other document using the Control-O command, the question as to how many copies you would like is asked. Pressing RETURN alone defaults to just one copy. Entering '2' would print out two copies of the document.

Be sure when doing multiple copies that you have either:

a) created a document of exactly 66 lines or a multiple thereof. (i.e. end-of-file is at line 1 of the next pg.)

or b) you either start or end each letter with a top-of-form control character (usually Ctrl-L (a flashing L))

For producing a number of "personalized" letters via your own database, try the Applesoft program included on this diskette called FORM LETTER DRIVER. It is explained in the section on additional utilities.

JUSTIFICATION

Justification refers to the process that is done to remove the ragged right edge that results from each line not ending at the same point at the right margin. To accomplish this, spaces are inserted between words on a printed line to create a uniform right hand margin, wih every line ending at the same point. If there are too few words on the line to be able to justify in a visually pleasing way, then the line is left alone.

If you elect to justify this process will be done to each line of text as it is output. The default input is not to justify.

There are certain instances where you may wish to change from justifying or not. An example might be if you had some type of chart within the text which the justify routine would disturb. However, it might still be desirable to have the rest of the text justified.

The solution to this is to use the 'justify flags' set up within The Correspondent. By putting the flashing characters 'JF' (for justify flag) at the left hand margin, this flag will 'toggle' the justify mode. That means that if you were in the justify mode during a printout, encountering the first 'JF' would turn it off. Encountering the next 'JF' would turn it back on again. This type of operation will occur each time the 'JF' flag is encountered. If the justify mode were originally off, then the first encounter would turn the mode 'on' and so on. NOTE: When the justify flag is used, all lines AFTER the one the flag is on are justified. Please take this into account when you use it.

Because The Correspondent uses the spaces between words to justify a line of text, an undesirable side-effect is possible. If you were justifying this line:

    1) This line could be the beginning of a paragraph on some
       particular topic.

    the final output could look like this:

    1) This line could be the beginning of a paragraph on some
       particular topic.

    Note that an extra space has been placed after the '1)' at the beginning of the line, resulting in the two lines of actual text no longer being aligned.   This is because the program "thought" that the '1)' and the 'This' were two distinct words the between which could be expanded to fill the line. To avoid this you can use an INVERSE space character (just use the Control-W key - Edit Mode, or ESCAPE if you don't have a lower case board) to create what is sometimes called a "hard space", i.e. one not affected during the justification process. These may be used any number of times within the line where you wish to select-ively preserve the spacing between words.

    The NEW FEATURES! (.40) file contains some examples and further explanation of this option.

                    LINKING FILES FOR LONG PRINTOUTS

    When printing out documents longer than 4-5 pages, it is possible to link several files together. When this is done, each time one file is completed, a check is done to see if another file follows it in a series. If so the next file is printed automati-cally, and so on until the entire series has been printed.

    See the section on linking files, as listed in the Table of Contents, elsewhere in this manual.

                      SETTING UP MULTIPLE PAGES

    When typing in more than one page of text into a file, remem-ber that the page will be printed exactly as it appears. This means you should type in the page number as you want it to be printed, and allow the appropriate number of blank lines above and below the number. Usually line 65 is a good spot for the page number.   At least 4 lines should be allowed above this, and the text on the following page should start on line 5 or so.

    See the files SAMPLE TEXT, NEW FEATURES! (.40), or EPSON SAMPLE FILE.40 on The Corrspondent diskette for an example of how multi-page files are set up.

Many printers recognize certain control characters as special instruction codes for their operation. A common example of this is the function of a Control-J as producing a 'LINE FEED', that is advancing the paper one line through the printer. A carriage return is itself a Control-M.

On The Correspondent, any character entered in the flashing mode will be converted to a control character when output to the printer. Thus to send one or more Control-J's to the printer we would simply put the needed number of flashing J's in the text.

One point to remember though is that control characters do not take up any space on the final printed page. This means for instance that a centered title preceded by a control character will be displaced to the left one space when actually printed out because the control character is not printed along with the other characters.

Certain printers allow the production of expanded characters when particular codes are sent out. If you are printing, for instance a title, you will have to remember that since the output characters will be twice as wide, the words will have to start half as many spaces from the left as would normally be done in order to get the proper appearance. This should be taken into account when producing the original source document.

To aid you in creating the desired effects using your printer, two files EPSON MX-80 SAMPLE and CENTRONICS 737 SAMPLE have been included on the diskette as samples of how to achieve certain results.

Note that providing your printer interface card will automatically supply a line feed after every carriage return, and that the printer does not, a special option is then available.

To understand how this works, you must understand the difference between a carriage return and a line feed. A carriage return is literally just that - the print head returns to the left edge of the paper. Technically speaking the paper is NOT advanced one line. This is done by the Line Feed operation. Usually you do not have to concern yourself with this because the Apple printer interface card, and may others automatically add a line feed to each carriage return that goes to the printer. However, if your printer also automatically adds line feeds too, the net result is double spacing between each line of text printed. This is usually disabled by printing a Control-I,K when the printer is first initialized.

If your printer does not supply its own line feeds (by far the most common situation) then a Control-I,K would cause all the text to be printed on a single line. However, this does introduce the posibility of 'overlaying' multiple lines of text to produce some interesting results. You can underline on printers that usually don't such as the EPSON MX-80, and even mix fonts within a line, something else that is usually not an option.

If your printer is the type that does supply its own line feeds (such as a Centronics 737), then this will not be an option. It should be mentioned though that even on the 737 the line feed can be selected by means of a jumper wire, and on may other printers selected by use of a 16-pin DIP switch. See the owner's manual for your printer for more details on this.

One of the easiest ways to test all this is if you do have an EPSON MX-80 or CENTRONICS 737, just print out the sample file and see if you get the underlining and/or mixed fonts. If you do, then examine the samples there to produce the same results in your own file. Note that I never said this techinique is easy - but then again, most people would probably tell you that it's just impossible on your printer!

One final point. Most printers require that the control sequences to switch fonts, etc. contain CAPITAL letters at certain times. If you don't have the lower case display option in effect, this means that the characters MUST be in inverse to work properly. Also note that for changing fonts, many printers require that the ESCAPE character be the FIRST character of the line.

For example, if your printer required an ESCAPE,A as the control code (CHR$(27),CHR$(65)) you would enter the code by typing: Control-O,<ESC>,<ESC>,A   and then the remaining text.

The Control-O,<ESC> puts the ESCAPE character in the text, the next ESCAPE shifts to upper case for the next character, in this case the 'A'.

CHANGING FORMS: PRINTER STOP CHARACTER

If you are using single sheets, or for any other reason wish to stop the printer automatically during a print-out, you can put a Control-Z (flashing Z) as the first character of a line. When the program encounters this during a printing, it will stop until you press any key. Pressing ESCAPE will stop the printout entirely.

The printer stop command is also useful for stopping the printer to change print wheels on printers such as the NEC, QUME, DIABLO and others.

INVERSE CHARACTER MASK

If you have a lower case display board and have EXEC'ed the LOWER CASE MOD file, inverse characters are no longer needed as such to represent capital letters. This can then be taken advantage of to create characters in the file which will not be printed out in the final document. This feature is referred to as the Inverse Character Mask. When The Correspondent is first run it will ask you if you want the mask on or off. The default is 'off', that is, print inverse characters as capitals. Once you start using the mask option though, you may wish to easily switch back and forth between the mask being on and off as you print different files, or even different versions of the same file.

To switch the mask on and off, just do a soft exit from the program using the 'Q' (Scroll Mode) command, make sure The Correspondent diskette is in the current drive, and then type in:

EXEC MASK SWITCH

A prompt will appear on the screen followed by a statement as to whether the mask is then 'on' or 'off'. You can then return to your file with the usual 'GOTO 185'.

80 COLUMN DISPLAY BOARDS

There are now available optional peripheral cards which when inserted into your Apple, allow the display of 80 columns of text on the screen. Because The Correspondent was designed with a "stock" Apple in mind, it does not specifically support all the 80 column cards during the Scroll and Edit modes.

There is however, one specific command related to these devices. If you would like to 'preview' a document before printing it, you can press the ESCAPE key immediately before pressing Control-O (Scroll Mode) for the print-out. This will send the output to your 80 column board in slot 3 instead of to the printer. Any key will stop/restart the display, and ESCAPE will return you to the scroll mode.

The line which initializes the board is #1704 of the program COR II, and is configured for the Videx board in slot 3. If you have a different arrangement, you may wish to change this line to suit your own device. All that should need to be altered is the 'PR#3' to whatever slot your card is in, and the 'CHR$(26)' to whatever control characters are required to 'HOME & CLEAR' the screen.

NOTE: To facilitate these mods, MOD files for the SMARTERM and VIDEX boards are provided as well. Just insert the Correspondent diskette in the drive and EXEC the appropriate file to configure COR II if you have one of these boards.

** ASCII CHARACTER CHART **

    The following table is provided to help determine what ASCII value will be sent to the printer when various flashing characters are put in the text. Remember that only the characters shown below will be converted. All special characters not included on the chart such as numerals, etc. will be sent out in the normal mode just as they appear in the text.

FL. CHAR -->	CHAR.	ASCII	HEX	CODE
@	ctrl-@	0	$00	NULL
A	ctrl-A	1	$01	SOH
B	ctrl-B	2	$02	STX
C	ctrl-C	3	$03	ETX
D	ctrl-D	4	$04	ET
E	ctrl-E	5	$05	ENQ
F	ctrl-F	6	$06	ACK
G	ctrl-G	7	$07	BELL
H	ctrl-H	8	$08	BS
I	ctrl-I	9	$09	HT
J	ctrl-J	10	$0A	LF
K	ctrl-K	11	$0B	VT
L	ctrl-L	12	$0C	FF
M	ctrl-M	13	$0D	CR
N	ctrl-N	14	$0E	SO
O	ctrl-O	15	$0F	SI
P	ctrl-P	16	$10	DLE
Q	ctrl-Q	17	$11	DC1
R	ctrl-R	18	$12	DC2
S	ctrl-S	19	$13	DC3
T	ctrl-T	20	$14	DC4
U	ctrl-U	21	$15	NAK
V	ctrl-V	22	$16	SYN
W	ctrl-W	23	$17	ETB
X	ctrl-X	24	$18	CAN
Y	ctrl-Y	25	$19	EM
Z	ctrl-Z	26	$1A	SUB
[	ctrl-[	27	$1B	ESC
\	ctrl-\	28	$1C	FS
]	ctrl-]	29	$1D	GS
^	ctrl-^	30	$1E	RS
_	ctrl-_	31	$1F	US

LOWER CASE NOTES & MODIFICATIONS

On a standard Apple computer, lower case characters cannot be displayed on the screen. To compensate for this, The Correspondent displays all capital letters in inverse, and lower case letters in 'normal' text.

In this mode of operation, use of the ESCAPE key will automatically shift between normal and inverse.

If you have installed a lower case display board, lower case letters can be displayed directly. To make The Correspondent produce true lower case, simply place your program diskette in the drive and type in: EXEC LOWER CASE MOD

A number of prompts (]) will appear on the screen. When the cursor returns, the modification is complete.

Lower case display devices are available from a number of manufacturers. Ask your dealer for more information on this.

If your dealer does not carry these, they may be ordered directly from Southwestern Data Systems for $65.00 (plus 6% tax for Calif. residents). The board shipped is the Lazer Systems, Inc. model.

The lower cae mod may be reversed by typing in:

EXEC NO LOWER CASE MOD

CLR SCRN / LG FILE MOD

When The Correspondent is run on the original version, the area directly above the beginning-of-file marker line is blank. This gives a pleasant appearance, but does use a certain amount of memory as overhead. This also means that you will not get the full number of pages of text possible. To get the maximum usage of your system's memory, you may wish to EXEC the file 'LG FILE MOD' is recommended.

To reverse the 'LG FILE MOD', just EXEC the file 'CLR SCRN MOD'. This will return The Correspondent to its original form.

SPECIAL NOTE: Users are often confused by trying to put the optional characters in normal text when they do not have a lower case board. If you do this, the characters will be in LOWER CASE, as would any other normal text alphabetic character. The result will be that a bracket (]) will print as a '}' and an underscore (_) will be printed as a rubout, ie. not at all ( ).

Be sure to use inverse special characters if you do not have a lower case board and desire to print the standard character.

MATH FUNCTIONS

One of the option files on The Correspondent is the MATH MOD file. This was put in as an option because of the memory required to support it. If you do install it you will lose the available space for the equivalent of about 1/2 page of normal text.

If you desire this option, just type in:

EXEC MATH MOD <RETURN>

This will automatically put in the necessary changes.

The overview of the math function is this: At any time you're in the Edit Mode, pressing Control-V (for 'Value') will access the math function. For a complete operation, this must be done four times. The first time you press Ctrl-V it will ask 'WHAT FUNCTION?'. Reply by pressing +,-,* or / for add, subtract, multiply or divide. (no <RETURN> needed). This sets up the function for the next steps.

The next time you press Ctrl-V it will look to the right of the cursor for a number, and will call this 'X1'. There cannot be any non-numeric characters in front of the number (such as dollar signs, etc.) The next time you press Ctrl-V it will again take whatever number is to the right of the cursor, this time assigning it to 'X2'. After showing you the value of X2, it will give the result of the function using X1 and X2.

For instance, to read the number $104.52, you would place the cursor on the '1' and press Control-V.

All that remains now is to put that value for the result into your text where you want it. Just position the cursor where you want the number to start and press Ctrl-V a 4th time. It will print the number at this spot. The cycle will now repeat the next time you use the Ctrl-V sequence.

In general then:

ACTION	WHAT HAPPENS
1st Ctrl-V	Enter Function
2nd Ctrl-V	Set X1
3rd Ctrl-V	Set X2 and calculate
4th Ctrl-V	Put result in text

A few comments:

1) This sequence can be cancelled at any time by simply pressing <ESCAPE> immediately before a Ctrl-V.

2) The sequence is fairly durable. You can set any of the values, do any editing you want, switch between Scroll and Edit Modes, etc. and still be able to continue with the next Ctrl-V.

3) This means that you can use the math function while completing forms using the FIND function. The only drawback is that you will have to back the cursor up after typing in X1 and X2 since they are only read from the right of the cursor. The other way is to make two passes through the form, the first time entering the numbers, and the second time using the math function on the numbers you entered. Just make sure not to erase the inverse block markers for X1, X2 and the total the first time through.

4) There are also two user defined functions. The period and comma characters can be assigned to a function of your choice by modifying lines 1150 and 1170 of COR II. In your original version, the period is assigned to non-columnar addition, and the comma to taking the average of X1 and X2. The operation is very straight forward and can be modified to your own functions if you wish.

5) When doing columnar addition, the numbers are added vertically from X1 to X2. Blank lines, total bars, etc. do not affect the result. The Ctrl-V marker for X2 MUST NOT be to the left of the column X1 was marked in. If this happens, X2 will be displayed, but not included in the total. You may wish to experiment a little with this to get a feel for how it works.

COLUMNAR ADDITION EXAMPLE:

```
   * 23.06   <X1>
      9.23
    105.33
 +*  0.99   <X2>
    ------
    138.61  <TOTAL>
```

The '*' marks where the cursor would be placed when marking X1 and X2. Note that second marker was done in line with the first and to the right of the '+' sign.

If you want to do non-columnar addition, use the period character when giving the function.

NON-COLUMNAR EXAMPLE: 2.34 + 1.19 = 3.53

Here the cursor would be placed on the '2' of '2.34', and then on the first '1' of '1.19' when setting X1 and X2. Then the cursor is place where the '3' is to appear in the result of '3.53'.

6) MATH MOD can be reversed by placing The Correspondent diskette in the drive and typing in: EXEC MATH CANCEL MOD

MAKING BACKUPS OF THE CORRESPONDENT & ITS DATA DISKS

To make back-up copies of the Correspondent diskette, you must use the copy program provided on the original diskette. To run this, simply boot on the diskette, and as the drive light comes on, press any key on the keyboard. A banner will appear, then a short menu of whether to make copies or not. You can make up to 3 copies of the original diskette. After that the copy program will continue to operate, but will only copy standard Apple format diskettes. To insure maximum reliablility in the copy, only a single-drive copy is supported, as opposed to the usual Apple COPYA utility, where you may be accustomed to using 2 drives if available.

During the copy process, MASTER refers to your original Correspondent diskette, and COPY refers to the fresh blank diskette onto which the copy is being made. Because the Corresponent diskette is nearly full, a fair number of exchanges between MASTER and COPY diskettes will be necessary for the complete copy. Have patience!

If you have an Integer Apple with Language or RAM card, first boot on the Apple System Master, as originally supplied with your disk drive. Then re-boot with a PR#6 on The Correspondent diskette, following the instructions given above.

NOTE: THE WRITE-PROTECT NOTCH MUST BE UNOBSTRUCTED WHEN MAKING THE CORRESPONDENT BACKUP COPY.

Depending on your particular disk drive back up copies may be slightly noisier when booting. This however, is not detrimental to either your disk drive or the diskette.

If you should accidentally delete a file from one diskette, you can LOAD the file from your master or one of your copies and SAVE it back to the disk from which it was deleted.

DATA DISKETTES:

Data diskettes can be any normally formatted diskette, INITed after booting on a standard Apple System Master diskette. The HELLO program should be as short as possible to maximize the available space for other files. In fact, extra space may be gained by DELETEing the HELLO program once the disk is created, and then removing DOS as described later in the section called "DOS REMOVE UTILITY".

Data diskettes may be copied using the copy program provided on your Apple System Master, as originally supplied with your disk drive. It is not recommended that you use the back-up copy program supplied on The Correspondent diskette, although doing so would not reduce your allowed number of copies.

Special Catalog Feature:

     The Correspondent modifies the normal Apple DOS so that when a
'CATALOG' is done, if you see the file you want early in the list,
pressing 'RETURN' alone aborts any further listing.

     Also, just to the right of the word 'VOLUME NO.' will be shown
the number of remaining unused sectors on the diskette. There are
about 500 sectors available on a normal 3.3 diskette. Each four
sectors will hold about 1K of program or file data.

     These features may be specifically invoked at any time by
putting The Correspondent diskette in and entering 'EXEC DOS 3.3
CAT MOD'.   This EXEC file will then automatically perform the
modification without having to run The Correspondent.   This
feature will   stay in effect until you either re-boot DOS or turn
off the computer. NOTE: Because of where the routines are held in
memory, do not attempt to initialize a diskette when operating
under this modification.

DOS Remove Utility:

     Normally DOS takes up three full tracks on the diskette, or
about 12K.   If the diskette is to only hold data though, the
presence of DOS is not required, since there would be no reason to
boot on the diskette.

     The program called 'DOS REMOVE' will remove just the DOS
tracks from any diskette.   To run it, just type in 'RUN DOS
REMOVE'.   The program will then prompt you to enter the desired
diskette and press 'R' to confirm the removal.

Bi-Directional Scrolling in Your Own Programs:

     As part of this package, a demonstration program called
'SCROLL EXAMPLE' is included on the diskette. This shows how the
bi-directional scrolling seen in The Correspondent may be put in
any Integer or Applesoft program.

     When using this routine there are several options. You may
scroll either page 1 or 2 of TEXT/GRAPHICS and you may either do a
pure scroll, or elect to bring a new line of data onto the screen
each time you scroll up or down. The sample program first does a
pure scroll on page 1, then switches to page 2 and scrolls bring-
ing 40 more bytes onto the screen each time it scrolls. As you
can see, this is very similar in appearance to how The Corres-
pondent works.

If you are using what I call the 'viewer' mode, i.e. bringing in new data, you need some kind of data to view. The text on The Correspondent is intelligible because memory is initially cleared to spaces, and then the user puts readable data in later. The random pattern just above the starting point of a file in The Correspondent is how memory would normally appear if you were to just examine random locations.

The sample program carries the instructional text that you view during the demo along with it at the end of the listing. In Applesoft, binary data at the end of the listing is always invisible if properly appended. When the sample program runs, it looks at locations 175 & 176 to determine where the absolute end of the program is according to the formula:

$$'END = PEEK(175) + 256 * PEEK(176)'$$

Knowing where the end is, if you know the length of the binary data appended onto the end, you can calculate where the file starts. For the sample program, the start is equal to the program end minus 2360 bytes.

```
 ---------------------------------------------------------------
|               |         |                                     |
|               | BINARY  |                                     |
|  SAMPLE PROG. |  TEXT   |    END OF PROGRAM =                  |
|               |         |<--PEEK(175)+256*PEEK(176)            |
|               |<--L---->|                                      |
 ---------------------------------------------------------------
```

fig. 1

This ability to display one body of text on page 2 without disturbing what is already on page 1 can be very useful. For instance, in our graphics package, 'ROGER'S EASEL' the user can access a detailed help list at any time without destroying the picture being created on page 1. In other programs, this allows the user to get immediate detailed help without losing the text already on the screen he is using.

As another practice example, let us create our own demo program using these scrolling routines.

First we will need some kind of text for the user to look at on page 2. For this, the AUTO MEMO.40 form will do. Remember when creating these files that they must be done in the 40 column width to appear properly on the screen when displayed.

Re-run The Correspondent at the 40 width and load the file 'AUTO MEMO.40'. Now save this back to a diskette of your own the name 'TEST FILE'.

Now you may exit The Correspondent and proceed to writing the demo program listed on the next page.

Type in the following program in Applesoft:

```
10 PRINT CHR$(4);"BLOAD SCROLL.OBJ,A$300"

15 POKE 10,4: POKE 11,0

20 HOME: VTAB 12: PRINT"THIS IS A TEST"

25 VTAB 22:PRINT"PRESS A KEY TO SCROLL UP...";:GET A$

30 CALL 768

35 VTAB 23:PRINT"PRESS A KEY TO SCROLL DOWN...";:GET A$

40 CALL 863

45 POKE 10,8: POKE 11, 1: FOR I=1 TO 500: NEXT I

50 EN = PEEK(175) + 256*PEEK(176):BEG = EN - 880

55 LB = BEG - INT(BEG/256)*256: HB = INT(BEG/256)

60 POKE 8, LB: POKE 9, HB

65 POKE -16299,0

70 FOR I= 1 TO 25:CALL 768: NEXT I

75 POKE 6, LB: POKE 7, HB

80 CALL 863

85 VTAB 12:GET A$

90 IF A$<>CHR$(8) AND A$<>CHR$(21) THEN POKE -16300,0:END

95 IF A$ = CHR$(8) THEN CALL 863

100 IF A$ = CHR$(21) THEN CALL 768

105 GOTO 80
```

To join the previous 'TEST FILE' to this program, save it onto the same diskette and then run the program 'FILE LINK 3.3'.

When done, the program with attached files will be in memory. Save this under a different name than the one already on the diskette in case there was a problem in the link operation.

Before the demo can be run, page 2 of Applesoft must be protected. Page 2 starts at $800 (2048 dec). To protect pg.2, type in: EXEC PG.2 PROTECT . This exec file will set up your Apple so that you can use page 2. This modification will remain in effect until you either change languages, type in 'FP', or turn off the machine.

Now run your completed demo. If it does not seem to work, check carefully for typographical errors in the listing.

Remember that the file SCROLL.OBJ must be on the diskette in the drive when the program is run. You may wish to transfer this file to other diskettes using the FID utility supplied on the Apple System Master diskette originally suppied with your disk drive.

The File Link program will take any binary file and append it onto the end of an Applesoft program. Knowing how long the file is means you can also determine where it starts in relation to the absolute end of the program. Thus you can view it with the scrolling routine. The Link program may also be used to append machine code to the end of a program. Again, if you can calculate the start of the machine code, then you know the 'CALL ' address to use it!

HOW THE DEMO WORKS

Let's see what each line does. Line #10 loads the driver routine into memory at $300 (768 decimal). This routine must be placed here to work. If you do decide to move it, there are a number of JMP's and JSR's that must be re-written in the code. This is mentioned more for the advanced programmer rather than try to present detailed instructions for such an operation here.

Next, locations 10 & 11 are 'POKE'ed with values. Location 10 is the page to be displayed. It should hold a '4' for page 1, and an '8' for page 2. Be sure to protect page 2 with the EXEC file before running this program. How to do that is mentioned a little later. Location 11 is the scrolling mode. A '0' here will set it to pure scrolling. A '1' will bring new data onto the screen with each scroll. For the first part, we are setting the modes to page 1 and pure scrolling.

Line #20 clears the screen and gives us something to look at. Line #25 waits for a key press, followed by the actual scroll up on line #30.

Line #35 again waits for a keypress followed by the scroll down on line #40. That is all that's required to do the scroll. 'CALL 768' to scroll down, 'CALL 863' to scroll up.

Starting with line #45 we begin the second part. It resets the page to page 2 and the scrolling mode to the viewing mode.

The absolute end of the program is calculated on Line #50, and since we know that the text stored was 880 bytes long, the beginning of that text must be at EN - 880. This address is converted to the low and high order bytes on line #55 and put in locations 8 & 9 on Line #60. (See fig. 1).

Locations 8 & 9 are called pointers and point to the place in memory from which to fetch the next 40 bytes when the screen is scrolled up. After the display is switched to page 2 by the 'POKE -16299,0' on Line #65, the screen is filled by scrolling up 25 times (25 = screen height + 1). At that point, 6 & 7 are set to the values 8 & 9 started with and the screen scrolled back down one line.

The reason for all this is that it is a fairly easy way to both fill the screen and synchronize 6 & 7. These pointers should point to the place in memory where the next 40 bytes will be fetched from when the screen scrolls down next. If 6,7 and 8,9 are not separated by the screen height x screen width, the text will not appear continuous when scrolling. If you want to avoid the motion when the text first appears, just do the 'POKE-16299,0' after the 25 scrolls plus 1. (i.e. delete Line 65 and re-write it as Line #83).

Line #85 gets a character to see whether you want to scroll up or down, and the does the appropriate call and return on Lines 95 to 105. Line #90 checks to see if another key has been pressed and returns you to page 1 with the 'POKE -16300,0' and ends if it has.

The same thing can be done in Integer. At this point, an Integer File Link program has just not been provided.

FORM LETTER DRIVER

A desirable feature on any text editor is the ability to link created letters to a user database (such as a mailing list) to create "personalized" letters on a large scale.

Although a companion package for The Correspondent is planned, in the mean time you may wish to experiment with a simple demonstration program provided on The Correspondent diskette.

The program included is called FORM LETTER DRIVER. This is provided only as an example of a way of doing form letters using files created by The Correspondent. The program is in no way intended to be the last word in form letter programs. It is here for your interest and as an example of ways of setting up such a program.

The two supporting files are LETTER FILE SAMPLE and DATA FILE SAMPLE.

The first is a text file created from the file SAMPLE TEXT also on this diskette. It was created by using the '.TEXT' save technique described earlier in this manual under "Converting Binary files to Text files".

The second file is a miniature mailing list with some sample names on it.

Please note that the FORM LETTER DRIVER program is set up primarily to read this sample file. For your own database files you may wish to alter the input routines in the 'DRIVER'.

Also note that the mailing list has what is generally called a 'HEADER', that is, a number of entries preceding the actual data to tell the program how many records are in the file, etc.

For this application, I set up the header specifically for the form letter driver program.

The header has this information:

RECORD NUMBER	EXAMPLE	PURPOSE
1	3	Number of records in file.
2	4	Number of items in each Record.
3,5,7,9	NAME	Description of item.
4,6,8,10	13,19,...	Line # to put that item on in the letter.

The rest of the file continues with this information:

11	JOHN DOE	Name #1
12	MR. DOE	Greeting Name #1
13	1234 MAIN	Address #1
14	LOS ANGELES	City/State/Zip #1
15	SAM SMITH	Name #2
16	MR. SMITH	Greeting Name #2
17	3349 2ND ST.	ADDRESS #2
18	SANTEE, CA	City/State/Zip #2
19	JANE DOE	Name #3
20	MS. DOE	Greeting Name #3
21	9978 CIRCLE	Address #3
22	NEW YORK, NY	City/State/Zip #3

(END OF FILE)

Run the program FORM LETTER DRIVER and you should get 3 personalized letters, one to each of these people. Remember you must load the files LETTER FILE SAMPLE and DATA FILE SAMPLE when prompted by the DRIVER program.

When it asks about the header, give choice #1, i.e. use the header already in the sample data file. If you really can't keep out of things and insist on trying option #2, answer the questions thus:

# OF ITEMS IN LIST?	ANS: 4
LINE # FOR ITEM 1?	ANS: 13
LINE # FOR ITEM 2?	ANS: 19
LINE # FOR ITEM 3?	ANS: 14
LINE # FOR ITEM 4?	ANS: 15
LENGTH OF HEADER?	ANS: 10
# OF RECORDS?	ANS: 3

This option (#2) is for accessing lists that you may already have created with other programs, that you'd like to try with the form letter driver. As long as you know how the header is set up, and presuming the file is a sequential file type (see DOS Manual for more on these), you can probably access it.

NOTE: If you do not wish to use a given item from each record, just enter '0' as the line # of your letter to use it on.

If you do not already have a list from another program, you can use the Sequential Text File Mode of The Correspondent (#2 or the 'T' Fast Run Option) to create the list, using the DATA FILE SAMPLE as a guide.

CREATING THE ORIGINAL LETTER

To create the original letter you may either:

1)   Write it as a sequential text file and save it directly to disk to be used by the FORM LETTER DRIVER.

     Or...

2)   Write it as a Binary file and save it to disk as a textfile by appending the word .TEXT to the end of the name to save under. If you want to edit this later you can either edit the original binary file and re-create the textfile, or load the textfile directly with the width set to one greater than the binary file that created it. For example a file created from a 66 column binary file would be reloaded in the text file mode at a width of 67 columns.

     Remember, these files and suggestions are provided only for the people who enjoy a programming challange and wish to pursue this possibility. It is not designed to be a universal application program.

LETTER CARRIER

This program is included to make it easy to send letters to other Apple owners using the diskette itself as the media. Using the FILE LINK 3.3 program, you can link letters you create to this driver, which contains the bi-directional scrolling routines.

Once linked, LETTER CARRIER gives a very automatic viewer for someone who may not have The Correspondent to read your letters with.

The basic procedure is this:

1) Create your letter in a 40-column binary format, and save to your data diskette.

2) Transfer the file LETTER CARRIER from the Correspondent diskette to this data diskette.

3) LOAD the program FILE LINK 3.3 from the Correspondent diskette. Then insert the data diskette holding the letter and type in: RUN

4) Follow the prompting in the FILE LINK 3.3 program to link your binary letter file to the Applesoft program LETTER CARRIER.

5) When the append operation is complete, type in:

   SAVE <FILENAME>

   where <FILENAME> is the name you wish to give to the letter with its attached viewer. You should not save it under the name LETTER CARRIER as this will overwrite the program on the diskette already.

To view the letter, just RUN the new file, and follow the instructions. If you wish to make up your own introduction in BASIC you may alter lines 100-199. Notice that the SCROLL.OBJ file is not needed with the LETTER CARRIER as these routines are already carried internally with this program.

The LETTER CARRIER can be useful anytime you want to send a diskette to another Apple owner and you don't want to go to the trouble to write or print out a separate letter.

REMEMBER: It is not necessary to use The Correspondent to view completed letters when the LETTER CARRIER is used.

CORRESPONDENT TROUBLE-SHOOTING GUIDE

Use the following guide to solve any problems you might encounter in using The Correspondent. If you still cannot resolve the difficulty, feel free to contact our offices for further assistance.

PROBLEM	CAUSE	SOLUTION
1) Printer output is all on the same line.	COR II is set up to cancel line feeds.	EXEC PARALLEL MOD or CENTRONICS W/O LF MOD.
2) Printer output is on every other line.	Printer needs to have line feeds cancelled.	EXEC CENTRONICS W/ LF MOD.
3) FILE NOT FOUND error when trying to link files.	File name is in lower case letters.	Re-write name in capitals.
4) SAMPLE TEXT file does not print out 1st letter of words.	Your COR II is set up for lower case and SAMPLE TEXT wasn't converted using Ctrl-Y before printing out.	Use Ctrl-Y to convert file to true lower case
5) Strange inverse chars. appear above file.	LG FILE MOD was used.	Ignore it - it gives you more room and won't hurt. Or EXEC CLR SCRN MOD.
6) Escape codes to printer aren't being recognized.	a) File is a text file. Input routine of COR II is like the Apple's - 1ft, rt arr. and ESC are edit cmds.	a) Store file in binary form.
	b) Printer req.s that ESC code be 1st char. of line and margin prevents this.	b) Move ESC cmd to beg of line. (NOTE: This cancels left margin, so text should not follow.
	c) Command letters must be capitals and you've got them in 'normal' with NO LOWER CASE MOD.	c) Put letters in inverse. See item #7.

7) Underline or other optional characters do not print out properly.	Underline on your screen is in normal text and you have NO LOWER CASE MOD in effect.	Put underscore in inverse. (i.e. capitals)
8) FIND routine doesn't find what you know is in the file.	Beg. or end of file is not set. Perhaps COR. was re-run.	Use B & E to confirm beg. & end. Correct if necessary.
9) Text files read in overflow past end of workspace.	Too much of the WS is being used for blanks.	Reduce col. width to 30 or less and try again, or read fewer records in at a time.
10) Insert/remove of char. cause entire file to shift.	COR moves all data between cursor and end of file point.	a) Set end of file the blank ln. at the end of your paragr. Then fix after editing. (See pract. ex.) b) If you're moving a col. of #'s this can be an advantage
11) RESET pressed.	APPLE put the RESET key in a clever place.	Type in: GOTO 2100 (Ignore ERROR) GOTO 185
12) Wrong Command key pressed.	Murphy's Law.	RETURN alone will back out of most cmds.
13) Program is hopelessly bombed or inoperative.		Re-boot on the Correspondent diskette, reply 'N' to the 'NEW FILE?' quest. Reset End-of-file ptr with Control-E cmd.
14) Chars. typed in or loaded from another file appear as %,$, etc.	Your COR II is set up for lower case & you don't have a display chip.	EXEC NO LOWER CASE MOD.

** SUMMARY OF THE SCROLL MODE COMMANDS **

COMMAND KEY	DESCRIPTION	PAGE REF.
A	Toggles address mode <-> Line/Page	16
B	Jump to the beginning of the file.	6,16
C	Enter mode to copy block of text. Use Control B, E and D to set beginning and end of source, and beginning of destination.	17,38
D	Dos command mode entry.	27
E	Jump to the end of the file.	6,16
F	Enter FIND mode. (ESC, F for disk).	23,35-37
G	Get a file from disk.	11,20
H	Help. (S for scroll, E for edit, N for notes).	12,25-27
J	Jump to another location in the file.	16
L	Scroll down one page.	6, 8,16
;	Scroll up one page.	6, 8,16
M	Enter move mode. (Same parameters as COPY.)	17,39
N	Save current screen as a note page.	25
Q	(Quit) Soft exit for immediate return.	28
S	Save file to disk.	10,19
X	Exit The Correspondent.	28
<space>	Space bar to enter Edit Mode.	6,29
Control-A	Change drive Access # (#1 <-> #2)	27
Control-B	Set beginning of file.	22
Control-D	Special Display Mode.	8,18
Control-E	Set end of file.	22
Escape -F	Global disk Find.	23
Control-I	Insert one line of text.	8,17
Control-N	Capture note page into text.	26
Control-O	Output to printer.	11,44
Control-P	Page edge toggle: left-right edge.	8,29
Control-R	Remove one line of text.	8,17
Control-S	Set page # offset factor.	16
Control-W	Set/clear frozen window at top of screen.	18,38
Control-Y	Case display conversion.	24
Control-Z	Erase (zap) the entire file. (Sets End = Beg.)	11,27

** SUMMARY OF THE EDIT MODE COMMANDS **

COMMAND KEY	DESCRIPTION	PAGE REF.
Control-A	Toggle for cursor vs. screen left/right scrolling.	30
Control-C	Center the current line.	9,32
Control-D	Duplicate last character.	33
Control-E	Word move on/off, left margin release	7,33
Control-F	Flashing mode.	31
Control-I	Insert one character at the cursor.	9,30
Control-J	Scroll down one line.	8,29
Control-K	Scroll up one line.	8,29
Control-L	Set left margin. (see Ctrl-E)	33,39
Control-N	Normal mode.	31
Control-O	Optional character key.	32
Control-P	Page edge toggle.	8,29
Control-Q	Clear all tab stops.	31
Control-R	Remove one character at the cursor.	9,30
Control-S	Set/Clear tabs.	31
Control-T	Jump to next tab stop.	31
Control-V	Math mode key. (Value)	54
Control-W	Inverse text mode. (White)	31
Control-X	Exit edit or find mode.	6,29,33
<ESCAPE>	Twice shifts upper <--> lower case.	7,30
	Once shifts only the very next character to the opposite case.	

** SPECIAL CONTROL CODES **

Control-F,Control-N	File Link Flag	34
Control-J,Control-F	Justify Flag (on/off)	47
Control-Z	Find/Printer Pause Flag	23,50