BATTERIES INCLUDED™

PAPERCLIP™

FOR ATARI

BY STEVE AHLSTROM & DAN MOORE

PAPERCLIP™

Atari™ Edition

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WARNING!

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INTRODUCTION

FOR THOSE WHO DON'T LIKE TO READ MANUALS ... THE 5 MINUTE INTRODUCTION TO PAPERCLIP

No one likes to read manuals. Even though we think you'll find that this one is among the best and easiest to use, you still probably want to get right in there and start using the program. HERE'S HOW!

Plug the Paperclip Key into joystick port #2.

Turn on your TV or monitor and then your disk drive. Insert the PaperClip disk and now turn on your Atari. After a short while you will see the title screen. Now you're ready to start writing. In the next few minutes we're going to teach you how to write with PaperClip, edit, preview, save your work to a disk and print it out.

Go ahead, **start typing.** If you've never used a word processor before, or even if you have, simply type away. Get the feel of the keyboard and the look of the screen.

The first thing you'll notice is that when you reach the end of the line the words will "wrap" around to the next line and a small diamond shape will appear at the end of the line. This is simply an indicator to show you that a line on the screen has ended. You don't need to type **RETURN** until the *end* of a paragraph or where you wish to have blank lines on your page.

If you make a typing mistake and you catch it before typing the next letter press the **DELETE** key and type it again. If you want to move the flashing cursor (that shows you where you are working) to another spot in what you have just written, hold down the **CTRL** key and then one of the arrow keys.

There are many ways to delete text. As you saw the DELETE key moves the cursor

backwards one character at a time while "eating them up". If you press **CTRL + DELETE** you'll make the cursor stand still but text will flow "into" the cursor position and be eaten up that way.

There are many shortcuts in PaperClip. Here are a couple. Hold down the **CTRL + SHIFT** keys at the same time and now press the **"(" or the ")"** keys. The cursor will move left or right a word at a time. If you press **CTRL + SHIFT** and the **"⟨" or the "⟩"** keys, the cursor will instantly move to the beginning or the end of the line it's on.

Want to get to the "Home" position? In other words, to the top of what you've written? Simply press **CTRL + SHIFT-H.** (Remember, H is for Home.) To get to the bottom press **CTRL + SHIFT-E.** ("E" is for End of course.)

You quickly see that **all editing commands in PaperClip are done with CTRL + SHIFT and then another key**, in combination. Printing commands such as Bold and Underline are entered with the CTRL key alone, but we won't get into them here. The manual has all the details.

Write a few paragraphs now and get the feel of things. You are writing on a screen that is showing you only a "window" on a real printed page; 40 columns wide by 18 lines deep, while a letter sized piece of paper is usually 65 wide by 66 lines long. To see what your work will look like on a piece of paper, and if you'd done a lot of fancy formatting you'd see it now as well; **press CTRL + SHIFT** and the "Atari Key". You'll see the screen split in two, and the question;

Starting page number? 1

Just press **RETURN**. The word Formatting will appear for a second or two and then you'll see your work displayed in the second window, formatted much as it will look when on paper. Use the usual cursor controls to move around and look at the whole thing. The reversed

characters at either end of each line are there to show you that there's more to the line than you are seeing.

At any time, you can press **CTRL + SHIFT-D**, (for "D"elete) and the second preview window will disappear. You're probably now eager to **try printing**. Make sure that your printer is on and that paper is loaded. When ready, **press CTRL + SHIFT-ESC** and whatever you wrote should end up going to the printer. There may be some problems at this stage since we really haven't set up the program of your printer to work together. In most cases it should work just fine though. If you've encountered a problem, don't worry. The manual will get you going pretty quickly.

Once you've written something you'll want, of course, **to save it to disk** so that you can recall it at another time. press **CTRL + SHIFT-W**, for ("W"rite). At the bottom of the screen the copyright notice will disappear and the question, "Write?", will appear. Type in the name you wish to give your text, for instance **TEST**, and then press **RETURN**. That's it.

NOTE: Any time you find that you're in the middle of some special action and want to "bail out", simply press the **ESC** key. This will terminate whatever you were doing and return you to editing mode.

To load a text file, type **CTRL + SHIFT-R**, (for "R"ead). The question, Read?, will appear. Simply type in the name of the file you wish to load. There'll be some questions if your screen isn't blank, about whether you want to get rid of what you're working on or if you wish to add the file coming in to what you've already got. By the way, pressing **CLEAR + SHIFT** and answering **"Y"**es will completely clear the screen.

There's much, much more to PaperClip than you've seen here. You'll discover dozens of handy features such as being able to instantly reverse words or characters within words that have been mistyped, or how to change lower case words to upper case, and visa-versa. Here's a nice one for students and free-lance writers. Press **CTRL + SHIFT-1**. You'll see displayed the number of words that you've just written.

One last feature before you tackle the rest of the manual. PaperClip comes with built-in help. At any time press either the **HELP** key or **CTRL + SHIFT-?**. You will now see;

Drive # or (H)elp File ?

You can get a disk directory by pressing the number of the drive, 1 if you only have one, and the directory will appear in the second window. To delete the window press **CTRL + SHIFT-D.**

There are three help files. If you press "H" the second window will open and the line will read;

Help Menus (F)ile (P)rint (E)ditor?

Pressing one of the letters will load the appropriate help file from the PaperClip disk. You can use the cursor control keys to move around in the file but you can't change it. When you've found the help you need simply press **CTRL + SHIFT-D** and the help window will disappear.

We hope that this quick overview has been a help in getting you started with PaperClip. When you're ready, or when you feel the need to, read the rest of the manual. You'll be pleasently surprised at what PaperClip can do for you. We know you're going to find it to be one of the most powerfull and usefull programs that you own. Enjoy!

1 GETTING STARTED

Three enterprising engineers in Milwaukee, WI, patented the first practical typewriter in 1868. In 1874, this model was put on the market by E. Remington and Sons.

The idea of using the strength of one's finger to force a small type head to strike a ribbon and leave an impression on a piece of paper revolutionized the business industry. It made it easier to communicate.

Then an electric typewriter using the same principle as the mechanical wonder of 1874 was introduced to the marketplace. And technological advances continued. Many machines now are being called typewriters, but on close inspection you will find that most are really little computers that are dedicated to word processing. Some contain print buffers, special keystrokes, and other such devices that you expect to find on your computer. But, are they expensive!

With your ATARI Home Computer and PaperClip you can do anything you could do with a fancy electric typewriter and much, much more! For instance, a typewriter won't allow you to work on two documents simultaneously; PaperClip does! A typewriter doesn't allow you to take text directly from one document and insert it quickly and easily into another; PaperClip does. A typewriter can't give you a count of the number of words in your document; PaperClip can! These are just some of the features of PaperClip that turns your ATARI Home Computer into a "serious" word processor (a fancy term for a computerized typewriter).

In fact, PaperClip was used to write the manual for paperClip.

EQUIPMENT NEEDED

To properly use PaperClip you will need the following equipment:

- An ATARI Home Computer with a minimum 48K of memory.
- An ATARI or ATARI compatible Disk Drive. PaperClip's DOS will support two disk drives and is "density smart". See SECTION 3 for details.
- A monitor or television.
- An ATARI or ATARI compatible printer.
- Some printers require an ATARI compatible printer interface, such as the ATARI 850 Interface Module or similar.

BACKING UP PAPERCLIP

Before you begin experimenting with the PaperClip, it is a good idea to make a copy of the PaperClip Master Program Diskette and then put the diskette that came in your PaperClip package in a safe place.

You must use the "J - Copy Diskette" function from ATARI DOS 2.0 or DOS XL to copy the diskette.

HOW TO LOAD PAPERCLIP

- Turn your ATARI Home Computer system OFF.
- Remove any cartridges that you may have in the computer console.
- Turn on your Disk Drive. When the READY light goes off, insert your PaperClip Program Diskette.
- Turn ON your printer.
- If you are using an ATARI 850 Interface Module, turn it ON.
- The small grey box that came with your PaperClip Program Diskette is called the PaperClip Key. Insert the Key in Joystick Port 2. (PaperClip will not function without the Key in place.)
- Turn ON your computer. PaperClip will boot and you are ready to begin work.

HOW TO USE THIS GUIDE

The PaperClip User's Guide was written for the person who has some computer knowledge. If you come across any terms with which you are unfamiliar, APPENDIX F is a glossary of terms used in the guide.

SECTIONs 2 and 3 contain information of interest to beginners and those of you familiar with other ATARI Word Processors. Read these sections before beginning.

Once you have created a version of PaperClip that suits your needs, see **SECTION 3** for information as to how to save it so that you need not reconfigure every time you boot the program diskette.

"Old Pros" can scan the left margin of the text for the function they need. The function will be described in the text to the right. Or, refer to **APPENDIX A** for a list of all the commands and functions available in PaperClip.

SECTIONs 4 and 5 describe the editing commands used by PaperClip. Old hands should scan these two sections or refer to **APPENDIX A.** New users can begin experimenting after reading **SECTION 4.** The more esoteric functions are described in **SECTION 5.**

Once you have created some sparkling copy, you will want to see how it looks in print. **SECTIONs 6 and 7** describe format your document for printing and **SECTION 8** tells you how to create a "hard copy" of your document.

SECTION 9 describe some special functions of PaperClip, including how to do simple mathematics from within your text, how to create a Table of Contents for your document, and others.

SECTION 10 describes some very special print functions of PaperClip.

SECTION 11 describes Macros, a special feature of PaperClip that is not found in most, if any, other word processor programs for the ATARI Home Computer. Macros allow you to enter predefined text with a single keystroke.

As mentioned above, **APPENDIX A** is a reference to all PaperClip's functions and commands.

APPENDIX B is an index to the data files and programs to be found on your PaperClip Master Program Diskette.

APPENDIX C is a table of Control Code Equates and is explained in SECTION 5.

APPENDIX D contains instructions for the use of three utility programs that are on your PaperClip Master Program Diskette:

- A Printer Configuration File Customizer. If your printer is not listed in **APPENDIX B**, this program will allow you to create your own custom Printer Configuration File.)
- A program to convert AtariWriter text files (including printer and format codes) to PaperClip text files.
- A Graphics Dump and Merge utility. This is a special program to convert picture graphics that you may have created (using a KoalaPad or similar graphics instrument) into a form that can be included in your PaperClip text files.

APPENDIX E contains the text of PaperClip's Help Files. (The Help Files are described in **SECTION 2.**) **APPENDIX F** is a glossary of terms used in this manual and **APPENDIX G** is an index.

CONVENTIONS USED IN THIS GUIDE

The left margin in each section of the guide shows the command or feature described in the text to the right. In some cases there will be a summary of the command or feature.

Bold faced type surrounded by brackets is used to show those keys that you press, such as **[RETURN]** for the RETURN key. In cases where you are asked to press two keys simultaneously and then a third key, the commands will be shown in bold face type, and, in

most cases, be placed on a separate line. The third key will be surrounded in braces. For example,

⟨CTRL + SHIFT - ⟨?⟩]

means to press CTRL and SHIFT simultaneously, then press the question mark (?) key. (This command will give you a choice of reading a disk directory or a Help File. See SECTION 2.)

Any text that you may be required to enter into your screen text to initialize a PaperClip function will also be surrounded by braces. For example, entering

[CTRL — ⟨Z⟩] ⟨H, 1 This is a sample⟩

into your text will print

This is a sample

on the third line of each page of your printed document.

When PaperClip is giving you a menu option, or waiting for some other kind of input from you, the question or statement will be placed on the Command Line. For instance,

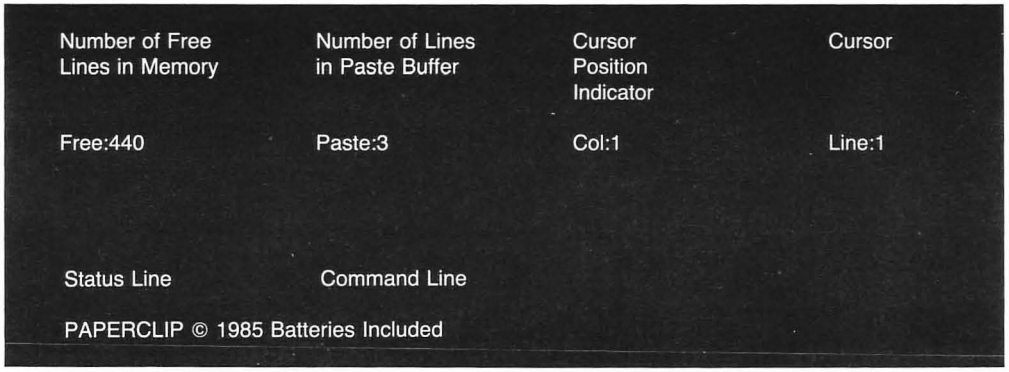
Drive # or (H)elp File ?

is the menu presented on the Command Line when you press

[CTRL + SHIFT - ⟨?⟩].

2 SOME THINGS YOU NEED TO KNOW

When you first boot PaperClip you will see a title screen on your monitor. The title screen will disappear after a moment and you will see this on your monitor:



THE STATUS LINE

The information on the Status Line is always shown.

The number after Free: is the number of lines of text available in the Text Buffer for your use. The number of free lines is based on the Line Length (or right margin) you have chosen. Changing the Line Length is discussed in SECTION 3.

The number after Paste: is the number of lines of text that are stored in the Paste Buffer. The Paste Buffer is discussed in SECTION 4.

The Column Position Indicator (Col: and Line:) shows the position of the cursor in your text. Column 1 is always the left margin of your screen. To reset the margins, see SECTION 3.

THE COMMAND LINE

The menu for various options will appear on the Command Line. The Command Line is also the divider between Window 1 and Window 2. The Windows and how to move from one to another is discussed in this section under WINDOWS.

SPECIAL KEYS USED BY PAPERCLIP

The commands used by PaperClip are called by pressing certain keys.

THE CONSOLE FUNCTION KEYS

[OPTION] – means to press the console function key marked OPTION.
[SELECT] – means to press the console function key marked SELECT.
[START - ⟨key⟩] – means to press the console function key marked START and while holding it down, press the required second key.
[HELP] – means the HELP key on ATARI XL model Home Computers.

THE KEYBOARD KEYS

[ATARI] – refers to the ATARI Logo key on the ATARI 400/800 Home Computers and the inverse video key on the XL models.
[DELETE] – refers to the Delete Back Space Key
[ESC] – refers to the key marked ESC on the upper left of the keyboard. In most cases, you

can press [ESC] to abort a command on the Command Line.
[RETURN] – means to press the key marked **RETURN.** PaperClip understands this to mean that you want a Carriage Return in your text and will place a special character at that place on the screen. [RETURN] is also used to enter commands to PaperClip from the various Options Menus.
[SPACE] – refers to the space bar.
[TAB] – refers to the TAB key.
[CTRL - ⟨key⟩] – means to press the key marked CTRL and while holding it down, press the required second key.
[CTRL + SHIFT - ⟨key⟩ – means to press the key marked CTRL and the key marked SHIFT and while holding both of them down, press the required key.

DISK DIRECTORY

To get a listing of the files you have on a diskette, place the diskette into your disk drive and press

[CTRL + SHIFT — ⟨?⟩]

⟨?⟩ means to press the question mark key. PaperClip will ask you

Drive # or (H)elp File ?

Enter the drive number of the disk drive containing the diskette to be checked. (If the diskette is in Drive 1, you must enter 1.) PaperClip will list the files on the diskette in Window 2. Press [ESC] to abort the command and return to the editing Window.

If you have any text in Window 2, PaperClip will ask

Clear 2nd Window? No

If you change your mind, press **[RETURN]** or **[ESC]** and PaperClip will return the cursor to the editing Window. Otherwise enter ⟨Y⟩ and press **[RETURN]**. PaperClip will erase the text in Window 2 and list the files. Press

[CTRL + SHIFT — ⟨D⟩]

to delete the file directory and return to your editing Window.

PRINTING A DISK DIRECTORY

To print a disk directory, follow the commands to list a disk directory, as stated above. Your disk directory should now be in window 2. Press

[SELECT]

your cursor should now be in window one. Press

[CTRL + SHIFT-D]

to delete the window
When PaperClip asks

DELETE WINDOW? NO

press

'Y' [RETURN]

The disk directory is now in window 1, and has become a normal text file, which you may save ('W'rite) or send to your printer. Press

[CTRL + SHIFT — ESC]

The directory will be sent to your printer.

HELP FILES

Forgotten a particular command and can't find your manual? Not to worry. Press

[CTRL + SHIFT — ⟨?⟩].

When PaperClip asks

Drive # or (H)elp ?

press ⟨H⟩. PaperClip will then ask you

Help menus (F)ile (P)rint (E)ditor ?

NOTE: ATARI XL Home Computer owners need only press **[HELP]**. PaperClip will immediately show the above menu.

The File Help File contains a listing of all PaperClip commands necessary for file manipulation, such as File Read, File Write, etc. The print Help File contains a listing of PaperClip's printer control codes. The Editor Help File contains a listing of all PaperClip editing commands.

Press the appropriate letter and PaperClip will read that Help File into Window 2. If you have any text in Window 2, PaperClip will ask

Clear 2nd Window? No

If you change your mind, press **[RETURN]** or **[ESC]** and PaperClip will return the cursor to the editing Window. Otherwise enter ⟨Y⟩ and press **[RETURN]**. PaperClip will erase the text in Window 2 and list the Help File.

NOTE: The Help Files on your PaperClip Master Program Diskette are designed for screen display, not for printer output.

To delete the Help File (and the Window) press

[CTRL + SHIFT — ⟨D⟩].

The Help Files are listed separately on your PaperClip Master program Diskette. They are named HELPFIL, HELPPRT, and HELPEDT, respectively. Each of these files can be modified by reading the particular Help File into PaperClip as a regular text file, making your

changes, and writing the file back to the diskette. However, if you decide to change a Help File, it is suggested that you do not modify the files on your PaperClip Master Program Diskette.

You will find the full text of each Help File in APPENDIX E.

WRITING A FILE TO DISKETTE

You've created some sparkling copy and you want to save it to diskette. How do you do this? Simple. press

[CTRL + SHIFT — ⟨W⟩].

Write?

will appear on the Command Line. Enter the name of the file into which you want to store your prose, then press [RETURN]. Your text will be stored on your diskette under that filename.

If you are using PaperClip with one disk drive, you need not enter the drive number. If you are storing the file on any drive other than Drive 1, then you must enter the drive number before the filename. For example, D2:HENRY.

If you change your mind, press [ESC] to abort the command and return to the editing Window.

Forgotten some exciting prose you wish to add? No problem. Continue typing. You can write to your file at anytime and as many times as you want during your session. In fact, PaperClip will remember the filename for you. Whenever you are ready, press

[CTRL + SHIFT — ⟨W⟩].

PaperClip will show the name of the file currently in memory. Press [RETURN]. The new text will be written to diskette, replacing the old file. The cursor will return to the place in your text where you left off.

READING A FILE FROM DISKETTE

But suppose you're finished with one file and want to work on another or you've just turned on your computer and there is a file to which you wish to add some text. Press

[CTRL + SHIFT — ⟨R⟩].

The Command Line will say

Read?

If there is another file in memory, PaperClip will ask

Clear current Window?

Enter ⟨Y⟩ to clear the Window. PaperClip will then read your newly requested file into memory.

PaperClip will remember the name of the file, in case you want to write the modified text back to diskette. Press [ESC] to abort the command and return to the editing Window.

Once again, if the file is stored on Drive 2 you must enter the drive number. Paperclip doesn't care if you enter the filename in upper or lower case.

MERGING TWO FILES INTO ONE

You can place copy from a text file you have already created into any part of the file on which you are currently working. For example, suppose you are working on a file named TEXT.1 and you want to add text contained in TEXT.2. Place the cursor at the spot in your text where you want the second file to begin and press

[CTRL + SHIFT — ⟨R⟩]

and when PaperClip asks

Read?

enter the name of the second file (TEXT.2, in our example) and press **[RETURN]**. When PaperClip asks

Clear current Window?

enter ⟨**N**⟩. PaperClip then asks

Append to text?

If you enter ⟨**N**⟩, PaperClip will abort the entire process and return you to the editing Window. If you enter ⟨**Y**⟩, PaperClip will ask

Append at cursor position?

Enter ⟨**Y**⟩ and PaperClip will open the second file and place its contents into your onscreen file beginning at where you placed the cursor.

CAUTION: You cannot use this option to insert the second file into first file. Beginning at the cursor position, the contents of the second file will overwrite the first file.

If you enter ⟨**N**⟩, PaperClip will add the second file at the end of your current file.

WINDOWS

A feature of PaperClip that can't be found in many other word processors is the ability to work on two different files simultaneously. For instance, suppose you are writing a special report and suddenly get a brilliant idea that you just have to save. If you were using any other word processor program you'd have to follow these steps:

- Close the file on which you were working (for instance, D:MYREPORT)
- Open a new file (for instance, D:MYIDEA)
- Write down your idea
- Close the file (D:MYIDEA)
- Open your original file (D:MYREPORT)

- Find your place
- Continue working

With PaperClip all you need to do is press [SELECT]. The Command Line will move up and the cursor will now be resting below it in Window 2. You can now write down that great idea and save it to diskette when you are ready.

If, while you are writing in Window 2, you remember something that you want to add to your original report, press [SELECT] again and the cursor will move back to its original place in Window 1. You can toggle between Windows at anytime by pressing [SELECT].

To save the text, move the cursor to the Window containing the text you wish to save and press

[CTRL + SHIFT — ⟨W⟩]. (See Writing a File To Diskette.)

PaperClip will remember the name of the last file read into each Window.

You can read files into either or both Windows. Press [SELECT] and move the cursor to the Window in whch you wish to place the file. Then press

[CTRL + SHIFT — ⟨R⟩]. (See Reading a File From Diskette)

CLEARING A WINDOW

If you have text in a Window and want to clear the Window and delete the text, position the cursor in the Window you wish to remove. and press

[CTRL + SHIFT — ⟨D⟩].

PaperClip will ask you

Delete Window?

CAUTION: The Free lines shown on the Status Line refer to the number of available lines in the Text Buffer, which is used by both Window 1 and Window 2. If you are using both Windows in your creative process, be aware that it is possible to fill the Text Buffer.

Enter ⟨Y⟩ to delete. If the Window you are clearing is Window 2 and contains a disk directory or a Help File, PaperClip will automatically clear the Window when you press ⟨Y⟩. Otherwise, PaperClip will give you a chance to change your mind. The command Line will now read

Not Saved, Delete?

Type ⟨Y⟩ if you want to delete the Window (and the text in the Window). Press any other key if the answer is no.

ANOTHER WAY TO CLEAR A WINDOW

The two commands

[SHIFT—CLR] and [CTRL—CLR]

have the same function. Press [SELECT] and place the cursor within the Window containing the text to be deleted. Then press either of the above commands. PaperClip will ask

CLEAR (Y)es (N)o (R)estart?

If you enter ⟨Y⟩, PaperClip will clear the Window. If you enter ⟨N⟩, PaperClip will return the cursor to its original position within your text.

If you enter ⟨R⟩, PaperClip will ask

Clear macros ⟩ Yes

If you press [RETURN], PaperClip will clear any Macros you may have in memory.
If you enter ⟨N⟩ RETURN, PaperClip does not clear your Macros.
PaperClip then clears the text buffer and returns to the opening screen.

SCROLLING THE WINDOW

You can 'scroll', or move the entire Window to the right by pressing

[CTRL + SHIFT — ⟨] ⟩].

(⟨] ⟩ means to press the right bracket key.) The entire Window can be scrolled back to the left by pressing

[CTRL + SHIFT — ⟨ [⟩].

(⟨ [⟩ means to press the left bracket key.)

CAUTION: When in the editing mode in Window 2, PaperClip will accept all commands except those that use Window 2 for display purposes. Since PaperClip uses Window 2 to display Print Preview, the Help Files, and the Disk Directory, you cannot use those commands while in Window 2 without losing your text. Save any text in Window 2 to diskette first.

PAPERCLIP AND THE SYSTEM RESET KEY

You can press [SYSTEM RESET] at anytime to clear your text Windows.

3 THE OPTIONS MENU

PaperClip can be configured or "individualized" to fit your particular needs. Once so configured, you can save your personalized PaperClip to another diskette.
The following features are "user programmable":

- The left and right screen margins
- The size of the editing Windows
- A version of PaperClip can be created to take best advantage of your printer's features and capabilities.
- Special text blocks (Macros) can be created that you can enter with one keystroke.
- The color of the screen can be set to your particular taste.

The Options Menu is displayed by pressing [OPTION]. You will be given these choices:

(E)dit (P)rinter (M)acros (D)os (S)ave

THE EDITOR OPTIONS

You can reconfigure the PaperClip Screen Editor at any time by pressing **[OPTION]**, then pressing **⟨E⟩**. PaperClip will allow you to make these changes in order:

- Set the Cursor Movement Toggle
- Set the Screen Scroll Toggle
- Set the left screen margin
- Set the line length (right margin)
- Turn the Alarm Bell on or off.

- Set the size of the editing Windows
- Turn the Auto Save function on or off
- Set the Attract Mode Toggle
- ATARI XL owners can turn the key click on or off
- Set the colors of the screen.

SETTING THE CURSOR MOVEMENT TOGGLE

PaperClip uses the normal ATARI cursor control keys to move the cursor around the screen. (Press and hold [CTRL] and then press the appropriate Arrow key.) PaperClip allows you to use the Arrow keys WITHOUT pressing [CTRL], if you choose to do so.

After pressing ⟨E⟩. PaperClip will display

(E) Control for cursor? ⟩ Yes

Press [RETURN] to use this feature. PaperClip will move the cursor in the direction specified when you press the appropriate arrow keys WITHOUT pressing [CTRL] first. To get the regular key character press [CTRL] and then the key. For instance, to enter a plus sign (+) into your text, press [CTRL — ⟨LeftArrow⟩].

Press ⟨N⟩ [RETURN] if you want to use this feature.

See Cursor Control Keys, Section 4, for more details.

SETTING THE SCREEN SCROLL TOGGLE

If you set a line length (right margin) that is greater than the width of your monitor screen, the entire line cannot be displayed in the editing Window. PaperClip solves this dilemma by keeping the line on which you are typing within the Window. This, in effect, is scrolling the line.

Your options are to scroll one line or to scroll the entire editing Window across the line as you type. After setting the Cursor Movement Toggle, PaperClip will then say

(E) Scroll whole screen? ⟩ No

If you want the entire Window to move, enter

⟨Y⟩ [RETURN].

Otherwise, just press [RETURN].

SETTING THE LEFT MARGIN

The ATARI Home Computer was designed to display on a home color television set. (Of course, you can use a black & white television or a specially designed monitor). Many television sets have "underscan", where a portion of the display area is cut off.

After setting the Screen Scroll Toggle, PaperClip will say

(E) Left margin ⟩ 0

You can change the left screen margin to keep your text within the left boundary of your television by entering any number between 0 and 2 and then pressing [RETURN]. (Computers count strangely. Their first number is 0, while we humans are used to starting with 1.) PaperClip will not allow you to enter a left margin less than 0 nor greater than 2.

SETTING THE LINE LENGTH

NOTE: The screen margin settings have no bearing on the margins of your printed copy. These are handled by the Printer Controls, which are discussed in SECTIONs 6 and 7.

PaperClip will now display

(E) Line Length ⟩ 40

Line Length refers to the length of line you wish displayed on your screen (the right screen margin). You can enter any number from 15 to 132. Then press [RETURN].

When editing, PaperClip will keep the line on which you are typing in the Window until you press [RETURN] or you reach your preset margin. If the word you are typing pushes

the cursor past your margin limit, it will "wordwrap" and place the entire word on the next line.

THE ALARM BELL TOGGLE

After you have entered your line length and pressed [RETURN], PaperClip will ask

(E) Alarm Bell Y/N ⟩ Yes

PaperClip sounds an alarm to warn you of special occurrences (for instance when you press [CTRL + SHIFT — DELETE]). This bell can be turned off by answering "No" here.

Press [RETURN].

SETTING WINDOW SIZE

Now PaperClip displays

(E) Window Size ⟩ 12

This refers to the number of lines displayed in Window 1. (See SECTION 2 for details.) PaperClip will allow you to enter any figure from 4 to 14. Press [RETURN].

TURNING ON AUTO SAVE

PaperClip will display

Auto Save Y/N ⟩ No

PaperClip's Auto Save option allows you the luxury of automatically saving the text file on which you are working after a predescribed number of keystrokes.

If you press [RETURN] or enter ⟨N⟩, PaperClip will move to the Screen Colors option. If you enter ⟨Y⟩ and press [RETURN], PaperClip will ask

(E) How many characters? 2000

This means that PaperClip will automatically save your text when you have entered

2000 characters. You can enter any figure between 100 and 32000. Enter the figure you want and press [RETURN]. PaperClip will then display

(E) Auto Save drive # 1

If you want PaperClip to use Drive 2 when automatically saving your text then enter

⟨2⟩ [RETURN]

PaperClip will alternatively save your text into a file named PCTEMP.1 or PCTEMP.2 on the disk drive you have designated. The save will be done whenever you have entered the number of characters you have set. PaperClip will put a warning notice on the Command Line 10 characters before save is done.

Even if the Auto Save option is not toggled on, you can still use it by pressing

[CTRL + SHIFT — TAB]

at any time. PaperClip will write the current text into a temporary file and assume Drive 1. A handy feature if the phone rings while you are working and you want to quickly save what you have done.

NOTE: If you previously set the Auto Save to on, chose Drive 2, and then later turned Auto Save off, PaperClip will save to D2:PCTEMP when you press [CTRL + SHIFT — TAB]

SETTING THE ATTRACT MODE TOGGLE

ATARI found that some of their early games would "burn in" and create a ghost image on the face of the television or monitor. This was caused by some of the screen phosphors being "lighted" more than others.

ATARI's engineers devised a way to periodically change the luminance of the signal to the screen which stopped this problem. Taking a page from their (then) coin-op brethren,

they called it the "attract mode". (In a coin-op game, the attract mode is the mode that is supposed to attract a player to a game and entice him to drop in a coin.)

ATARI Home Computers are set so that they automatically go into attract mode after about nine minutes. You can turn the attract mode on, if you wish by entering

⟨Y⟩ [RETURN]

when PaperClip asks

(E) Attract mode ? No

Press [RETURN] if you want the attract mode to remain off.

TURNING OFF THE KEY CLICK (XL and XE's Only)

If you are using an older ATARI 400 or ATARI 800, PaperClip will automatically skip this option.

When PaperClip asks

(E) Allow key click ? ⟩ No

press [RETURN] if you want to disable the key click sound. Otherwise, enter

⟨Y⟩ [RETURN⟩.

SETTING SCREEN COLORS

PaperClip allows you to set the screen colors to suit yourself. When the Command Line reads

(E) Screen colors

press [⟩] or [⟨] to change the background color, ⟨UpArrow⟩ or ⟨DownArrow⟩ to set the contrast, and ⟨I⟩ to set the intensity. When you are satisfied with the screen colors, press [RETURN] or [ESC]. Now you are ready to begin writing.

CHANGING AN EDITOR OPTION AFTER IT IS SET

You can change any option on the screen editor (except the line length) at any time. Press

[OPTION] ⟨E⟩

and cycle through the choices until you find the one which you wish to change. Make your change, then press **[ESC]**. PaperClip will record the change and return to the editing Window.

CAUTION: If you have text in the editing Window and reset the line length PaperClip cannot reconfigure the text. Your file will be erased from memory. If you must change the line length, save the file to diskette first.

THE PRINTER OPTION

PaperClip can be used with any printer. Your PaperClip Master Program Diskette contains Printer Configuration Files for many of the major brands and types of printers that can be used with your ATARI Home Computer. When the appropriate Print Configuration File is read into PaperClip, the program will then know the specific control codes to send to your printer to make it print your document the way you want it, such as underlining text, centering lines of text on the page, etc. (Printer Control Codes are explained in detail in SECTIONs 6 and 7.)

A list of the Printer Configuration Files can be found in APPENDIX B. Find the Printer Configuration File that matches your printer. (If you cannot find a file for your printer, APPENDIX D has details on creating a customized Printer Configuration File.)

Once you have found your Printer Configuration File, press [OPTION], and when PaperClip asks

(E)ditor (P)rinter (M)acros (D)os

press ⟨P⟩. PaperClip will now ask

⟨P⟩ Config file name⟩

Enter the name of your Printer Configuration File and press [RETURN]. PaperClip will read the file and set itself up accordingly. If the Printer Configuration File is on any drive other than Drive 1, you must enter the Drive number (for example, D2:AT825.CNF).

THE MACRO OPTION

SECTION 11 has instructions for creating Macro Files and their use.

After pressing [OPTION] to get the Options Menu on the Command Line, press ⟨M⟩ for Macros. PaperClip will ask

⟨M⟩ Macro file name ⟩

Enter the name of your Macro File. PaperClip will read the file into the Macro Buffer and the Macros are now ready for your use.

Your Macro File can be placed on any disk drive in your system. If it is on Drive 2 then you must enter the drive number (for example, D2:MACRO).

CAUTION: If you have any text in your editing Windows, the text will be lost when you read in your Macro File. Save any text on which you are working to diskette BEFORE reading in your Macro File.

THE DOS OPTIONS

Press [OPTION] to put the Options Menu on the Command Line. When PaperClip asks

(E)ditor (P)rinter (M)acro (D)os

press ⟨D⟩. PaperClip will now display a menu:

(E)rase (R)ename (I)nit (P)ro (U)npro

As with most commands, you can press [ESC] if you change your mind, and PaperClip will abort the command.

DELETING FILES

To erase or delete a file from diskette, press ⟨E⟩. PaperClip will ask

Erase file name?

Enter the filename and press [RETURN]. If the file is not on Drive 1, you must specify the drive number (for example, D2:DUMBO).

The Command Line will now state

Press START to delete, ESC to exit

PaperClip will erase the file when you press [START].

RENAMING FILES

To rename a file on your data diskette, press ⟨R⟩. PaperClip will ask

Rename File?

Enter the name of the file to be renamed, press the space bar, then enter the name to which you wish the file to be changed. For instance,

Rename File? ⟨D2:TEMP TEST⟩

will change a file named TEMP on the diskette in Drive 2 to TEST.

FORMATTING A DISKETTE

To format a diskette, place the diskette in a disk drive and press ⟨I⟩. PaperClip will ask

Format drive #?

NOTE: PaperClip uses true double density as well as single density. Therefore, it cannot read or write to the "enhanced" density of ATARI DOS 3, which is sometimes used by the ATARI 1050 Disk Drives. PaperClip will write to single density on these drives and can use the 1050 Density mode of SynFile+.

Enter the drive number of the disk drive containing the diskette to be formatted and press [RETURN]. PaperClip will ask

(S)ingle or (D)ouble Density?

If you are using double density disk drives, enter ⟨D⟩; if you are using single density disk drives, enter ⟨S⟩.
Your disk drive will make a whirring noise and then PaperClip will state

Press START to format, ESC to exit

If you press [ESC], PaperClip will set the requested drive density for the drive number you have entered, and return to the editing Window.

PROTECTING FILES

Press ⟨P⟩ to protect a file from accidental erasure. PaperClip will then ask

Protect File?

Enter the filename and press [RETURN].

NOTE: You cannot write to or erase a protected file.

Protected files are noted with an asterisk (*) to the left of the filename when you read the disk directory.

UNPROTECTING FILES

If you have a protected file on your data diskette that you want to unlock, press ⟨U⟩. PaperClip will ask

Unprotect file?

Enter the filename and press [RETURN]. PaperClip will "unlock" the file so that you can write to it or erase it.

USING SINGLE OR DOUBLE DENSITY DISKETTES

A special disk operating system (DOS) is incorporated within PaperClip and is used for disk I/O. The DOS supports two disk drives and is "density smart". It automatically senses the density of the diskette in the drive when an attempt is made to open a file. If you have both single
and double density drives on your system, this allows you to easily change between single and double density diskettes.

Some disk drives, such as the Percom and Astra, do an automatic density switch on the master drive, and not on any slave (or second) drives. This means that to whatever density the second drive defaults is the only density PaperClip will use in that drive. If all drives are master drives there is no problem with density switching.

SAVING PAPERCLIP

There are two ways you can make backup copies of PaperClip. One is to use the "J — Duplicate Disk" function of ATARI DOS 2.0 or DOS XL. This will create a duplicate of the version of PaperClip that you are copying.

NOTE: You can use the Atari DOS"C — Copy File" function to move PaperClip to a new diskette, but the program on the new diskette will not work. PaperClip has its own disk operating system included within the program. Therefore certain sectors of the destination diskette must be reserved for PaperClip for the program to work properly.

However, you may find that you want a copy of the PaperClip program on each of the data diskettes you may be using. And, you may be using a different set of Macros for each. (For instance, correspondence may use different Macros than school or business reports.)

Once you have reconfigured PaperClip to suit your particular needs and taste, you can save that version, including Macros and your Printer Configuration File, to any formatted diskette. The Macros and the Printer Configuration File must have been read into PaperClip before they can be saved to your personalized version. (See Editor Options, this SECTION, for instructions on reconfiguring PaperClip.)

To save your customized version of PaperClip, press

[OPTION]

CAUTION: PaperClip clears the Text Buffer when it reads the program to the new diskette. Save any text you may have in the Editing Windows before proceeding.

NOTE: Although you can put the PaperClip program on any clean formatted diskette, you cannot use the program without the PaperClip Key. The Key must be placed in Joystick Port 2. See How To Load PaperClip, SECTION 1.

then press ⟨S⟩. The command line will then say

(S) with Macros? ⟩ No

Press [RETURN] if you do not want to include any Macros in your new PaperClip.
To include Macros, enter ⟨Y⟩ [RETURN].
The Command Line will then say

Insert destination disk, press START

Place your clean formatted diskette in Drive 1 and press [START]. PaperClip will then read your reconfigured version of PC.SYS to that diskette.

4 EDITING COMMANDS

The simple editing commands described here are all you need to begin work. If this is the first time you have used a word processor program, study this section carefully. If you're an old hand with word processing, you should still spend some time scanning this section to familiarize yourself with the various commands.

CURSOR CONTROL KEYS

The cursor can be moved quickly and easily around your text with these commands. Your PaperClip Program Diskette contains a sample file named CURSOR. Read it into PaperClip and experiment with the various commands listed below.

MOVING AROUND THE SCREEN

[CTRL — ⟨ ↑ ⟩] – moves the cursor directly up one line.
[CTRL — ⟨ ↓ ⟩] – moves the cursor directly down one line.
[CTRL — ⟨→⟩] – moves the cursor one space to the right. If the cursor is in the column 1 position, the cursor will go to the end of the previous line.
[CTRL — ⟨←⟩] – moves the cursor one space to the left. If the cursor is at the end of the line, the cursor will go to be start (column 1) of the next line.

If you have turned off the Cursor Movement Toggle, then you need only press the appropriate arrows keys. See SECTION 3.

[CTRL + SHIFT — ⟨) ⟩] – moves the cursor one word to the right. if the cursor is at the end of the line, the cursor will move to the start of the next line.

[CTRL + SHIFT — ⟨ (⟩] – moves the cursor one word to the left. If the cursor is at the beginning of the line, it will go to the end of the previous line.
[CTRL + SHIFT — ⟨INSERT⟩] – moves the cursor from any position in a line to the end of the line.
[CTRL + SHIFT — ⟨CLR⟩] – moves the cursor from any position in a line to the beginning of the line.

MOVING AROUND THE FILE

[CTRL + SHIFT — ⟨ ↑] – moves the cursor up one screen. The number of lines the cursor moves depends on the number of lines you are using in that Window.
[CTRL + SHIFT — ⟨ ↓ ⟩] – moves the cursor down one screen. The number of lines the cursor moves depends on the number of lines you are using in that Window.
[CTRL + SHIFT — ⟨] ⟩] – scrolls Window one space to the right.
[CTRL + SHIFT — ⟨ [⟩] – scrolls Window one space to the left.
[CTRL + SHIFT — ⟨E⟩] – moves the cursor to the end of your text.
[CTRL + SHIFT — ⟨H⟩] – moves the cursor to the head (top) of your text.

DELETING COPY

PaperClip gives you several ways to remove portions or all of your text from the screen.

DELETE A SINGLE CHARACTER

To delete the character underneath the cursor, press

[DELETE].

To delete a single character to the right of the cursor, press

[CTRL — DELETE].

DELETING A SINGLE WORD

To delete a single word, position the cursor anywhere on the word and press

[CTRL + SHIFT — ⟨5⟩]

DELETING A RANGE OF TEXT

To delete a range of copy (this is also called Block Delete), position the cursor on the first character of the text you want to delete. Press

[CTRL + SHIFT — ⟨M⟩]

When PaperClip asks

Set Range

then position the cursor on the last character of the text you want to delete and press [RETURN]. PaperClip will ask

(M)ove (C)opy (D)elete

Press ⟨D⟩ and PaperClip will delete the text within the range you have set. The Block Move and Block Copy commands are described in SECTION 5.

Press [ESC] at any time to abort the command and return to the editing Window.

DELETE COMMANDS THAT FILL THE PASTE BUFFER

The Delete Commands listed below place the deleted text into a special buffer area called the Paste Buffer, which actually is a part of the Text Buffer. notice that as you delete lines of text the number of Free lines diminish. The number of Free lines will increase when you clear the Paste Buffer.

To delete an entire line, place the cursor on that line and press

[SHIFT — DELETE].

CAUTION: There is a limitation to using **[CTRL + SHIFT — DELETE]** to delete to the top or end of the file (using the ⟨**T**⟩ or ⟨**E**⟩ command). If you have positioned the cursor anywhere but the beginning of the screen line, the line on which the cursor is placed is not placed in the Paste Buffer.

To delete copy from the cursor to either end of your file, the command is

[CTRL + SHIFT — DELETE].

PaperClip will ask

[Delete to (E)nd or (T)op of file?

To delete to the end-of-file, position the cursor over the first character to be deleted and press ⟨**E**⟩. PaperClip will delete everything from the cursor to the end of the text.

To delete to the top-of-file, position the cursor over the last character to be deleted and press ⟨**T**⟩. PaperClip will delete everything from the cursor to the top of your text.

In either case, the character underneath the cursor will also be deleted. Press **[ESC]** to abort any command and return to the editing Window.

THE UNDO COMMAND

If, when using the **[CTRL + SHIFT — DELETE]** command, you decide that you really did not want to delete the text after all, press

[CTRL + SHIFT — ⟨U⟩].

PaperClip will replace the text you previously deleted. However, if you have moved the cursor in anyway (such as by editing on that line), the Paste Buffer will be emptied.

USING THE PASTE BUFFER

You can place the contents of the Paste Buffer anywhere in your text by positioning the cursor at the beginning of the line where you want it placed and pressing

[CTRL + SHIFT — ⟨P⟩]

37 **CAUTION:** The Free lines shown on the Status Line refer to the number of available lines in the Text Buffer, which is used by Window 1, Window 2 and the Paste Buffer. (In fact, the Paste Buffer is akin to a third "invisible" Window. If you are putting a large amount of text into the Paste Buffer, it is advisable to empty it so as to not fill the entire buffer area.

PaperClip will "paste" the contents of the Paste Buffer into your text beginning at your cursor position.

The Paste Buffer is not automatically cleared when you use the Paste Command, so you can paste its contents as many times as you wish. You can even create text in Window 2, put it in the Paste Buffer, press [SELECT] to move the cursor to Window 1 and paste it into the text you have there.

To clear the Paste Buffer, press

[CTRL + SHIFT — DELETE]

and then press [RETURN].

Press [ESC] to abort any command and return to the editing Window.

5 MORE EDITING COMMANDS

Experiment with the editing commands listed in this section. As you learn the commands and how to use them, you'll see why PaperClip is the most powerful word processor program yet designed for the ATARI Home Computer.

CUT AND PASTE

Cut and Paste is a typographer's term meaning to take (cut) a piece of text from one place in the copy and move (paste) it in another place. PaperClip allows you to do this as well. (This is also known as a "Block Move").

You can also duplicate a block of text and move the duplicate copy to another place in your manuscript. (This is a Block Copy.) Or, you can "cut" a block of text and throw it away (Block Delete).

But before you can do any of these things, you must tell PaperClip which block of text it is that you want to manipulate. Move the cursor to the first character in the block and press

[CTRL + SHIFT — ⟨M⟩].

PaperClip will ask

Set Range

Using any of the Cursor Control commands, move the cursor to the last character in

the block of text and press [RETURN]. PaperClip will highlight the text, read it into a special buffer, and then ask

(M)ove (C)opy (D)elete

Press ⟨M⟩ to delete the text block and move it to another place. Press ⟨C⟩ to move a copy of the text block. Press ⟨D⟩ to remove the text block. If you change your mind, press [ESC] to abort the command and return to the editing Window.

If you press ⟨D⟩ then PaperClip will remove the range of text you have selected. If you press either ⟨M⟩ or ⟨C⟩ then PaperClip will ask

Destination?

Move the cursor to wherever it is that you want to place the text block and press [RETURN]. PaperClip will read the text block out of the buffer beginning at the point where you have placed the cursor.

If you move the cursor to the opposite Window by pressing [SELECT] before you press [RETURN], you can then empty the buffer into that Window area.

FINDING A CHARACTER STRING

You can find the occurrence of a string of characters within your text file simply and easily. Move the cursor to the head of the file and press

[CTRL + SHIFT — ⟨F⟩].

PaperClip will ask

Find?

If you change your mind, press [ESC], otherwise enter the group of characters or words

you wish to locate and press **[RETURN]**. PaperClip will place the cursor on the first occurrence. If you press

[CTRL + SHIFT — ⟨F⟩].

again, PaperClip will find the next occurrence. When PaperClip can no longer find a match,

Not Found

will appear on the Command Line.

SUBSTITUTING A CHARACTER STRING

Suppose you've just finished typing your great American novel and then you decide that you should change the hero's name from Bruce to Bryce. Is it necessary to go through each file and manually make the change? No! You're using PaperClip!

Press

[CTRL + SHIFT — ⟨S⟩].

PaperClip will ask

Global Substitute ⟨Y/N⟩ Yes

For now, press **⟨N⟩ [RETURN]**. PaperClip displays

Substitute?

At this point, enter exactly how you want the text to read AFTER the change has been made and press **[RETURN]**. (Bryce, in our example.) PaperClip will then ask

for?

Now enter the text that you want to change. (Bruce)

PaperClip will change the first occurrence. (In our example, PaperClip will change Bruce to Bryce the first time Bruce appears in your text.) If you press

[CTRL + SHIFT — ⟨F⟩] [RETURN]

PaperClip will find the next occurrence. You can change that occurrence by pressing

[CTRL + SHIFT — ⟨S⟩]

or go on to the next by pressing

[CTRL + SHIFT — ⟨F⟩].

Press [ESC] to abort the command and return to the editing Window.

If you are planning to make the same change in other files, PaperClip remembers what the Substitution string and the Find string is. Read in the next file, press

[CTRL + SHIFT — ⟨S⟩]

and then press [RETURN] at the appropriate commands.

GLOBAL SUBSTITUTION

You don't have to go through each and every file to make a substitution. PaperClip will change each and every occurrence on command. When PaperClip asks

Global Substitute Y/N⟩ Yes

press [RETURN]. PaperClip will then ask

Include files also? Y/N⟩ No

Press [RETURN]. (Include Files are described in SECTION 10. See that SECTION also for information on Global Substitution within them.)

Enter your change. PaperClip now asks

More? (Y/N) No

Press [RETURN] again.

PaperClip moves the cursor to the top of the Test Buffer and automatically changes every occurrence throughout your file. This is Global Substitution.

MULTIPLE GLOBAL SUBSTITUTIONS

When the Command Line says

More? (Y/N) No

enter ⟨Y⟩ [RETURN]. This gives you the opportunity to make a second change in your document at the same time. Suppose our hero's love interest was named Alyce and we decided to change the name to Alice. The Command Line once again states:

Substitute?

Enter the second change (Alice) and press [RETURN]. When PaperClip asks

for

enter the second piece of text you want changed. (Alyce)

PaperClip will again ask

More? (Y/N) No

If you have any more changes to make, enter the data in the same way. PaperClip will accept up to six substitutions. If you have no more changes then press [RETURN].

PaperClip will go through your text once for each change you have requested in the reverse order to which they have been entered. In our example, one check would be made for "Alyce" and a second check would then be made for "Bruce".

HINTS ON USING THE FIND AND GLOBAL SUBSTITUTION COMMANDS

1. If you are looking for a single word put a space before and after the word when PaperClip asks **"Find?"**. For instance, if you are looking for the word "the" in your text, without the space before and after PaperClip will find each occurrence of "other", "their" and any other word in which "the" appears.

2. The same is true when doing a Global Substitution. Just remember to put the same spaces in your **"Substitute"** string as you do in your **"For?"** string.

3. Here's a shortcut for entering your **"For?"** or your **"Find?"** string. Position the cursor on the first occurrence of the string to be found. PaperClip will enter a character (beginning at the cursor position) each time you press **[CTRL — →]**.

4. You can use Global Substitution to change Printer Control codes within your text. See APPENDIX C for details.

5. PaperClip remembers the strings you have entered in your Substitution and will display them when you ask for a second Substitution. In Multiple Global Substitutions, PaperClip remembers the first set of strings.

TAGS

A unique feature of PaperClip is the ability to place "Tags" within your text. Tags act as a sort of bookmark that allows you to return to that place within your text with a single keystroke.

To set a Tag, position the cursor in your text where you want the Tag set and then press

[CTRL + SHIFT — ⟨T⟩]

PaperClip will ask

tag id:

Enter a single character for your Tag ID, for instance, the number "1" or the letter "a" and press [RETURN]. You can set numerous Tags throughout your text.

Press [ESC] to abort the command and return to the editing Window.

Once you have set your Tags where you want them, you can move quickly to that place in your text by pressing

[CTRL + SHIFT — ⟨G⟩]

PaperClip again asks

tag id:

Enter the number or character you have chosen for the Tag. When you press [RETURN], PaperClip will place the cursor at that place in your text.

Press [ESC] to abort the command and return to the editing Window.

You can set as many tags as there are charactes on your keyboard, including uppercase and lowercase.The Tags are not saved as a part of your text when you write your text to a disk file. Tags are lost if you do any editing on the line containing them.

CAPS/LOWERCASE TOGGLE

NOTE: PaperClip has a unique feature for ATARI 400/800 owners. Pressing [CAPS/LOWR] tog-

A feature of PaperClip not usually found in word processors for the ATARI Home Computers is the ability to change uppercase letters to lowercase letters (or lowercase letters to uppercase letters) with one keystroke. Suppose you have inadvertently typed several words in uppercase letters before you were aware of it. Place the cursor over the first letter to be changed and press

45 gles between uppercase and lowercase letters. You no longer need to press [SHIFT-CAPS/LOWR] to look into uppercase letters (although that feature still works). This is standard on ATARI XL Home Computers.

[CTRL + SHIFT — CAPS/LOWR].

PaperClip will change (toggle) that letter from uppercase to lowercase and move the cursor to the next letter. If you continue to hold the keys down, PaperClip will change the next letter as well and move to the third.

INSERT/OVERWRITE TOGGLE

A nice feature about word processors is the ability to insert words and sentences within the body of your text. Then there are times that you may wish to write over part of your text. The PaperClip Insert/Overwrite toggle allows you to do either.

PaperClip's default mode is Insert. That means when you begin typing, PaperClip will push any text ahead of your new copy out of the way.

To set PaperClip so that it will overwrite your text, press

[CTRL + SHIFT — ⟨I⟩]

Notice that the color of the screen margin changes. This is to warn you that you are in the Overwrite Mode. To set PaperClip back to Insert mode, press

[CTRL + SHIFT — ⟨I⟩]

again. The color of the screen margin will change back.

LETTER SWAP TOGGLE

You're madly typing along, and, as sometimes happens with typing, your fingers move faster than your brain. You transpose a couple of letters. For instance, suppose you type "brian" when you meant to type "brain".

Instead of deleting the entire word, place the cursor over the second of the two transposed letters (the letter "a" in our example) and press

[CTRL + SHIFT — ⟨3⟩]

PaperClip will magically transpose the character under the cursor with the character immediately before it (changing "brian" to "brain").

WORD SWAP TOGGLE

PaperClip also allows you to swap two words within a sentence. The two words to be exchanged MUST be on the same line on the screen. Place the cursor anywhere within the second of the two words to be swapped. Press

[CTRL + SHIFT — ⟨4⟩]

PaperClip will exchange the two words within the sentence. For instance suppose the sentence is

You can word swap

Place the cursor over the Carriage Return at the end of the sentence and press

[CTRL + SHIFT — ⟨4⟩]

Add an "s" to the end of the sentence and it now reads:

You can swap words

NOTE: If you have any punctuation after the last word (an exclamation mark, for instance), PaperClip will include it in the swap.

WORD COUNT

Here's a feature of PaperClip that students and authors will appreciate. Suppose you've been given an assignment to prepare a 1500 word essay or article. Normally, you would have to

47 **NOTE:** If you are using an ATARI 800 or an ATARI 400 with 48K memory, or an ATARI 65XE Home Computer, PaperClip's text buffer will hold about 2300 words. If you are using an ATARI 800XL or an Atari 65XE or Atari 30XE, PaperClip will hold about 4300 words.

make an educated guess based on the number of typewritten pages, or to count each word in your text. Press

[CTRL + SHIFT — ⟨1⟩]

and PaperClip will give you a count of the words in the file you currently have in memory. To return to the edit mode, just begin typing.

Actually, PaperClip does not count the words, but counts the spaces between the words. This method gives a fairly accurate estimate of the number of words contained in your work.

6 PREPARING YOUR PAGE FORMAT

What good is a word processor program if you can't make a "hard copy" (print your text on paper)? PaperClip allows you a choice of many different formats to use, depending on the features of your particular printer. But, before you can choose the printer features, PaperClip has to know how to tell your printer to do all the things that you may want it to do.

Printer Control Codes are the special codes that tell your printer to perform specific functions, such as microspacing, centering text, or setting the line spacing, etc. There are no standard printer control codes; each printer manufacturer seems to use their own particular set of control codes. Also, printer functions are not standardized either; what one printer can do another cannot do. Check the manual that came with your printer to see which print functions your printer will support.

As mentioned in SECTION 3, your PaperClip Master Program Diskette contains Printer Configuration Files for many of the major brands and types of printers. Each Printer Configuration File has been designed for a specific printer. It contains the information that PaperClip needs to send the correct printer control codes to your printer. You can find a listing of the various Printer Configuration Files in APPENDIX B.

Unlike some other word processor programs, PaperClip gives you a unique visual representation of each of the control codes. This is so you can tell exactly what codes you have entered and what to expect on your printed copy.

FORMATTING THE PRINTED PAGE

PaperClip will allow you to change the margins of your document and do other changes that will make the printed page more visually appealing.

SETTING THE PAGE MARGINS

Page margins are the area of white space at the sides, top, and bottom of the printed page.

PaperClip's built-in default margins are:

Top Margin	– 6 lines
Bottom Margin	– 60 lines
Left Margin	– 10 characters
Right Margin	– 70 characters

This creates about one inch of white space around your printed text.
To change your margins press

[CTRL — ⟨M⟩]

PaperClip will ask

(T)op, (B)ottom, (R)ight or (L)eft ?

When you press any of these keys, PaperClip will place a special code on the screen (and in your text) that alerts your printer that a margin is to be changed. Enter the number of the line or column to which you want that margin to be changed. For instance,

[CTRL — ⟨M⟩] ⟨T3⟩
[CTRL — ⟨M⟩] ⟨B63⟩
[CTRL — ⟨M⟩] ⟨L5⟩
[CTRL — ⟨M⟩] ⟨R75⟩

NOTE: Many printers can be programmed to print more lines per inch or more (or less) characters per inch by changing the type style. Your margins should be adjusted accordingly. See Setting The Print Pitch, in this section.

NOTE: Any changes in the margins must be made before the first Carriage Return in your text file in order for PaperClip to set the margins before printing. In any event, the left margin should be set before the right margin.

will change the top margin to three lines, the bottom margin to 63 lines, the left margin to five characters, and the right margin to 75 characters. In effect, this will create a $^1/_2$ inch margin of white space around your printed text.

CHANGING THE LENGTH OF THE PRINTED PAGE

Suppose you want to print your text on legal size ($8^1/_2 \times 14$) paper. You can tell PaperClip that you are using a different size page by pressing

[CTRL — ⟨Z⟩] ⟨L⟩.

Now enter the number of lines you want printed on each page. For instance, for a 14 inch page, you would enter 84 (6 lines per inch times 14 inches). The command would look like this

CTRL — ⟨Z⟩] ⟨L84⟩

Don't forget to change your page margins to match your new page length.

NOTE: [CTRL — ⟨Z⟩] is a special command used by PaperClip. It alerts PaperClip that the character that follows is also a command. See SECTION 9 for details.

SETTING THE PRINTED LINES PER INCH

Most printers will print a "standard" six lines of text per inch on the page. This is PaperClip's default setting. Some printers can also print eight lines of text per inch. PaperClip allows you to format your page for either setting.

To set your printed page at eight lines per inch, position the cursor at the beginning of the first line you want printed at that setting and press

[CTRL — ⟨Z⟩] ⟨8⟩

To reset your printed page at six lines per inch, position the cursor at the beginning of the first line you want printed at that setting and press

[CTRL — ⟨Z⟩] ⟨6⟩

SETTING THE LINE SPACING

PaperClip allows you to set the number of blank lines you want between each line of printed text. To set the line spacing, press

[CTRL — ⟨Z⟩] ⟨G⟩

enter the number of blank lines and press **[RETURN]**. For instance,

[CTRL — ⟨Z⟩] ⟨G2⟩

will tell PaperClip to print on every second line or, in effect, to skip a line.

BLOCKING TEXT TO THE RIGHT MARGIN

"Block right" means to line up the text so that the last character in the text ends at the right margin. (This is also called Flush Right.) To invoke the Block Right command, position the cursor in front of the text that you wish to Block Right and press

[CTRL — ⟨R⟩].

PaperClip will place a special character in front of the text. When PaperClip sends that character to your printer, the proper amount of spaces will be placed in front of your text to force it to the right margin. You must use a Block Right command for each line of text.

The line of text must fit within the margins that you have set for your printed page.

CENTERING TEXT ON THE PAGE

Centering a line of text on the page is a nice way of making the printed page visually appealing. PaperClip centers one line of text at a time; therefore it must be told each time to center a line.

This command can be used in combination with printer commands that change the

type style, such as Bold Face and Italics, and commands that change the pitch of the printer. See your printer owners manual for details.

To set the Centering function, place the cursor immediately in front of the first character on the line to be centered. Press

[CTRL — C]

PaperClip will ask

(S)tart or (E)nd?

Press **[S]** to start centering.

To end centering, place the cursor at the end of the text to be centered and press

[CTRL — C]

again. Now when PaperClip asks

(S)tart or (E)nd?

press **[E]**.

PaperClip will center all text between the Start Command and the Carriage Return ending the line (or the End Command, whichever comes first).

MIXING PRINT FORMATS ON THE SAME LINE

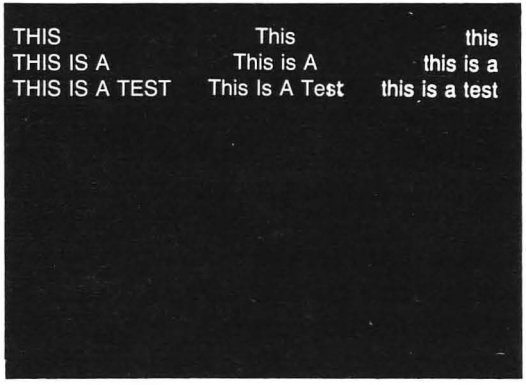
You can place text to be printed flush left, text to be centered, and text to be flush right on the same line. For example, try this:

⟨THIS⟩ [CTRL — ⟨C⟩] ⟨S⟩ ⟨This⟩ [CTRL — ⟨C⟩] ⟨E⟩ [CTRL — ⟨R⟩] ⟨this⟩ [RETURN]

⟨THIS IS A⟩ [CTRL — ⟨C⟩] ⟨S⟩ ⟨This is A⟩ [CTRL — ⟨C⟩] ⟨E⟩ [CTRL — ⟨R⟩] ⟨this is α⟩ [RETURN]

⟨THIS IS A TEST⟩ [CTRL — ⟨C⟩] ⟨S⟩ ⟨This is A Test⟩ [CTRL — ⟨C⟩] ⟨E⟩ [CTRL — ⟨R⟩] ⟨this is α test⟩ [RETURN]

When printed, it should look like this:



CAUTION: The flush right text MUST be the last bit of text before the Carriage Return and the entire text must fit on one printed line.

THE JUSTIFICATION TOGGLE

Justification is a typographers term that means the left and right margins of the printed text are even. PaperClip does this by placing a extra space between each word starting at the left of the line.

PaperClip uses a "toggle" to turn off and to turn on justification. To turn on justification, enter

[CTRL — ⟨Z⟩] ⟨J⟩

This sets the justification toggle to ON and PaperClip will justify your text.

To turn justification off again, enter another

[CTRL — ⟨Z⟩] ⟨J⟩

PaperClip's default setting is OFF. If no command is issued, PaperClip will not justify your document as it is printed.

MICROSPACING

When text is justified, "spare" spaces are added to each line in order to even up the right margin. When this is done some words may have two or more spaces between them, and others have will have one, even though there is only one space between the words in the document. This tends to place more "white space" on the left side of the paper than on the right, and doesn't look even.

If your printer will support it, microspacing will produce a justified document without double spacing between words. Microspacing spreads the "spare" spaces evenly across the line by breaking each space into a "micro space" and then adding the micro spaces to every space on the line. This results in a more even line than the "double spaces" of standard right justification.

PaperClip uses a toggle to turn microspacing ON. (PaperClip's default setting is OFF.) To turn microspacing on, position the cursor at the beginning of the text to be microspace justified and enter

[CTRL — ⟨Z⟩]⟨X⟩

To turn microspacing OFF, position the cursor at the end of the text to be microspace justified and enter

[CTRL — ⟨Z⟩] ⟨X⟩

Since this is a toggle, every time PaperClip encounters the command, if it is OFF it will go ON, if it is ON it will go OFF.

Microspaces are generated in several ways. Some printers use graphics (for instance, Epsons and Epson work alikes); on others they are normal spaces with the pitch set to some large value (like 100). For more information, see the instructions for the Printer Configuration program in APPENDIX D.

HEADERS AND FOOTERS

Headers are single lines of text that you can tell PaperClip to print at the top of each page of your printed copy. Footers are single lines of text that you can tell PaperClip to print at the bottom of each of your printed pages. They can contain page numbers, chapter headings, or any other information that you wish to be printed on each page. Each Header or Footer can contain no more than 80 characters, including printer control commands.

If your printer will support the appropriate print function, you can change the typeface or the print pitch of each header or footer. You can also change the margins on which it is to be printed. You cannot, however, use Double Column print margins in a header or footer. The printer control command must be placed AFTER header/footer commands described below.

HEADERS

PaperClip will give you the option of printing up to three headers. The header lines must be inside the top margin which has been set for your printed page. If they are not within the margin then PaperClip will ignore them. For instance, if your top margin is set at 6 lines and you request a header on line 7 of your printed copy, it will not be printed. Negative numbers will also be ignored. Each header must be on a separate line in your text and be followed by a [**RETURN**].

To print a single header line on the first line of your page, press

[⟨CTRL — ⟨Z⟩] ⟨H⟩.

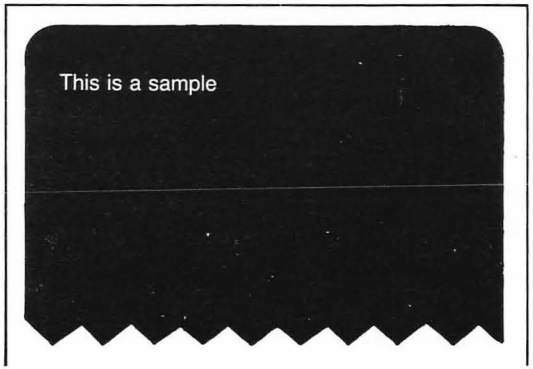
Type your header immediately after the special character and press [**RETURN**]. But, if a header command is issued and is followed by a number (such as 3) then a single header will be printed on that line (line 3).

If a header command is issued followed by two numbers (for instance, 3, 1) the a header will be printed on the line specified (line 3), and the header number will be number 1. If the second number is not 1 to 3, then 1 will be assumed.

For instance,

[CTRL — ⟨Z⟩] ⟨H3,1This is a sample⟩

will print



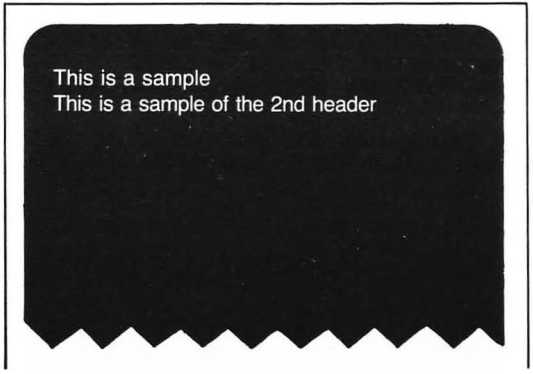
on the third line of each printed page of your text. As will

[CTRL — ⟨Z⟩] ⟨H3This is a sample⟩

A second header can also be placed on the printed page by pressing

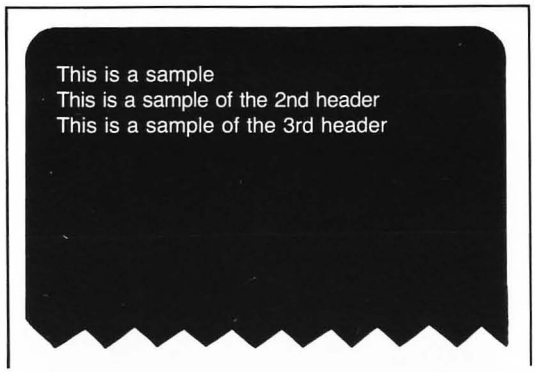
[CTRL — ⟨Z⟩] ⟨H4,2This is a sample of the 2nd header⟩

Now your printer will print



beginning on the third line of each printed page.
A third header can be placed on the printed page by pressing

[CTRL — ⟨Z⟩] ⟨H5,3This is a sample of the 3rd header⟩



beginning on the third line of each printed page.

Headers can be turned off by pressing

[CTRL — ⟨Z⟩] ⟨H⟩

entering the appropriate header number and pressing [RETURN]. The other headers will continue to print until they are also turned off.

You can change a header by pressing

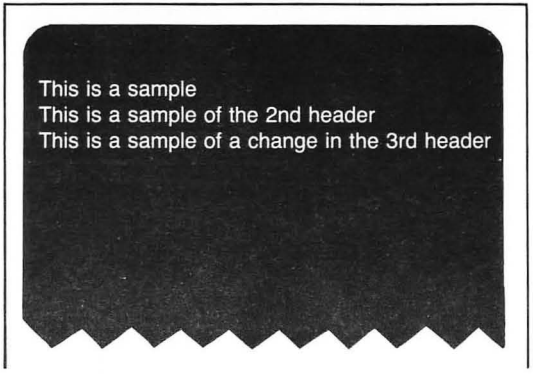
[CTRL — ⟨Z⟩] ⟨H⟩

entering the appropriate line number, a comma, the header number and then the new text.

For instance,

[CTRL — ⟨Z⟩] ⟨H5,3This is a sample of a change in the 3rd header⟩

will change the third header. Our sample headers will read



FOOTERS

PaperClip also gives you the option of printing up to three footers. If they are not within the bottom margin then PaperClip will ignore them. For instance, if your bottom margin is set at 60 lines and you request a footer on line 59 or line 67 (off the page), it will not be printed. Each footer must be on a separate line and must be followed by a **[RETURN]**.

To print a single footer line on the last line (line 66) of your page, press

[CTRL — ⟨Z⟩] ⟨F⟩.

Type your footer immediately after the special character and press **[RETURN]**. But, if a

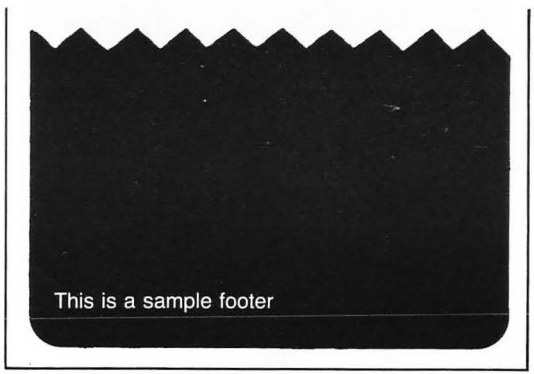
footer command is issued and is followed by a number (such as 63) then a single footer will be printed on that line (line 63).

If a footer command is issued followed by two numbers (for instance, 63,1) the footer will be printed on the line specified (line 63), and the footer number will be number 1. If the second number is not 1 to 3, then 1 will be assumed.

For instance,

[CTRL — ⟨Z⟩] ⟨F63,1This is a sample footer⟩

will print



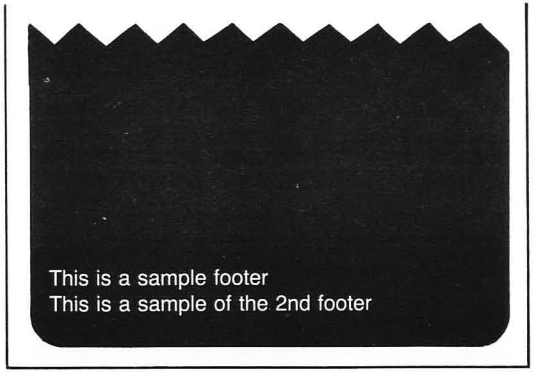
on the 63rd line of each printed page of your text. As will

[CTRL — ⟨Z⟩] ⟨F63This is a sample footer⟩

A second footer can also be placed on the printed page by pressing

[CTRL — ⟨Z⟩] ⟨F64,2This is a sample of the 2nd footer⟩

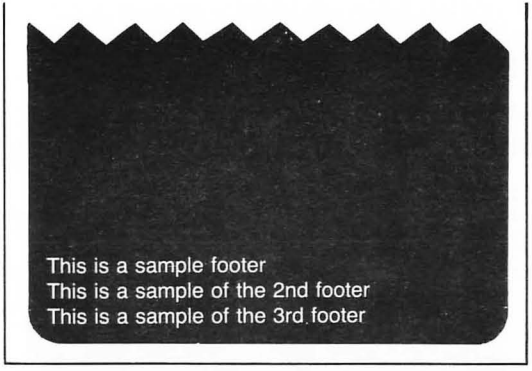
Now your printer will print



beginning on the 63rd line of each printed page.

A third footer can be placed on the printed page by pressing

[CTRL — ⟨Z⟩] ⟨F65,3This is a sample of the 3rd footer⟩



beginning on the 63rd line of each printed page.

Footers can be turned off by pressing

[CTRL — ⟨Z⟩] ⟨F⟩,

entering the appropriate footer number and pressing [RETURN]. The other footers will continue to print until they are also turned off.

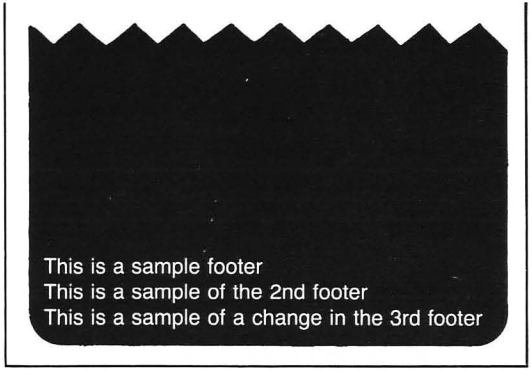
You can change a footer by pressing

[CTRL — ⟨Z⟩] ⟨F⟩,

entering the appropriate line number, a comma, the footer number and then the new text. For instance,

[CTRL — ⟨Z⟩] ⟨F65,3This is a sample of a change in the 3rd footer⟩

will change the third footer. Our sample footers will read



RULES AND HINTS FOR USING HEADERS AND FOOTERS

The only real difference between headers and footers is that headers are printed in the top margin and footers are printed in the bottom margin. Both follow these rules:

- The first number entered is always the line on which it is to be printed.
- The second number entered is always the designator. It must be from 1 to 3.
- The two numbers must be separated by a comma.
- There can be no spaces between the special [CTRL — ⟨Z⟩] character and the numbers.

- Headers and footers must be placed on a separate line within your text, but they can follow and be on the same line as any margin settings. For instance:

  [CTRL — ⟨M⟩] ⟨L10⟩ [CTRL — ⟨Z⟩] ⟨Htext of header⟩

- Headers and footers must be placed within the boundaries of your page margins. Otherwise, PaperClip will ignore them.
- Headers and footers can be added to your text at anytime. For a header to print on the first page, it must be on the first line of your text. For a footer to print on the first page, it must be on a line that PaperClip reads before the end of your first page.

If you need to place a number at the beginning of your printed header or footer, enter a space before the number. For instance,

[CTRL — ⟨Z⟩] ⟨H2,1 2B or Not 2B⟩

NUMBERING PAGES

Pagination is a typographer's term meaning to number each printed page. You can paginate your manuscript in a header or footer. The command is

[CTRL — ⟨N⟩].

PaperClip will place a special mark in your text and will increment each page number as it is printed.

As an example, suppose we want to print "Page #" at the bottom of each page on line 63. Furthermore, we want to print the page number directly after the "#". This means that the pagination will be in a footer. The commands are

[CTRL — ⟨Z⟩] ⟨F63Page #⟩ [CTRL — ⟨N⟩]

According to your printer's capabilities, pagination can be centered, blocked right, or the type style can be changed. Check your printer owners manual.

SETTING THE PAGE NUMBER

You can set the page number at which you want PaperClip to start pagination with the command:

[CTRL — ⟨Z⟩] ⟨N⟩

followed by the number you wish to use to start pagination. Suppose, for example, you are writing a manual and you want each section to start with page 1 in a footer. The command to be placed at the top of each section will look similar to this:

[CTRL — ⟨Z⟩] ⟨F6 — ⟩ [CTRL — ⟨Z⟩] ⟨N⟩ (This sets up the footer for Section 6.)
[CTRL — ⟨Z⟩] ⟨N1⟩ (This tells PaperClip to number this section beginning with 1.)

Or, suppose you have added a section to the end of a 41-page special report and the rest of the report has already been printed. You don't have to print the entire document to paginate the new section. If the pagination is in the header, you would enter

[CTRL — ⟨Z⟩] ⟨HAddendum — ⟩ [CTRL — ⟨Z⟩] ⟨N⟩ (This creates the header for the new section.)
[CTRL — ⟨Z⟩] ⟨N42⟩ (This tells PaperClip to start pagination with 42.)

The Set Page Number Command can be before or after the Print Page Number Command.

FORCING A NEW PAGE

NOTE: This variation of the Force New Page command MUST be on a separate line.

Whether you are generating a report, writing a term paper, a novel, or simply a letter, there will come a time when you will want some particular piece of text to begin printing at the top of a page (new sections, or a new chapter, for instance). That means you have to instruct your printer when to stop printing and move to the top of the next page.

There are two variations of the Force New Page command. One variation will force a new page arbitrarily, the other will force a new page only if there are not enough lines left on the page to finish printing that particular part of the file.

Move the cursor to column 1 of the first line you wish to be printed on the next page. Press

[CTRL — ⟨T⟩] [RETURN]

When PaperClip reads the special character it will send enough nonprinting carriage returns to your printer to "pad" the page, and move to the top of the next page before continuing.

As useful mnemonic: think of this command as

[CTRL — ⟨T⟩erminate

But, suppose you are writing a business report and you are including a table of figures. You know that the table will be 12 lines in length and you don't want it to be split between two pages in your report. Move the cursor to the beginning of your table and press

[CTRL — ⟨T⟩]

Now enter a number immediately after the special character generated by PaperClip and press [RETURN]. For our example, we would enter this:

[CTRL — ⟨T⟩] ⟨12⟩

PaperClip keeps count of the number of lines being printed per page. When it comes to the [CTRL — ⟨T⟩] ⟨12⟩, it will do some simple arithmetic. If there are 12 or more lines left on the page, it will print the table. If there is less than 12 lines, it will "pad" the page with carriage returns, and move to the top of the next page.

7 FORMATTING YOUR TEXT FOR PRINTING

As mentioned in SECTION 6, printer control codes are special codes that tell your printer to perform specific functions, such as underlining, changing type styles, etc. Since printer functions are not standardized be sure to check the manual that came with your printer to see which print functions your printer will support.

The Printer Configuration File that you have loaded into PaperClip gives it the information needed to send the proper printer control codes to your printer. If the information given PaperClip says that your printer will not support a particular print function then PaperClip will ignore the command if it finds it in your document.

Many printers need one control code to start the particular function and a second control code to end the function. Most word processor programs use the same onscreen character to represent both of these codes. PaperClip shows a different character representation for the "start function" printer control code and the "end function" printer control code. This has been done to make it easier for you to keep track of these printer control codes in your document.

CHANGING TYPE FACES

Changing type faces on your printed page can make the page more visually appealing. For instance, if your printer can do bold face, use it for headings. Italics, if your printer is able, can be used for emphasis.

69 BOLD FACE PRINT

Some printers create bold face by printing the line (or character) once, then go back and print it again. This is called "overstriking". Others print the line or character slightly "off register" to give the appearance of a darker, wider character. Still others have special characters set for bold face printing. In the latter case, it may be called an "extended" type face.

If your printer has a bold face feature, there may be two commands necessary to use it. One command turns the bold face print function on; the other command turns it off and returns the printer character set to its normal function. Check your printer owners manual for details.

To set the Bold Face Print function, position the cursor immediately in front of the first character to be printed in bold face. Press

[CTRL — ⟨B⟩]

PaperClip will ask

(S)tart or (E)nd?

Press ⟨**S**⟩ to start bold face printing.

To end bold face printing, position the cursor immediately after the last character to be printed in bold face and press

[CTRL — ⟨B⟩]

again. Now when PaperClip asks

(S)tart or (E)nd?

press ⟨**E**⟩.

When your printer receives the Start Bold Face command, it will then begin to print in

bold face. When it receives the End Bold Face command, it will turn off the bold face and continue in its normal print mode.

ITALIC PRINTING

Italic type is special characters set with a *slight lean to the right.* It is used by typographers and publishers to emphasize certain words or phrases.

If your printer has an italic printing feature, there are two commands necessary to use it. One command turns the italic print function on; the other command turns it off and returns the printer character set to its normal function. Check your printer owners manual for details.

To set the Italic Print function, move the cursor to immediately in front of the first character to be printed in italics. Press

[CTRL — ⟨I⟩]

PaperClip will ask

(S)tart or (E)nd?

Press (**S**) to start italic printing.

To end italics, move the cursor to immediately after the last character to be printed in italics and press

[CTRL — ⟨I⟩]

again. Now when PaperClip asks

(S)tart or (E)nd?

press (**E**).

When your printer receives the Start Italic command, it will then begin to print in italics.

When it receives the End Italic command, it will turn off the italic print and continue in its normal print mode.

SETTING THE PRINT PITCH

NOTE: The Optional print pitch is user programmable. See APPENDIX D for details.

NOTE: PaperClip automatically resets the margins to the default settings after every change of pitch. If you have changed the margins before the pitch change, you will have to change them again after the pitch change. The default margins will give you one inch of white space around your printed document.

Print pitch is the number of characters per inch on the printed line. Most printers have a 10 pitch, which means that these printers will print 10 characters per inch (or, on an 80 column line, 80 characters).

Many printers have programmable print pitches. You can set the pitch you want for a particular word, line, or paragraph to emphasize a point or to create a visually pleasing printed page.

If you are unsure of the print pitches used by your printer, check your printer owners manual. The Printer Configuration Files listed in APPENDIX B already contain the codes necessary for PaperClip to pass the needed printer control codes on to your printer to change print pitch.

Some printers allow you to change print pitch several times within a printed line, others do not. Once again, see your owners manual for details as to how your printer will respond to a print pitch change.

To change print pitch, press

[CTRL — ⟨F⟩]

PaperClip will respond

Pitch: 1(0), 1(2), 1(5), (0)pt ?

To choose:

10 pitch, press ⟨0⟩
12 pitch, press ⟨2⟩

15 pitch, press ⟨5⟩
Optional pitch, press ⟨O⟩.

When PaperClip reads the special character from your text that denotes a print pitch change, it will send the proper codes that your printer needs to make the change.

UNDERLINING TEXT

To underline a piece of text, place the cursor immediately in front of the first character to be underlined. Then press

[CTRL — ⟨U⟩].

PaperClip will ask

(S)tart or (E)nd?

Press (S) then move the cursor to directly after the last character to be underlined. Press [CTRL — ⟨U⟩] again. When PaperClip asks

(S)tart or (E)nd?

Press ⟨E⟩.

When PaperClip sends the [CTRL — ⟨U⟩] ⟨S⟩ command, the printer will know to begin underlining the text. When your printer receives the [CTRL — ⟨U⟩] ⟨E⟩ command, it will know to stop underlining.

USING SUPERSCRIPTS AND SUBSCRIPTS

Superscripts are used to print characters half way above the regular line of printed characters. For instance,

$2^2 = 4$

73 **NOTE:** Some printers cannot print superscripts or subscripts. See your printer manual.

Subscripts are used to print characters half way below the regular line of printed characters. For instance,

H_2SO_4

The command is

[CTRL — ⟨S⟩].

PaperClip will ask

Su(p)er, Su(b) or (E)nd script?

Press ⟨P⟩ to tell PaperClip that you want superscript; press ⟨B⟩ to tell PaperClip that you want subscript. Press ⟨E⟩ to end either print mode and return the print head to the regular print line.

When your printer receives a Start Superscript command, it will move the paper back a half line. This, in effect, moves the print head up a half line on the page and creates the superscript printing. When your printer receives a Start Subscript command, it will move the paper up a half line. This, in effect, moves the print head down a half line on the page and creates the subscript printing.

And, of course, when the printer receives the End Script command it moves the paper back to the original print line.

SETTING A "HARD SPACE"

When PaperClip reaches the right hand printed page margin you have set, it will not break the line in the middle of a word. The line will be broken at a space. There may be times when you don't want this to happen, such as when printing a date (for instance, January 14, 1985).

A Hard Space is a special character that tells PaperClip to regard the characters in front of the hard space and the characters following the hard space as though they were one word.

The special hard space character is

[CTRL + SHIFT — SPACE].

For example, the characters

January _ 14, _ 1985

Will appear to PaperClip as though it were a single word.

The underline character will appear in your onscreen file, but, when printed, will appear as a space between the characters.

THE AUTOMATIC INDENT COMMAND

You've written a very important business letter, and when you print it, you discover that you have indented several paragraphs incorrectly. PaperClip has a simple way to alleviate this problem.

USING THE INDENT COMMAND

Rather than create an indent by placing several spaces at the beginning of a paragraph, leave no spaces at all. Place the cursor at the beginning of the paragraph and press

[CTRL — ⟨P⟩].

PaperClip will place a special character at the beginning of the paragraph. When this character is sent to your printer, it will automatically indent the paragraph as it is printed.

CAUTION: PaperClip checks to see how many blank spaces there are at the beginning of a

printed line. If there are more than two, all spaces are ignored and the text is pushed to the left margin. If you choose not to use the Automatic Indent option and enter spaces with the space bar or by pressing [TAB] then insert a Hard Space at the beginning of your series of spaces.

You cannot enter the Automatic Indent command except at the beginning of a line (column 1).

PaperClip's default setting is 5 spaces.

SETTING THE INDENT PARAMETERS

PaperClip allows you to set the number of spaces you wish to indent. The command to set the number of spaces to indent is

[CTRL — ⟨Z⟩] ⟨P⟩

Enter the number of spaces to indent directly after the ⟨P⟩ and press **[RETURN]**. For instance

[CTRL — ⟨Z⟩] ⟨P10⟩

tells PaperClip to indent 10 spaces whenever it senses an Automatic Indent Command.

You can tell PaperClip to skip lines between paragraphs. The command

[CTRL — ⟨Z⟩] ⟨P10,1⟩

tells PaperClip to indent 10 spaces at the beginning of each paragraph and to skip one line between paragraphs. Notice the comma between the indent parameter and the skip-line parameter.

NOTE: If you have already placed a Carriage Return between paragraphs then PaperClip will skip that line as well as any lines that you may have entered as a skip-line parameter.

USING TABS

PaperClip allows you to use the [TAB] key for cursor tabulation only on the last line of your text file (the line on which you are working). These tabs are set at eight spaces; when you press [TAB], the cursor will move eight spaces to the right.

You can change the tabs by moving the cursor to the cursor position that you want and then press [SHIFT — TAB]. Tabs can be cleared by moving the cursor to the tab stop to be deleted and pressing [CTRL — TAB].

If you press [TAB] when the cursor is on any line other than the last line, the cursor will still move the set number of spaces, but skip over your text.

PRINT TABS

So how do you print columns of figures, create tables, and such? PaperClip has a function that allows you to set predetermined tab stops and send them to your printer. These are called Print Tabs.

SETTING PRINT TABS — THE TAB MAPS

PaperClip uses a "Tab Map" to set your printer tab stops. You can use two different Tab Maps.

To set Tab Map 1, press

[CTRL — ⟨Z⟩

then enter

⟨T1,⟩

now enter the tabular column numbers after the comma. For instance, to set tab stops at columns 5, 15, 30, and 45, your Tab Map command would look like this:

[CTRL — ⟨Z⟩ ⟨T1,5,15,30,45⟩

To set the second Tab Map, replace the 1 with a 2. If you were setting tabs at columns 20, 40, and 60, your second Tab Map command would look like this:

[CTRL — ⟨Z⟩ ⟨T2, 20, 40, 60⟩

You can place tab stops on any column from 1 to 128. Tab stops can be changed at anytime by entering a new Tab Map.

PaperClip's default Tab Map is every 10 columns.

USING PRINT TABS

The command to execute a Print Tab is:

[CTRL — ⟨A⟩]

To execute a Print Tab using Tab Map 1, you would enter

[CTRL — ⟨A⟩] ⟨1⟩

To execute a Print Tab using Tab Map 2, you would enter

[CTRL — ⟨A⟩] ⟨2⟩

As an example, assume we want to print three columns of figures: 132.30, and 99.25 in column 1, 75.10, and 42.40 in column 2, and 77.00 and 9.86 in column 3. We want the first column to begin ten spaces in on the page and the tabs 15 spaces apart. Our Tab Map will look like this:

[CTRL — ⟨Z⟩] ⟨T1,10,25,40⟩

and the Print Tab commands needed to print our columns of figures will look like this:

[CTRL — ⟨A⟩] ⟨1⟩ ⟨132.30⟩ [CTRL — ⟨A⟩] ⟨1⟩ [75.10⟩ [CTRL — ⟨A⟩] ⟨1⟩ ⟨77.00⟩ [RETURN]

NOTE: If you are using Tab Map 1 only then you don't have to specify the Tab Map when entering your data. PaperClip will assume Tab Map 1.

[CTRL — ⟨A⟩] ⟨1⟩ ⟨99.25⟩ [CTRL — ⟨A⟩] ⟨1⟩ ⟨42.40⟩ [CTRL — ⟨A⟩] ⟨1⟩ ⟨9.86⟩ [RETURN]

Notice the spaces that have been left in front of several of the numbers. This is done to line up the decimal points one above the other.

HINTS ON USING PRINT TABS AND TAB MAPS

It's a good idea to first enter the tabular data into your file in some semblance of order without worrying about Print Tabs, then go back and place your tab stops.

If you place a character in front of each datum, you can use Global Substitution to replace that character with the [CTRL — ⟨A⟩] command and your Tab Map number. See APPENDIX C for details.

If you use Print Tabs quite a bit, your Tab Maps can be written into a Macro File and placed into your text with a Macro. The same thing can be done with your [CTRL — ⟨A⟩] commands. See SECTION 11 for information on creating Macro Files.

8 CREATING PRINTED COPY

You've sweated blood creating some fantastic prose. You've designed a print format that you are sure is a visual knockout, using centered bold face headings and all the goodies. Now it's time to see how it looks on the printed page.

Follow this checklist before you start:

1. Check the printer. Is it turned on? If it has an "online" switch, is it in the correct position? Do you have paper?

2. If you need to use a printer interface, such as the ATARI 850 Interface Module, is it turned on?

3. Have you loaded in the correct Printer Configuration File? (See The Printer Option, SECTION 3, for details.)

4. The file to be printed MUST be in memory. If your file has not been read into memory, do so.

PRINTING YOUR TEXT

To start printing press

[CTRL + SHIFT — ⟨O⟩]

PaperClip will state

Print device? P:

PaperClip supports three print "devices":

- The **P:** device sends output to your printer. This is PaperClip's default.
- The **N:** device is called the Null device and is used when creating a Table of Contents. See SECTION 9.
- The **D:** device will send output to the disk drive. This is discussed later in this section.

For now, press [RETURN] to initiate output to your printer.

SETTING THE STARTING PAGE

NOTE: If you enter a page number that is more than the length of your document, PaperClip will still read through your document to find where to start printing. When it notices that the number you entered is too large, control will be returned to the editor.

PaperClip will ask

Starting page number: 1

PaperClip is asking on which page of your manuscript do you want to start printing. If your document has more than one page, you can begin printing from any page. Enter the page number and press **[RETURN]**.

SETTING THE NUMBER OF PAGES

PaperClip now asks

Number of pages to print? All

If you press [RETURN], PaperClip will begin with the starting page number for which you have asked (above) and print everything that comes after.

If you enter a number, such as 2, and press [RETURN], PaperClip will begin with the starting page for which you have asked and then print the number of pages (in our example, the next two pages).

SETTING THE NUMBER OF COPIES

If you are printing a form letter or some other document of which you need more than one copy, you can print up to 255 copies of a single document. See Mail merge, SECTION 10, for information as to how to include names and address in your form letters.

When PaperClip asks

Number of copies to print? 1

Enter the number of copies you want and press [RETURN]. If one copy is sufficient, press [RETURN].

USING SINGLE SHEET PAPER

If you are using single sheet paper with your printer, you can tell PaperClip to pause between pages so that you can change paper. When PaperClip asks

Pause between pages ⟨Y/N⟩? N

press [RETURN].

If you are using fanfold or roll paper (or are printing only a single page) then press [RETURN].

If you are printing one page at a time, when PaperClip gets to the end of the page, the alarm bell will ring and PaperClip will inform you to

Press START to continue

When you are ready to continue, press [START] and PaperClip will start the printer.

STOPPING THE PRINTER WHILE IT IS PRINTING

Whether you are using single print mode or continuous print mode, you can stop the printer at any time by pressing [ESC]. PaperClip will abort the printing process.

If you want to stop the printer (to change ribbons, for instance) and continue printing, place

[CTRL — ⟨Z⟩] ⟨W⟩

in your text file, do what needs be done and then press [START] to continue the printing process.

DOUBLE COLUMN PRINTING

PaperClip's Double Column Print option allows you to print your document in two columns on the page. There are other word processor programs for the ATARI Home Computer that also have this feature, but accomplish it differently. PaperClip will print both columns in a single pass of the print head across the paper. The others print the first column of text, then back the paper up and print the second column.

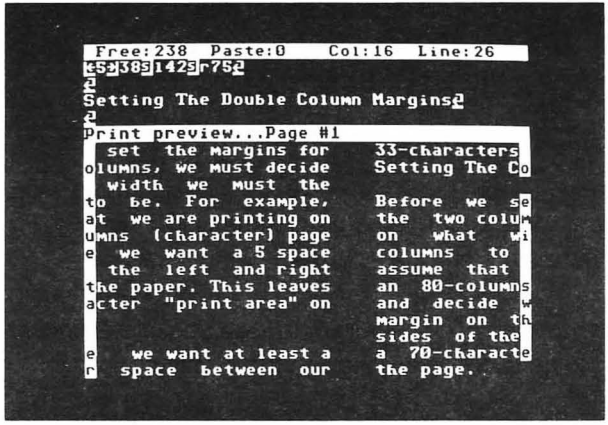
In order for the Double Column Print option to work correctly, the Justification Toggle must be ON. PaperClip does this automatically before starting printing. The Justification Toggle will be reset to your previous setting when Double Column printing is turned off.

SETTING THE COLUMN MARGINS

Before we set the margins for the two columns, we must decide on what width we want the columns to be. For an example, assume that we are printing on an 80-column (character) page and decide we want a 5 space margin on the left and right sides of the paper. This leaves a 70-character "print area" on the page.

Furthermore, we want at least a 4-character space between our two printed columns. This leaves us a 66-character print area.

Now the decision must be made as to whether we want columns of equal width. PaperClip doesn't care, as long as the margins for the two columns don't overlap. For our example, assume we do. Therefore, each column on our printed page will be 33-characters wide.



So, for Column 1, we will set the left margin by pressing

[CTRL — ⟨M⟩] ⟨L5⟩.

Now set the right margin for Column 1. Press

[CTRL — ⟨M⟩] ⟨R38⟩

(5-character margin plus 32-character width). To set the left margin for Column 2, press

[CTRL — ⟨Z⟩] ⟨L42⟩

(4-character space between columns plus the Column 1 right margin). And, finally set the right margin for Column 2. Press

[CTRL — ⟨Z⟩] ⟨R75⟩.

Your printer will now print two equal width columns of 33-characters, leaving a margin of 5-characters on each side of your page and a "trench" between the two columns of 4-characters.

The two columns need not be of the same width, however. As long as you set the margins for Column 1 BEFORE you set the margins for Column 2 and the two settings don't overlap, your printed columns can be any width that will fit on your printed page.

TURNING OFF DOUBLE COLUMN PRINTING

The Double Column Print mode can be turned on at anytime. However, you can turn it off ONLY when beginning a new page. For that reason, a new page must be forced BEFORE Double Column printing can be stopped. The Force New Page command

[CTRL — ⟨T⟩]

must be on a line by itself. Then set the Column 2 left margin to 0 by entering

[CTRL — ⟨Z⟩] ⟨L0⟩

Now set your normal right margin by entering

[CTRL — ⟨M⟩] ⟨Rn⟩.

In our example, we would enter these commands to end Double Column print:

[CTRL — ⟨T⟩ [RETURN]
[CTRL — ⟨Z⟩] ⟨L0⟩ [CTRL — ⟨M⟩] ⟨R75⟩ [RETURN].

RULES FOR DOUBLE COLUMN PRINTING

There are some rules that need be followed when in the double column print mode:

- You cannot use mail merge files or verbatim files, but you can use batch files. See SECTION 10 for more information.
- You must use single line spacing.
- You can use microspacing. See SECTION 6.
- The margins for Column 1 must be set before the margins for Column 2.
- You must be certain that the margins for your two columns do not overlap.
- You must force a new page before turning off the double column print mode.
- You can use headers and footers when using double column print, however they cannot have Column 2 margin settings.

PRINT PREVIEW

PaperClip allows you to see what your document will look like when printed BEFORE it is printed. To Print Preview, your document must be in Window 1 and there can be no text in Window 2 (if there is, the text will be lost). Press

[CTRL + SHIFT — ATARI]

PaperClip's Command Line will say

Starting Page number? 1

To preview from the beginning of your document, press [RETURN]. If you want to preview some page other than page 1, enter the page number and press [RETURN].

PaperClip will format your document according to the printer control codes you have placed in the text and show you a representation in Window 2.

Notice that the cursor is now resting at the top of the Preview area. You can use all cursor control commands to move around the preview area to see how it looks. You cannot edit the text in the Preview area.

You can preview the next page of your document by pressing ⟨N⟩. You can check the previous printed page by pressing ⟨P⟩. Or, you can choose which page of your document to preview by pressing ⟨S⟩ and then entering the page number.

To clear the Print Preview and return to the editing window, press

[CTRL + SHIFT — ⟨D⟩]

SOME NOTES ON USING PRINT PREVIEW

You can "escape" Window 2 and return to Window 1 by pressing [SELECT]. If you now press [CTRL + SHIFT — ⟨D⟩] to delete the current Window, the preview page will now be in Window 1.

However, the text will contain no Carriage Returns. You can edit the text and save it to a new file.

Because of the limitations of the screen display, PaperClip cannot show a representation of Boldfaced, Italicized, or Underlined text. Also, if you are using a Print Pitch other than 10, PaperClip will not give you an accurate picture of the right margin. PaperClip does, however, show your page breaks, and an accurate picture of your document's left margin, as long as you have not changed any margin settings from the default.

Print Preview will not give you an accurate picture if your text is set to print at eight lines per inch.

Previewing Double Column printing is slow, due to the internal calculations PaperClip must make for the screen display.

Include Files and Batch Files can also be previewed with the Print Preview function. (See SECTION 10 for more information.)

PRINTING TO THE DISK DRIVE

As mentioned earlier in this section, one of the "devices" to which you can print is your disk drive (in particular, a file on your disk drive).

This feature is quite handy for those who do a great deal of communicating via electronic mail. Your messages can be composed using PaperClip, print formatted to fit within the boundaries of the electronic mail service you are using, then printed to a disk file to be used later when leaving your message. (At a considerable savings in connect time, as data transfer from a disk file to the host computer is considerably faster than typing in the message directly.)

SysOps (system operators) of ATARI Bulletin Boards, such as AMIS, will find this feature useful. Welcome Files and other information screens that the caller receives can be quickly done with PaperClip, print formatted to the BBS, and transfered to the BBS system diskette.

Of course, PaperClip cannot print boldface, italics, underline, or change pitches when printing to a disk file, so they will be ignored. Changes in pitch will reset the margins to their default parameters. PaperClip can do such things as Block Right, Center, and justify your text. When printed to a disk file, your text will appear exactly as it does in Print Preview.

Any print margins you have set will also be observed (unless your text includes any pitch changes). Therefore, if you are using this feature for electronic mail then you should change the margins accordingly (particularly the top and left margins, unless you want to leave some "white space" at the top and left of your "page"). Unless you know exactly how many printed lines your message will take and have set the bottom margin accordingly,

you will have to read your message file into memory and delete the Carriage Returns that have been added by PaperClip to fill the page.

To start printing, press

[CTRL + SHIFT — ⟨O⟩]

PaperClip will state

Print device? P:

Enter

⟨Dx:filename.ext⟩

where x: is the drive on which you want PaperClip to put the file, and filename.ext is the name of the file. For instance, suppose we are composing a message to Batteries Included. The message is going on Drive 2 and we are going to call the file "Henry". First we press

[CTRL + SHIFT — ⟨O⟩]

and then enter

⟨D2:HENRY⟩

and press **[RETURN]**. PaperClip will then ask

Send control codes? ⟨Y/N⟩ No

PaperClip is asking if you want to send the text exactly as it is, including all printer control codes, or do you want to send a formatted version. If you are sending the message to someone you know has PaperClip, then you can send the message exactly as it appears

on your screen. This can be a cost efficient means of text transfer. However, the host computer through which you are communicating MUST be able to receive and transmit the special ATARI characters (called ATASCII). Many cannot. If you want to send your screen version, enter

⟨Y⟩ and press **[RETURN]**.

If your friend does not have PaperClip (poor soul!), you can send a formatted version of your disk file. Using the DOS Copy File function, the file can then be sent to a printer to create a preformatted hard copy. To have PaperClip send a formatted version, simply press **[RETURN]**.

PaperClip then gives you the same options you would have if printing to your printer.

9 PAPERCLIP'S SPECIAL FUNCTIONS

The functions described in this section further demonstrate the power and usefulness of PaperClip.

DOING MATHEMATICS

A most unique and useful PaperClip option is the ability to do simple mathematics with a series of up to eight numbers. PaperClip allows you to enter the figure and the operator, have your ATARI Home Computer do the math, and then prints the answer in your document. Or, you can use the Print Preview function to check your math at any time.

THE PAPERCLIP MATH OPERATORS

The PaperClip Math Operators are:

- [CTRL — ⟨Z⟩] ⟨+⟩ Add this positive number
- [CTRL — ⟨Z⟩] ⟨×⟩ Subtract this positive number (or add this negative number)
- [CTRL — ⟨Z⟩] ⟨*⟩ Multiply by this number
- [CTRL — ⟨Z⟩] ⟨/⟩ Divide by this number
- [CTRL — ⟨Z⟩] ⟨?⟩ Print a subtotal
- [CTRL — ⟨Z⟩] ⟨=⟩ Print the total and then clear it.

The math can be done in one of two formats:

1. Dollars and cents (decimal point followed by two places). Your entry can include commas and dollar signs ($1,325.00, for instance); PaperClip will ignore them.

2. Floating Point. PaperClip will print whatever number that your computer gives it.

The Dollar format is PaperClip's default. To change to Floating Point, enter

[CTRL — ⟨Z⟩] ⟨#⟩

in front of the first math operation.

ADDITION

Suppose we want to add $77 and $9.86 and then print the total in our document. First we give PaperClip the first number:

[CTRL — ⟨Z⟩] ⟨+$77⟩

Then we give PaperClip the second number:

[CTRL — ⟨Z⟩] ⟨+$9.96⟩

Then we tell PaperClip to give us a total:

[CTRL — ⟨Z⟩] ⟨=⟩

When printed, your math will look like this:

```
77.00
 9.86
86.86
```

Notice that PaperClip added a decimal point and two zeroes to the $77. The dollar sign in both numbers was also ignored and not printed. And, as you can see, the decimal points

were not lined up one over the other in a column. This can be adjusted by placing a space in front of the 9.

[CTRL — ⟨Z⟩] ⟨+$77⟩
[CTRL — ⟨Z⟩] ⟨+$ 9.96⟩
[CTRL — ⟨Z⟩] ⟨=⟩

The math can be printed on a single line, as well.

⟨$⟩ [CTRL — ⟨Z⟩] ⟨+$77 + $⟩ [CTRL — ⟨Z⟩] ⟨+9.96 = $⟩ [CTRL — ⟨Z⟩] ⟨=⟩

will print

$77.00 + $9.86 = $86.86

Notice that we added dollar signs and an equal sign in the text, so that they would be printed. The [CTRL — ⟨Z⟩] ⟨=⟩ command prints the total.

SUBTRACTION

Subtraction is done the same way. Suppose now we want to subtract $9.86 from $77 and then print the total in our document. First we give PaperClip the first number:

[CTRL — ⟨Z⟩] ⟨+$77⟩

Then we give PaperClip the second number:

[CTRL — ⟨Z⟩] ⟨−$ 9.96⟩

Then we tell PaperClip to give us a total:

[CTRL — ⟨Z⟩] ⟨?⟩

When printed, your math will look like this:

```
77.00
 9.86
67.14
```

and

⟨$⟩ [CTRL — ⟨Z⟩] ⟨+$77 — $⟩ ⟨CTRL — ⟨Z⟩] ⟨−9.96 = $⟩ [CTRL — ⟨Z⟩] ⟨?⟩

will print

$77.00 − $9.86 = $67.14

The [CTRL — ⟨Z⟩] ⟨?⟩ command prints a subtotal. More arithmetic can be done against that figure and another subtotal (or total) taken later.

MULTIPLICATION

The multiplication command is:

[CTRL — ⟨Z⟩] ⟨*⟩

To multiply 2 × 2 × 4, for example, you would enter:

[CTRL — ⟨Z⟩] ⟨+2⟩ [RETURN]

This sets up the "base" number against which the multiplication will be done. Then enter

[CTRL — ⟨Z⟩] ⟨*2⟩ [RETURN]

for the first multiplication and

[CTRL — ⟨Z⟩] ⟨*4⟩ [RETURN]

for the second multiplication. To get the total, enter

[CTRL — ⟨Z⟩] ⟨=⟩ [RETURN]

PaperClip will print

2
2
4
16

Try this:

[CTRL — ⟨Z⟩] ⟨+2⟩ ⟨times⟩ [CTRL — ⟨Z⟩] ⟨*2⟩ ⟨times⟩ [CTRL — ⟨Z⟩] ⟨*4⟩ ⟨equals⟩
[CTRL — ⟨Z⟩] ⟨=⟩ [RETURN]

PaperClip will print

2 times 2 times 4 equals 16

DIVISION

The division command is:

[CTRL — ⟨Z⟩] ⟨/⟩

To divide 16 by 4, for example, you would enter:

[CTRL — ⟨Z⟩] ⟨+16⟩ [RETURN]

This sets up the "base" number against which the division will be done. Then enter

[CTRL — ⟨Z⟩] ⟨/4⟩ [RETURN]

for the division. To get a subtotal, enter

[CTRL — ⟨Z⟩] ⟨?⟩ [RETURN]

PaperClip will print

16
4
4

Try this:

[CTRL — ⟨Z⟩] ⟨+16⟩ ⟨divided by⟩ [CTRL — ⟨Z⟩] ⟨/4⟩ ⟨equals⟩ [CTRL — ⟨Z⟩] ⟨/⟩ [RETURN]

PaperClip will print

16 divided by 4 equals 4

WORKING WITH A SERIES OF NUMBERS

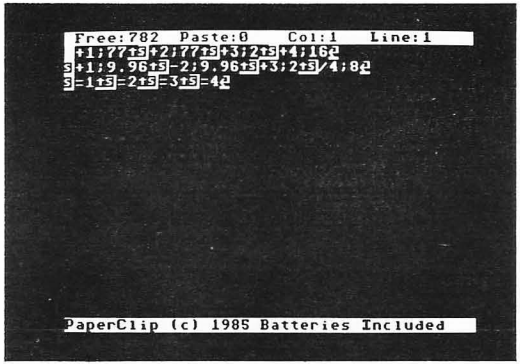
Our examples so far have shown you how to do math on a single series of numbers. But suppose you have several columns of numbers that you are using in a table. PaperClip will perform mathematical wizardry on up to eight different series of numbers.

PaperClip has to know on which series of numbers on which it is working. To do so is really quite easy, but it can be confusing when you are looking at it on your screen.

For instance, let's take all the examples used above and print them in a tabular fashion. Each figure will have ten spaces between it and the next.

[CTRL — ⟨Z⟩] ⟨+1:77⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨+2:77⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨+3:2⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨+4:16⟩ [RETURN]
[CTRL — ⟨Z⟩] ⟨+1:9.96⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨−2:9.96⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨+3:2⟩
⟨[CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨/4:8⟩ [RETURN]
[CTRL — ⟨Z⟩] ⟨=1⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨=2⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨=3⟩ [CTRL — ⟨A⟩] [CTRL — ⟨Z⟩] ⟨=4⟩ [RETURN]

What did you get?



CREATING A TABLE OF CONTENTS

Your manuscript is completed and you want to add a Table of Contents to the final copy. Normally you would have to manually go through each page and mark the headings and

such that you want in your Table of Contents and type them in. Not now. Let PaperClip do it for you.

Here's how it works. Each item to be included in your Table of Contents must be specially marked. As you print your document, PaperClip senses these special marks and instead of printing the item, it is placed in a special file, followed by an ellipse (three periods), and then the page number on which that item is found.

PREPARING YOUR TEXT

To mark the item, position the cursor directly in front of it and enter

[CTRL — ⟨Z⟩] ⟨C⟩

PaperClip will mark that heading and put all text between the mark and the Carriage Return into the Table of Contents file.

Since PaperClip sends the specially marked heading to the file instead of the printer, each heading must be duplicated.

There are two ways to prepare your manuscript for the creation of a Table of Contents:

1. Duplicate the heading as you are writing your text. Place the [CTRL — ⟨Z⟩] ⟨C⟩ command in front of one of the headings.

2. Go through each file and, using the [SHIFT — DELETE] command, first delete the heading and then duplicate it by pressing [CTRL + SHIFT — ⟨P⟩] twice. Place the [CTRL — ⟨Z⟩] ⟨C⟩ command in front of one of the headings.

CREATING FILE SPACE

Read the first file of your manuscript into memory. Position the cursor at the start of the file

Now enter the filename you want to use for the Table of Contents file. For instance,

[CTRL — ⟨Z⟩] ⟨CD2:MANUAL.TOC⟩

will place your Table of Contents into a file named MANUAL.TOC on Drive 2.

FILLING THE TABLE OF CONTENTS

CAUTION: Do not print to the same filename you are using to store your Table of Contents. For instance, you cannot print the document to D2:MANUAL.TOC and store the Table of Contents into the same file. This can lock up the system and possibly cause the loss of data.

As mentioned in SECTION 8, PaperClip will process your text and send it to one of three separate print "devices", of which the Null device ⟨N:⟩ was one. The Null device is used exclusively for creating a Table of Contents.

To fill the Table of Contents, press

[CTRL + SHIFT — ⟨O⟩] [RETURN]

and when PaperClip states

Print device? P:

enter ⟨N:⟩ [RETURN].

PaperClip will read the file (and any subsequent Include Files), internally count the pages, and create a Table of Contents for you.

You can also create your Table of Contents while printing your document. When the command line says

Print device? P:

press [RETURN]. PaperClip will create the Table of Contents as your document is printing.

Or, you can print your document to a disk file. When the command line says

Print device? P:

enter ⟨D:⟩ and the name of the file to which it is to be printed.

If you know how many pages your Table of Contents will be, you can include it in your page count. For instance, if you know that your Table of Contents will be two pages, set the page

number to 3 at the beginning of the first file to be printed. (See Setting The Page Number, SECTION 6.)

USER DEFINED SPECIAL COMMANDS

Four special printer commands are set aside for your use. For example, if you have a printer that prints in multicolor, you can use a special command to specify a color change. Or, if your printer has a special type font, you can initiate a font change with a special command. User defined special printer commands can be defined for any command that PaperClip does not have as a part of the normal command set.

Defining your special commands is a part of configuring PaperClip to your printer. Instructions for defining your special commands can be found in APPENDIX D.

These are the special commands:

[CTRL — ⟨Z⟩] ⟨1⟩ User command 1
[CTRL — ⟨Z⟩] ⟨2⟩ User command 2
[CTRL — ⟨Z⟩] ⟨3⟩ User command 3
[CTRL — ⟨Z⟩] ⟨4⟩ User command 4

NONPRINTING COMMENT LINES

PaperClip has a nonprint comment function that will allow you to leave a note to yourself within the body of your text. To enter a comment, position the cursor at the left margin and enter

[CTRL — ⟨Z⟩] ⟨.⟩

then enter your text. PaperClip will ignore all data between the period and the Carriage Return when printing your document.

TYPEWRITER MODE

Typewriter Mode is a special feature of PaperClip that allows you to type one line of up to 130 characters and send it to your printer when **[RETURN]** is pressed. This option is especially useful for addressing envelopes.

To access the Typewriter Mode, press

[CTRL + SHIFT — ⟨2⟩]

Window 1 will become one line. Any text you may have in either Text Window will be saved in the Text Buffer.

Typewriter Mode ignores any text formatting codes you may have set in the Text Window. It will begin printing on the first line at the first column.

To address an envelope, position the envelope in your printer so that the print head is on the line you wish to begin printing. Then determine how many spaces from the left margin you want your address to be typed. (You can set a Tab Stop here; see Using Tabs, SECTION 7.) Enter the name of the addressee and press **[RETURN]**. PaperClip will send that line to your printer, clear the Window and await your next line. Move the cursor to the same Tab Stop and enter the address. Press **[RETURN]**. Continue until your address is complete.

To clear Typewriter Mode and return to your editing window, press

[CTRL + SHIFT — ⟨2⟩]

again.

COMMANDS YOU CAN USE IN TYPEWRITER MODE

You can use these commands when editing your line of text. The commands must be used BEFORE you press **[RETURN]**.

Right One Column	[CTRL — ⟨→⟩
Left One Column	[CTRL — ⟨←⟩
Right Margin	[CTRL + SHIFT — ⟨INSERT⟩]
Left Margin	[CTRL + SHIFT — ⟨CLR⟩]
Right One Word	[CTRL + SHIFT — ⟨)⟩]
Left One Word	[CTRL + SHIFT — ⟨(⟩]
Delete Character under Cursor	[CTRL — DELETE]
Delete Left of Cursor	[RETURN]
Insert/Overwrite Toggle	[CTRL + SHIFT — ⟨I⟩]
Caps/Lowercase Toggle	[CTRL + SHIFT — CAPS]
Letter Swap Toggle	[CTRL + SHIFT — ⟨3⟩]
Word Swap Toggle	[CTRL + SHIFT — ⟨4⟩]
Bold Face (start)	[CTRL — ⟨B⟩ ⟨S⟩
Bold Face (end)	[CTRL — ⟨B⟩ ⟨E⟩
Italics (start)	[CTRL — ⟨I⟩] ⟨S⟩
Italics (end)	[CTRL — ⟨I⟩] ⟨E⟩
Underline (start)	[CTRL — ⟨U⟩] ⟨S⟩
Underline (end)	[CTRL — ⟨U⟩] ⟨E⟩

LIMITATIONS OF TYPEWRITER MODE

Typewriter Mode is designed to give you a way of sending one line of text to your printer easily without destroying any text you may have in your Text Windows. For that reason, you cannot use any commands other than those listed above. Nor can you:

- Use Macros
- Delete the entire line using **[SHIFT — DELETE]**
- Change Print Pitch
- Set Printer Margins
- Use Print Tabs
- Any editing or print command that uses a range of lines

10 SPECIAL FILE COMMANDS

Your text data files are of a limited size because of memory and other constraints. For instance, you cannot copy Chapter 1 of "War and Peace" and put it into a single data file. It is too much data to fit on a single diskette. And, for that matter, as a single data file, it would be much too large to fit in the memory space allotted by PaperClip.

As an example, this Users Guide was written using over 70 different data files on three diskettes. Each file contained a small segment of the text for the book you are holding and was "put together" using the Include File Command.

There may be instances where you want to include some special graphics in your document, such as a graph you have created using B/Graph or an illustration. This is done with another special command – the Verbatim File Command.

PaperClip can be used for personalized form letters. You can place names, addresses and other pertinent information in a special file and add it to your document with the Mail Merge Command.

INCLUDE FILES

PaperClip uses the "Include File" to allow you to print your entire document, even though it is broken into small segments.

For instance, suppose the document you want to print is Chapter 1 of your Great American Novel and it is broken into three parts – D:CHAPTER.1A, D:CHAPTER.1B, and D:CHAPTER.1C.

You can "chain" these three parts so that it will print as one. Read CHAPTER.1A into PaperClip, position the cursor so that it is on a line by itself at the very end of the file. Press

[CTRL — ⟨Z⟩] ⟨I⟩

then type in the filename of the next segment and press **[RETURN]**. The command will look like this:

[CTRL — ⟨Z⟩] ⟨ID:CHAPTER.1B⟩

Write the file back to diskette and then read D:CHAPTER.1B into PaperClip. Again position the cursor at the end of the file and enter

[CTRL — ⟨Z⟩] ⟨ID:CHAPTER.1C⟩

and write it back to diskette.

To print the entire Chapter, read D:CHAPTER.1A into PaperClip and print it as you normally would. When PaperClip gets to the end of the file, it will automatically close D:CHAPTER.1A, read in D:CHAPTER.1B, and continue printing. When PaperClip gets to the end of the file, it will close D:CHAPTER.1B, read in D:CHAPTER.1C, and print it.

You can chain up to three files from either disk drive in this manner.

BATCH FILES

There is another (and easier) way to create a hard copy of Chapter 1. That is by creating a Batch File.

A Batch File is a separate file that contains a series of instructions for PaperClip to follow when printing. These instructions can be Include Files, margin settings, font changes, or even straight text.

NOTE: Don't forget to clear the Window first, unless the text within the Window is also supposed to be printed.

In our Include File example, we chained together three files called D:CHAPTER.1A, D:CHAPTER.1B, and D:CHAPTER.1C. A Batch File for this job would look like this:

[CTRL — ⟨Z⟩] ⟨ID:CHAPTER.1A⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER.1B⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER.1C⟩

After creating the Batch File, we then write it to diskette as D:CHAPTER1.BAT to be used whenever we want to print Chapter 1.

The only limit to the number of Include Files you can place in your Batch File is the number of files you can access on your system. For instances, if Chapter 2 (on Drive 2) was broken into 5 parts, our Batch File would look similar to this:

[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2A⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2B⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER.2C⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER.2D⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2E⟩

OTHER INSTRUCTIONS THAT CAN BE BATCHED

Since a Batch File is really nothing more than a text file containing special instructions, you can write anything into it that you might in a "regular" text data file. For instance, in our Chapter 2 example, suppose the margins of D2:CHAPTER.2D are to be brought in five spaces on each side. The margins can be changed in D2:CHAPTER.2D itself, but we can also change them in the Batch File.

[CTRL — ⟨Z⟩] ⟨IML10⟩ [CTRL — ⟨Z⟩] ⟨IMR70⟩ (sets the margin for the first section)
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2A⟩

[CTRL — ⟨Z⟩] ⟨IML15⟩ [CTRL — ⟨Z⟩] ⟨IMR65⟩ (sets the margin for the second section)
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2B⟩
[CTRL — ⟨Z⟩] ⟨IML10⟩ [CTRL — ⟨Z⟩] ⟨IMR70⟩ (sets the margin for the rest of the section)
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2C⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2D⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER.2E⟩

Font changes, print pitch changes, and other special effects can be done the same way.

BATCHING A BATCH FILE

NOTE: This form of Batch File is called a two layer "nested" Batch File, as the Include Files within it also contain Include-Files. PaperClip will not read more than two layer nested Batch Files.

You can create an overall Batch File to print your entire job. Suppose our Great American Novel contained nine chapters and each chapter has its own Batch File. We can write a Batch File called BOOK.BAT that will print it entirely:

[CTRL — ⟨Z⟩] ⟨ID:CHAPTER1.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER2.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER3.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER4.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER5.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER6.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩

[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER7.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER8.BAT⟩
[CTRL — ⟨Z⟩] ⟨T⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER9.BAT⟩

The [CTRL — ⟨Z⟩] ⟨T⟩ command forces PaperClip to begin each chapter at the top of a page. This command can also be placed at the end of each individual chapter's Batch File.

GLOBAL SUBSTITUTION WITHIN INCLUDE FILES

In SECTION 2 we used the example of changing the name of the hero of our Great American Novel from "Bruce" to "Bryce". Suppose we have a printer Batch File similar to this:

[CTRL — ⟨Z⟩] ⟨ID:CHAPTER1.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER2.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER3.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID:CHAPTER4.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER5.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER6.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER7.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER8.BAT⟩
[CTRL — ⟨Z⟩] ⟨ID2:CHAPTER9.BAT⟩

NOTE: PaperClip will NOT check the second layer if you are using nested Include Files.

When PaperClip asks

Include files also? Y/N⟩ No

enter

⟨Y⟩ [RETURN]

PaperClip will read each Include File when it comes to it, change "Bruce" to "Bryce", and then read the file back to diskette.

VERBATIM FILE COMMAND

This is a special form of the Include File Command. It takes data directly from the disk file and prints it verbatim. This data can be graphs and charts you have created with B/GRAPH or illustrations you have created using a KoalaPad Touch Tablet. Use the Verbatim File command to include any data that you don't want PaperClip to process (such as placing line margins, or justifying) before it is printed.

To include a file verbatim, enter

[CTRL — ⟨Z⟩] ⟨V⟩

and then the filename. For instance,

[CTRL — ⟨Z⟩] ⟨VD3:CHART⟩

would tell PaperClip to open D3:CHART and pass the data within that file directly to the printer.

Verbatim files can be a part of your Batch Files.

Some printers, such as the Epson or Toshiba, allow you to download specific character sets to the printer. You can place the specified character set in a file and use the Verbatim command to send the file directly to your printer.

VERBATIM FILE LIMITATIONS

Since PaperClip does not examine the verbatim file, it has no way of knowing whether it is printing a file that is two lines long or 32 lines long. Therefore the line count becomes incorrect. This can also affect the page count.

If your printer CANNOT do a form feed (FF – top of form), then we suggest you avoid using the Verbatim File Command.

If your printer CAN do a form feed, then the Force New Page Command will issue a FF instead of counting line feeds. This moves the paper to line 1 of the next page.

If a footer has been designated for the page the FF will skip the footer line. if your printer can reverse line feed, then PaperClip will backup the paper and printer footer number 1. If any other footers have been designated, they will be printed only if they follow footer number 1 in your text.

If you have set PaperClip to pause between pages (or your printer cannot reverse line feed) then no footers will be printed.

MAIL MERGE

You can use PaperClip's mail merge function to "include" single strings of text, such as names and addresses, within in your printout. That means that the mail merge function can be used to print individualized form letters.

HOW IT WORKS

A special Include character is placed in your text at the point that you want the text string to be printed. When PaperClip is printing your document and senses the special command, it reads the text string outof a file and prints it where you have designated.

CREATING THE MAIL MERGE FILE

Any ATARI DOS compatible data file can be used as a Mail Merge File, Therefore, you can use PaperClip to create the file.

Each text string must be on a line by itself and terminated with a Carriage Return. To create a mailing list, for instance, we could enter

Batteries Included
30 Mural Street
Richmond Hill, Ontario L4B 1B5
The GRAFex Company
PO Box 700058
San Jose, CA 95170
No Such Computers
12345 Sassafras Lane
Zipp Lock, CA 94000

Notice that we did not skip a line between entries. PaperClip does not want any single Carriage Returns between entries, therefore our next entry must begin on the next line. Also notice that our example contains three lines of data for each entry.

When our mailing list is complete, we can write it to diskette. We can name the list anything we want, but for now:

[CTRL + SHIFT — ⟨W⟩] ⟨D:MAILLIST⟩

PREPARING THE DOCUMENT

Position the cursor within the body of your text. It must be against the left margin and before the place that you want your first Mail Merge entry. Enter

[CTRL — ⟨Z⟩] ⟨M⟩

and then the name of the data file from which you are going to input your mail merge data. From our example above, the command would be:

[CTRL — ⟨Z⟩] ⟨MD:MAILLIST⟩

Now PaperClip knows from which data file it is to read the mail merge input.

ENTERING THE COMMAND

Position the cursor in your text where you want the mail merge to be placed and enter

[CTRL — ⟨Z⟩] ⟨M⟩

You need not enter a [RETURN], unless you want a Carriage Return after the mail merge data.

A MAIL MERGE EXAMPLE

In our example above, we created amailing list containing the name of three firms and named the file MAILLIST. Here is an example of a form letter using MAILLIST to insert the names and addresses:

Foolishness, Inc.
855 Battery Street
Nowheresville, ID
[CTRL — ⟨Z⟩] ⟨M⟩ D:MAILLIST
Dear executive at [CTRL — ⟨Z⟩] ⟨M⟩. This short note is to let you know that your long awaited order of lefthanded widgets is winging its way to you at [CTRL — ⟨Z⟩] ⟨M⟩, [CTRL — ⟨Z⟩] ⟨M⟩.
Thanks for your patience.

When printed, the first letter will look something like this:

Foolishness, Inc.
855 Battery Street
Nowheresville, ID

Dear executive at Batteries Included. This short note is to let you know that your long awaited order of lefthanded widgets is winging its way to you at 30 Mural Street, Richmond Hill, Ontario L4B 1B5.

Thanks for your patience.

The second letter will be similar to this:

Foolishness, Inc.
855 Battery Street
Nowheresville, ID

Dear executive at The GRAFex Company. This short note is to let you know that your long awaited order of lefthanded widgets is winging its way to you at PO Box 700058, San Jose, CA 95170.

Thanks for your patience.

And the third letter will be similar to this:

Foolishness, Inc.
855 Battery Street
Nowheresville, ID

Dear executive at No Such Computers. This short note is to let you know that your long awaited order of lefthanded widgets is winging its way to you at 12345 Sassafras Lane, Zipp Lock, CA 94000.

Thanks for your patience.

Compare the three samples. Notice that PaperClip made adjustments for the different lengths of mail merge data. The Mail Merge Command can be placed anywhere in your text. If placed within a line, PaperClip will make the necessary calculations for justification, centering, or whatever other format change you have have made.

MERGING DATA FILES CREATED WITH SYNFILE+

Since PaperClip will strip any leading spaces and one trailing space from the incoming merge data you can merge data files you have created using SynFile+. If the incoming data is numbers, this allows for easier formatting.

11 CREATING AND USING MACROS

As you use PaperClip you may find that there are words, phrases, paragraphs, etc., that you are continually typing. These kinds of things are called "boilerplate". "Macros" allow you to store boilerplate in a special buffer and enter them into your text with a single keystroke. For instance, if you use PaperClip to write letters, you can place your signature closing into the Macro Buffer and call it out when you need it.

See SECTION 3 for details on how to load Macros into your computer memory.

USING MACROS

To call a Macro, position the cursor at the spot in your text where you wish to place it. Now press [START] and while holding it down, press the designator you have chosen for that Macro.

To read what has been placed in the sample Macro File, press these keys in succession:

[START + ⟨1⟩]
[START + ⟨+⟩]
[START + ⟨α⟩]
[START + ⟨b⟩]
[START + ⟨2⟩]
[START + ⟨3⟩]

To see what the sample Macro File looks like, press

[CTRL + SHIFT — ⟨R⟩]

and read D:MACRO into memory.

Notice how some of the phrases seem to be run together and others are not. When a Macro is called, PaperClip checks the Macro Buffer for the correct Macro by looking for the equal signs (=). The character in front of the equal sign is the keystroke used call that Macro.

Look for these characters in D:MACRO:

```
1=
+=
A=
B=
2=
3=
```

Notice that some portions of the text have Carriage Returns between the equal signs. PaperClip does not care what characters you use as part of your Macros, including Carriage Returns. The only exception to this is that you cannot use the equal sign as a part of your Macro.

To create your own Macro File, first clear a Window of any text. Then choose the keystroke that you wish to use to call that Macro, for instance, the number 1. Type

```
1=
```

followed by the text you wish to place in the Macro Buffer. Then type

2=

followed by the next piece of text you want to place in the Macro Buffer. Follow this procedure for as many Macros as you wish.

Again, it is not necessary to enter a Carriage Return after the equal sign or at the end of the Macro, unless you want the Carriage Return as a part of that Macro.

When you have completed your Macro file, press

[CTRL + SHIFT — ⟨W⟩]

and write the new Macro File to diskette. You can name your Macro files anything you wish, as long as your Macro filenames follow the rules set by ATARI.

The Macro Buffer uses part of the text buffer to store your Macros. PaperClip will hold a maximum of 2000 characters (including the Macro keystroke codes and the equal signs). PaperClip uses only enough of the buffer to store your Macros, so if your Macro File contains 20 characters, only 20 characters of the text buffer will be allocated.

APPENDIX A PAPERCLIP'S CONTROLS AT A GLANCE

ABORT COMMAND

Return to Text Window [ESC]

CONSOLE FUNCTION KEYS

Options Menu [OPTION]
- ⟨E⟩ Editor Options
- ⟨P⟩ Load Printer Configuration File
- ⟨M⟩ Load Macro File
- ⟨S⟩ Save Reconfigured PaperClip

[SELECT]

Toggle Windows
Enter Macro Text [START — ⟨Macro Keystroke⟩]

SCREEN CURSOR MOVEMENT

Right One Column	[CTRL — ⟨→⟩
Left One Column	[CTRL — ⟨←⟩
Up One Line	[CTRL — ⟨ ↑ ⟩
Down One Line	[CTRL — ⟨ ↓ ⟩
Right Margin	[CTRL + SHIFT — ⟨INSERT⟩]

Left Margin	[CTRL + SHIFT — ⟨CLR⟩]
Right One Word	[CTRL + SHIFT — ⟨)⟩]
Left One Word	[CTRL + SHIFT — ⟨(⟩]

BUFFER CURSOR MOVEMENT

Up One Screen	[CTRL + SHIFT — ⟨ ↑ ⟩]
Go To Present Tag	[CTRL + SHIFT — ⟨ ↓ ⟩]
Top of Buffer	[CTRL + SHIFT — ⟨G⟩]
Bottom of Buffer	[CTRL + SHIFT — ⟨H⟩]
Scroll Line/Window Right	[CTRL + SHIFT — ⟨E⟩]
Scroll Line/Window Left	[CTRL + SHIFT — ⟨]⟩]
	[CTRL + SHIFT — ⟨[⟩]

FILE I/O

Up One Screen	[CTRL + SHIFT — ⟨R⟩]
Write a File	[CTRL + SHIFT — ⟨W⟩]
or	[CTRL + SHIFT — TAB] writes to PCTEMP.
Disk Directory	[CTRL + SHIFT — ⟨?⟩] ⟨n⟩ n = drive number
File Help File	[CTRL + SHIFT — ⟨?⟩]H ⟨F⟩
Printer Help File	[CTRL + SHIFT — ⟨?⟩]H ⟨P⟩
Editor Help File	[CTRL + SHIFT — ⟨?⟩]H ⟨E⟩
Clear Window	[CTRL + SHIFT — ⟨D⟩]

WINDOWS

Select Text Window	[SELECT]
Delete Text Window	[CTRL + SHIFT — ⟨D⟩]
	or [SHIFT — CLR]
	or [CTRL — CLR]

Position cursor, press [SELECT — ⟨macro keystroke⟩]

EDITING COMMANDS

Insert/Overwrite Toggle [CTRL + SHIFT — ⟨I⟩]

Caps/Lowercase Toggle [CTRL + SHIFT — CAPS]
Letter Swap Toggle [CTRL + SHIFT — ⟨3⟩]
Word Swap Toggle [CTRL + SHIFT — ⟨4⟩]

Cut and Paste position cursor at beginning of block then
[CTRL + SHIFT — ⟨M⟩]
position cursor at end of block then press [RETURN]
⟨M⟩ Block Move – deletes text range
⟨C⟩ Block Copy – copies text range
position cursor at destination point and press [RETURN]
⟨D⟩Block Delete – deletes text range

Find Text String [CTRL + SHIFT — ⟨F⟩]
Replace Text String [CTRL + SHIFT — ⟨S⟩]
Set Hard Space [CTRL + SHIFT — SPACE]
Count Words in Text [CTRL + SHIFT — ⟨1⟩]
Set Tag [CTRL + SHIFT — ⟨T⟩] ⟨α⟩
Go to Tag [CTRL + SHIFT — ⟨G⟩] ⟨α⟩
α = user selected tag
Delete Character Under Cursor [CTRL — DELETE]
Delete Left of Cursor [DELETE]

Delete to Top of File	[CTRL + SHIFT — DELETE] ⟨T⟩ fills Paste Buffer
Delete to End of File	[CTRL + SHIFT — DELETE] ⟨E⟩ fills Paste Buffer
Retrieve Text From Delete	[CTRL + SHIFT — ⟨U⟩]
Delete Line Cursor On	[SHIFT — DELETE] fills Paste Buffer
Enter Text From Paste Buffer – position cursor	[CTRL + SHIFT — ⟨P⟩]
	[CTRL + SHIFT — DELETE]
Clear Paste Buffer	[RETURN]

FORMAT PAGE FOR PRINTING

Set Top Margin	[CTRL — ⟨M⟩] ⟨Tn⟩
Set Bottom Margin	[CTRL — ⟨M⟩] ⟨Bn⟩
Let Left Margin	[CTRL — ⟨M⟩] ⟨Ln⟩
Set Right Margin	[CTRL — ⟨M⟩] ⟨Rn⟩
Set Left Margin (2-column)	[CTRL — ⟨Z⟩] ⟨Ln⟩
Set Right Margin (2-column)	[CTRL — ⟨Z⟩] ⟨Rn⟩
Set Page Size	[CTRL — ⟨Z⟩] ⟨Sn⟩
Set Line Spacing	[CTRL — ⟨Z⟩] ⟨Gn⟩
n = number of spaces	
Justification Toggle	[CTRL — ⟨Z⟩] ⟨J⟩
Microspace Toggle	[CTRL — ⟨Z⟩] ⟨X⟩
Center Text (start)	[CTRL — ⟨C⟩] ⟨S⟩
will center text to first Carriage Return or	
Center Text (end)	[CTRL — ⟨C⟩] ⟨E⟩
Block Right	[CTRL — ⟨R⟩]
Print 6 Lines per Inch	[CTRL — ⟨Z⟩] ⟨6⟩
Print 8 Lines per Inch	[CTRL — ⟨Z⟩] ⟨8⟩

Force New Page	[CTRL — ⟨T⟩]
	or [CTRL — ⟨T⟩] ⟨n⟩
n = number of lines needed to print text	
Define Header	[CTRL — ⟨Z⟩] ⟨Hx,y⟩ ⟨text⟩
Define Footer	[CTRL — ⟨Z⟩] ⟨Fx,y⟩ ⟨text⟩
x = line number on which to print	
y = header or footer number (maximum three)	
Print Page Number	[CTRL — ⟨N⟩]
Set Page Number	[CTRL — ⟨Z⟩] ⟨N⟩ ⟨n⟩
n = new page number	

DOUBLE COLUMN PRINTING

Set Left Margin — 1st column	[CTRL — ⟨M⟩] ⟨L⟩ ⟨n⟩
Set Right Margin — 1st column	[CTRL — ⟨M⟩] ⟨R⟩ ⟨n⟩
Set Left Margin — 2nd column	[CTRL — ⟨Z⟩] ⟨Ln⟩
Set Right Margin — 2nd column	[CTRL — ⟨Z⟩] ⟨Rn⟩
n = number of spaces	
Stop Double Column Print	[CTRL — ⟨T⟩] [RETURN] [CTRL — ⟨Z⟩]⟨L0⟩

FORMAT TEXT FOR PRINTING

Set Pitch	[CTRL — ⟨F⟩] then ⟨0⟩, ⟨2⟩, ⟨5⟩, or ⟨O⟩
Bold Face (start)	[CTRL — ⟨B⟩ ⟨S⟩
Bold Face (end)	[CTRL] — ⟨B⟩ ⟨E⟩
Italics (start)	[CTRL — ⟨I⟩] ⟨S⟩
Italics (end)	[CTRL — ⟨I⟩] ⟨E⟩
Underline (start)	[CTRL — ⟨U⟩] ⟨S⟩

Underline (end)	[CTRL — ⟨U⟩] ⟨E⟩
Superscript	[CTRL — ⟨S⟩] ⟨P⟩
Subscript	[CTRL — ⟨S⟩] ⟨B⟩
End script (either)	[CTRL — ⟨S⟩] ⟨E⟩
Create Tab Map	[CTRL — ⟨Z⟩] ⟨Tx,n1,n2,n3...⟩
x = Tab Map number 1 or 2 and n = tab stops	
Print Tabs	[CTRL — ⟨A⟩] x
x = Tab Map Number	
Automatic Paragraph Indent	[CTRL — ⟨P⟩] when cursor at column 1
Set Paragraph Indent	[CTRL — ⟨Z⟩] ⟨Px,y⟩
x = spaces to indent	
y = lines to skip between paragraphs	
User Defined Printer Commands	[CTRL — ⟨Z⟩] ⟨1⟩ to [CTRL — ⟨Z⟩] ⟨4⟩
Comment Line	[CTRL — ⟨Z⟩] ⟨.text⟩
all between period and Carriage Return will not print	

PRINT DOCUMENT

Send To Printer	[CTRL + SHIFT — ESC]
	or [CTRL + SHIFT — ⟨O⟩] specify P:
Send To Disk File	[CTRL + SHIFT — ⟨O⟩] specify D:filename
Send To Null Device	[CTRL + SHIFT — ⟨O⟩] specify N:
Print Review	[CTRL + SHIFT — ATARI]
Next Page	⟨N⟩
Previous Page	⟨P⟩
Specify Page	⟨S⟩
Typewriter Mode Toggle	[CTRL + SHIFT — ⟨2⟩

INCLUDE FILES

Include filename	[CTRL — ⟨Z⟩] ⟨Id:filename⟩
Mail Merge – from file	[CTRL — ⟨Z⟩] ⟨Md:filename⟩ (sets file)
subsequent	[CTRL — ⟨Z⟩] ⟨M⟩ (calls data)
Print File Verbatim	[CTRL — ⟨Z⟩] ⟨Vd:filename⟩

MATHEMATICS

Toggle Number Format	[CTRL — ⟨Z⟩] ⟨#⟩
Addition	[CTRL — ⟨Z⟩] ⟨+⟩
Subtraction	[CTRL — ⟨Z⟩] ⟨−⟩
Multiplication	[CTRL — ⟨Z⟩] ⟨*⟩
Division	[CTRL — ⟨Z⟩] ⟨/⟩
Print Subtotal	[CTRL — ⟨Z⟩] ⟨?⟩
Print Total	[CTRL — ⟨Z⟩] ⟨=⟩
Math On a Series of Numbers	[CTRL — ⟨Z⟩] ⟨On:⟩

O = operator
n = series number

TOGGLES

Caps/Lowercase	[CTRL + SHIFT — ⟨CAPS/LOWR⟩]
Floating Point Math	[CTRL — ⟨Z⟩] ⟨#⟩
Insert/Overwrite	[CTRL + SHIFT — ⟨I⟩]
Justification	[CTRL — ⟨Z⟩] ⟨J⟩
Letter Swap	[CTRL + SHIFT — ⟨3⟩]
Microspace	[CTRL — ⟨Z⟩] ⟨X⟩
Typewriter Mode	[CTRL + SHIFT — ⟨2⟩
Word Swap	[CTRL + SHIFT — ⟨4⟩]

Attract Mode	[OPTION] ⟨E⟩
Auto Save	[OPTION] ⟨E⟩
Cursor Movement	[OPTION] ⟨E⟩
Key Click	[OPTION] ⟨E⟩
Screen Scroll	[OPTION] ⟨E⟩

TABLE OF CONTENTS

Add Entry [CTRL — ⟨Z⟩] ⟨Cdn:filename⟩

dn: = drive number

[CTRL — ⟨Z⟩] ⟨Ctext⟩

APPENDIX B
PAPERCLIP MASTER PROGRAM FILE INDEX

PAPERCLIP PROGRAM FILES

This is the PaperClip program file:

PC.SYS

PAPERCLIP HELP FILES

These are the PaperClip Help Files. See Appendix E for the complete text of each file.

HELPEDT
HELPFIL
HELPPRT

PAPERCLIP DOCUMENTATION FILES

The PaperClip Users Guide uses these files as examples:

CURSOR
MACRO

PAPERCLIP UTILITIES

These programs are described in detail in Appendix D.

Configure PaperClip to Printer	PRTR.COM
Convert AtariWriter Files to PaperClip	AWTOPC.OBJ
Screen Graphics Dump	HIRES.BAS
B/Graph Picture File	BGRAPH.PIC
KoalaPad Picture File	KOALA1.PIC
HIRES.BAS uses these data files:	
Anadex 9500	ANAD9501.CNG
Centronics	CENT.CNG
Epson	EPS.CNG
Epson FX models	FX.CNG
NEC — C. Itoh	CITOH.CNG
Okidata	OKI.CNG
Seikosha	SEK.CNG

PRINTER CONFIGURATION FILES

AT825.CNF	Atari 825
AT1027.CNF	Atari 1027
DM40.CNF	Brother
DP8051.CNF	Data Products
FX80.CNF	Epson FX80
FX80ALT.CNF	Epson
GEMINI.CNF	Gemini
GEN80COL.CNF	General 80-Column
GN132COL.CNF	"Advanced" General Printer Files 132-Column

MT160.CNF	Manisman Tally
MX80.CNF	Epson MX80
MX80III.CNF	Epson MX 80 II
NEC5530.CNF	NEC 5530
OKI82.CNF	Okidata 82
OKI84.CNF	Okidata 84
OKI92.CNF	Okidata 92
PC8023A.CNF	NEC
PR80COL.CNF	General Printer Files
PR132COL.CNF	General Printer Files
RX80.CNF	Epson RX80
RX80BS.CNF	Epson
SPIRIT80.CNF	Manisman Talley
TECF10S.CNF	Tecfid
T01351.CNF	Toshiba
TP1.CNF	Smith Corona

APPENDIX C
PRINTER CONTROL CODE EQUATE TABLE

Many of the printer control codes you enter into your text are two step operations. For instance, to underline text, you must enter [CTRL — ⟨U⟩] and then answer whether you are starting or stopping the underline process. The [CTRL — ⟨U⟩] command alerts PaperClip to the underline command. The next character you enter (either ⟨S⟩ or ⟨E⟩ places the correct printer control code into your text.

Because it is a "non-printing" character, PaperClip hides the original control character you entered (such as [CTRL — ⟨U⟩] in the above example). Then when you enter the ⟨S⟩tart or ⟨E⟩nd command, it prints a special character that is a visual representation of the command.

Suppose you wanted to change everything in your document that is printed in boldface text to italics. Since each is a two step operation, you need to know to what control code the special character representation is equal.

Check the table below. The Start Boldface character is [CTRL — ⟨B⟩]. The Start Italics is [CTRL — ⟨I⟩]. When using Global Substitution and PaperClip asks

Substitute ?

enter

[CTRL — ⟨I⟩]

When PaperClip asks

for?

enter

[CTRL — ⟨B⟩].

PaperClip will change each Start Boldface command to Start Italics. Now do the same for the End Boldface command.

These same rules apply for finding a non-printing character.

See SECTION 5 for more information on Finding a Character String and SECTIONs 5 and 10 for more information on Global Substitution.

Control Code	Command
↑	top margin
↓	bottom margin
L	left margin
R	right margin
T	special ([CTRL — Z]
G	block right
C	start center
Z	end center

B	start bold
A	end bold
I	start italics
J	end italics
U	start underline
, (comma)	end underline
P	set pitch
O	page number
N	new page
→	hard space
D	start subscript
E	start superscript
F	end script
H	start paragraph

APPENDIX D PAPERCLIP UTILITY PROGRAMS

CONFIGURING PAPERCLIP TO YOUR PRINTER

Included with your PaperClip Master Program Diskette is a program that allows you to create your own Printer Configuration File. The program is called PRTR.COM.

The program will ask a series of questions about your printer control codes needed to perform particular printer functions. These questions are answered by entering a decimal number.

Before beginning, study the list of questions below and then check the owner's manual that came with your printer for the proper numbers.

To load PRTR.COM:

- Boot your system using ATARI DOS 2.0 or DOS XL.
- Remove your DOS diskette and insert your PaperClip Master Program Diskette.
- Use the "L — Binary Load" function of your DOS to load PRTR.COM.
- When the program is loaded, remove your PaperClip Master Program Diskette and insert the diskette on which you want to save your new Printer Configuration File.

PRTR.COM will ask you a series of questions. Push [BREAK] at any time to abort the process. PRTR.COM will return to the opening question.

Do you wish to alter an existing printer configuration file?

This is the opening question. Your options are to change an existing printer configuration file or to create a new one.

Enter ⟨Y⟩ [RETURN] to change a file that is already on the diskette. The program will ask you to name your printer configuration file to be changed. The printer configuration file can be on any drive supported by your DOS. If the file is on any drive other than Drive 1, you must designate the drive number (for example, D2:AT1027.CNF).

NOTE: If the program cannot find the appropriate file it will again ask if you want to alter an existing printer configuration file.

Enter ⟨N⟩ [RETURN] if you want to create a new printer configuration file.

After having determined whether you are creating a new printer configuration file or modifying an existing file, the program will ask the following questions:

What is your printer's null character?

This is the character that your printer will never use as a command, normally 255. PaperClip will use this as a flag to indicate the end of a printer command, or that there is no such printer command available. For instance, if your printer cannot backspace then set the backspace character to 255 if the null character is 255.

What is your printer LF command?

If your printer does not have a switch to automatically LF upon a CR, set this to 10 otherwise set it to the null value.

What is your page length?

The number of lines that can be printed on one page. This is usually 66.

What is the top margin?
The number of lines down from the top of the page that print should start.

What is the bottom margin?
The number of lines up from the bottom of the page that the print should stop.

What is the printer backspace character?
The character your printer will use to move the print head back one character.

What is the printer underline character?
The character, when sent to your printer, will cause an underline to be printed.

What is your printer form feed command?
What command does your printer use to perform a linefeed?

What are the codes necessary to start ITALICS?
This is the command sequence to start printing italicized text. If your printer can not print italicized text, set all values to the null value.

What are the codes necessary to end ITALICS?
This is the command sequence to stop printing italicized text.

What is the offset for Italics?
If your printer prints italics by adding a number to the ASCII value of the character to print, what is the number that is added?

What are the codes necessary to start UNDERLINING?
This is the command sequence to start printing underlined text. If your printer will not automatically underline text, PaperClip will use the backspace command and the underline

character to underline the text. If the printer has no backspace or underline character, PaperClip will ignore all underline commands that are in the source text.

What are the codes necessary to end UNDERLINING?

This is the command sequence to end the automatic underlining mode on the printer.

What are the codes necessary to start BOLD FACE?

This is the command sequence to start bold face printing on your printer. (On some printers this is called emphasized or double strike text.) If your printer has no bold face mode, PaperClip will backspace and print the character again in the same place. If your printer has no backspace command, PaperClip will ignore all underline commands.

What are the codes necessary to end BOLD FACE?

This is the command sequence to end bold face printing.

What are the codes necessary to initialize 10-pitch?

The command sequence needed by your printer to put it in 10 characters-per-inch mode.

What are the codes necessary to initialize 12-pitch?

The command sequence needed by your printer to put it in 12 characters-per-inch mode.

What are the codes necessary to initialize 15-pitch

The command sequence needed by your printer to put it in 15 characters-per-inch mode.

What are the codes necessary to initialize the optional pitch

The command sequence needed by your printer to put it in an optional number of characters-per-inch mode.

What is your printer initialization code?

The command sequence to tells your printer to reset itself to the same state it was in when first turned on.

How many microspaces make up one 'normal' 10-pitch space?

If your printer is capable of microspacing in any mode (text or graphics), how many of the microspaces does it take to equal a space in 10-pitch mode?

How many microspaces make up one 'normal' 12-pitch space?

If your printer is capable of microspacing in any mode (text or graphics), how many of the microspaces does it take to equal a space in 12-pitch mode?

How many microspaces make up one 'normal' 15-pitch space?

If your printer is capable of microspacing in any mode (text or graphics), how many of the microspaces does it take to equal a space in 15-pitch mode?

How many microspaces make up one 'normal' optional pitch space?

If your printer is capable of microspacing in any mode (text or graphics), how many of the microspaces does it take to equal a space in the optional mode?

What is the character necessary to send one microspace?

If your printer can microspace, what is the command to tell the printer print just one microspace?

Can your printer microspace?

Enter the code (see your manual).

If your printer can microspace set this to 128. If the microspace command sequence must be repeated for each microspace, add 64. If your printer pitch must be reset after microspacing add 1.

What is the length byte in the microspace start command?

This is the offset to the length byte in the start microspace command.

What is the offset for spacing a microspace? (See your manual).

This is the constant that will be added to the length byte of each microspace. Some printers want the length in binary so the offset would be 0 (Epson, for instance); some printers want the length in ASCII (NEC, for instance), so the offset would be 48 (ASCII for 0).

What are the codes necessary to start microspacing?

If your printer can microspace, and if it can print more than one micro space at a time, what is the sequence needed to do so?

What are the codes necessary to end microspacing?

If your printer can microspace, and if it can print more than one microspace at a time, what is the sequence needed to stop microspacing?

What are the codes to initiate $^1/_6$ inch line spacing?

If your printer can vary the amount it spaces between lines, what is the sequence needed to space $^1/_6$ inch between lines?

What are the codes to initiate $^1/_8$ inch lines spacing?

If your printer can vary the amount it spaces between lines, what is the sequence needed to space $^1/_8$ inch between lines?

What are the codes to reverse line feed in $^1/_6$ line mode?
If your printer can reverse line, what is the sequence needed to tell it to reverse feed one $^1/_6$ inch line?

What are the codes to reverse line feed in $^1/_8$ line mode?
If your printer can reverse line, what is the sequence needed to tell it to reverse feed one $^1/_8$ inch line?

User defined command 1.
If your printer has special functions that have not been covered here, what is the sequence necessary to activate them?

User defined command 2.
If your printer has special functions that have not been covered here, what is the sequence necessary to activite them?

User defined command 3.
If your printer has special functions that have not been covered here, what is the sequence necessary to activate them?

User defined command 4.
If your printer has special functions that have not been covered here, what is the sequence necessary to activate them?

CONVERTING ATARIWRITER FILES TO PAPERCLIP

PaperClip uses a unique set of commands to format your document for printing. Your PaperClip Master Program Diskette contains a special program called AWTOPC.OBJ. This program will convert the commands and codes used in AtariWriter documents to those used by PaperClip.

STARTING THE PROGRAM

To load AWTOPC.OBJ, remove any cartridges from your computer and boot a disk containing DOS. (800XL owners must hold down **[OPTION]** when turning on their computer.)

If you are using ATARI DOS or DOS XL, use the **(L)** option to load AWTOPC.OBJ. If you are using a different DOS then use whatever function necessary for a binary load of AWTOPC.OBJ.

USING THE PROGRAM

AWTOPC.OBJ is primarily a self documented program. Follow the instructions that you see on screen.

The first prompt asks you to insert your data diskette and press [START] when ready. If you are using two disk drives, insert both diskettes at this time. You can read your AtariWriter files from one drive and write them to the other. Specify the drive number when asked for the input and output filenames. AWTOPC.OBJ assumes Drive 1 if no drive is specified.

You can get a directory of either diskette by entering the drive number at either filename prompt.

Press **[ESC]** at any prompt to restart the program.

AWTOPC.OBJ will not allow you to write to a file that already exists. If you are trying to do so, AWTOPC.OBJ will give you the option of deleting the old file first.

Nor can you read from and write to identical files.

HOW IT WORKS

AWTOPC.OBJ examines your AtariWriter file and checks for the special codes used by AtariWriter for printing and formatting. When one of these codes is detected, it is converted to the corresponding PaperClip command.

The only code not converted is AtariWriter's printer control code, CTRL-O. Since these codes are not necessary for PaperClip, AWTOPC,OBJ bypasses them.

GRAPHICS DUMP AND MERGE UTILITY

The Graphics Dump and Merge Utility can be found on your PaperClip Master Program Diskette. The program is named HIRESDMP.BAS. This program can be used to convert pictures and graphs to data that can be used by PaperClip in your documents. It also is a "stand alone" utility program that you can use to send the same pictures and graphs to your printer.

The program is written in BASIC and is uncompiled and unprotected. The program is copyrighted. Therefore you cannot legally pass around copies of the program to your friends and neighbors. Feel free, however, to use parts of the program in your own programming efforts.

USING THE PROGRAM

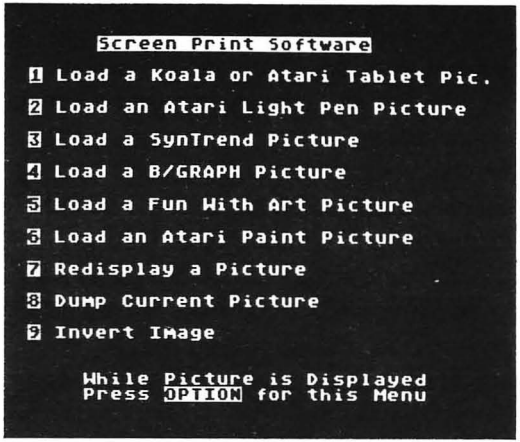
With BASIC in place, load HIRESDMP.BAS from the PaperClip Master Programming Diskette. Once the program is loaded, you can save it to another diskette, if you wish.
The Graphics Configuration files (.CNG) must reside on Drive 1.

NOTE: If you do save the program to a different diskette you will also need to copy the configuration files. They are the files with the extender of .CNG on your PaperClip Master Programming Diskette.

When you run the program, there will be a short wait and then the program will ask you to select your printer.

The last choice on the menu is User defined. If you make this choice the program will ask if you want to load a customized Graphics Configuration File or create one. If you have created a customized Graphics Configuration File, press ⟨L⟩. (Creating your own Graphics Configuration File will be discussed later.)

After choosing your printer, the program will display this menu:



Item ⟨1⟩ allows you to convert pictures you may have created with the KoalaPad Touch Tablet. Use the same input for pictures you may have created using the ATARI Touch Tablet.
Item ⟨2⟩ is for any pictures created with the ATARI Light Pen. Use this same input for pictures created with Smart Art II. The original colors of Smart Art II pictures are not preserved.

Item ⟨3⟩ allows you to process graphs created with SynTrend.

Item ⟨4⟩ allows you to process graphs created with B/Graph. A sample graph, called BGRAPH.PIC is included on your PaperClip Master Program Diskette.

Item ⟨5⟩ allows you to process pictures created by Fun With Art from EPYX. Fun With Art uses a programming trick called display list interrupts (DLI) to provide up to 128 colors on the screen simultaneously. This program will load these files but without all of the DLIs.

NOTE: The picture files called KOALA1.PIC, KOALA2.PIC and KOALA3.PIC have been included on your PaperClip Master Program Diskette. Use these pictures for experimentation.

Since only four textures are supported in the dumps, inclusion of the DLI material would make visualizing the picture more difficult.

Item ⟨6⟩ allows the processing of pictures created with ATARI Paint.

Having chosen any of the above, the program will then ask for the filename of the picture. Enter the appropriate data and the picture will be loaded into memory and display on your monitor. Press [OPTION] to return to the Main Menu.

Item ⟨7⟩ on the Main Menu will redisplay any picture in memory if you have left the picture and returned to the Main Menu.

Item ⟨9 inverts the colors of the picture. This is really appropriate for black and white pictures and graphs.

The B/Graph file BGRAPH.PIC has been included on your PaperClip Master Program Diskette. Use this graph for experimentation.

PRINTING THE PICTURE

Press Item ⟨8 on the Main Menu to begin the printing process.

The program will ask you for a grey scale to use for each color. The grey scale is created by printed textures and runs from 0 (blank) to 8 (solid). Press [ESC] in answer to each shading question for a black and white dump.

If you are preparing a color illustration or graph, choose a number from the scale that you think will most adequately represent the color.

You can abort the printing process by pressing [SELECT]. You can abort before printing by asking for a directory when asked for a filename. Once in the directory mode press [ESC] to return to the Main Menu.

If you do not want to save the picture to diskette, enter ⟨P:⟩ when asked for a filename.

NOTE: The difference between any two adjacent values is slight. Details involving two colors with adjacent textures may be lost. Experiment by printing the picture before saving it to your data diskette.

CREATING A GRAPHICS CONFIGURATION FILE

The creation of your own customized Graphics Configuration File involves answering a series of questions. Before starting, it might be a good idea to study your printer manual and also have it nearby for reference.

Codes to start graphics – Some printers actually use a special code to start graphics. Others start graphics every line. In the latter case the data entered here is used to set the line spacing as needed.

Enter the appropriate control codes as a character string. (Not a set of numbers – see your ATARI BASIC Reference Manual.) If, in setting the line pitch or turning on graphics in BASIC, you would normally send a Carriage Return then do so. Some printers require that one not be sent. Check your printer manual.

Code at start of each line – Many printers require that nothing be sent before each line of graphics data. For instance, Centronics, Okidata 92, and Seikosha AT100 are in that group. In a case such as this just press [RETURN]. For other machines a string of control codes are required.

Each line contains 420 graphics bytes so set the parameters accordingly.

Codes at end of each line – This is the required set of codes to cause a Carriage Return and Line Feed in graphics. For most machines a [CTRL — ⟨M⟩] is needed since it is the ASCII Carriage Return. Some printers, such as the Okidata and Seikosha, need other characters. Check your printer manual.

Code to turn off graphics – This is the character string necessary to terminate the graphics at the end of the dump.

Character to repeat – This is the character which has to be sent twice if it occurs. For most printers there is no such requirement. In that case enter 255. This is a single numeric entry not a character string.

Number for a space – A blank space in graphics may have any numeric value. For the Epson and NEC printers it is a zero. For the Centronics it is a 32. The Seikosha AT100 uses 128. (See your manual.) Enter the appropriate number. The default is 0.

Number of lines per pass – The program will handle the requirement of sending from 1 pin firing at a time to 8 pins firing. Some printers have no option; for other printers there may be a choice. (See your printer manual.) The choice will must correspond to the line spacing chosen.

Is top pin high or low – Most printers consider the top pin in graphics to be the lowest value pin. The Epson line considers it to be the highest value. This question enables you to customize for both types of printers.

Maximum rotations – If a printer treats the top pin as high it does so by assigning a value of 128 to it. Similarily a printer treating the top bit as low will usually give it a value of 1. When the program is doing its manipulation it pushes the bits around to achieve this. The normal situation requires a maximum of 8 rotations. The Anadex 9500 series treats the top pin as high but assigns it a value of 32. Thus the top 2 bits of the byte are not used for graphics data. In order that the program not push data into these bytes a value of 6 is used for maximum rotations.

APPENDIX E – HELP FILES

Since the Help Files on your PaperClip Master Program Diskette are designed for screen display, not for printer output, they are listed here for your convenience. The Help Files, listed separately on your PaperClip Master Program Diskette, are named HELPFIL, HELPPRT, and HELPEDT, respectively.

THE FILE HELP FILE

This Help File contains a listing of all the PaperClip commands necessary for file manipulation, such as File Read, File Write, etc.

CONSOLE KEYS:

OPTION — Options menu
SELECT — Window selection
START — Start a macro

CTRL + SHIFT — :

? — Disk directory and Help menus
R — Read a file
W — Write a file
ATARI — Preview the document (displays in 2nd window
N-next page
P-previous page
S-specify page number)
TAB — Instant auto save

CTRL — :

ESC — Print using defaults
2 — Typewriter mode
) — Print the document
Z — Special
- **C** — Table of contents
- **H** — Define header
- I — Include a file from disk (eg. **[CTRL — ⟨Z⟩] ⟨**Id:include.txt**⟩**)
- P — Set paragraph indent and line spacing (eg. **[CTRL — ⟨Z⟩] ⟨p4,1⟩** or **[CTRL — ⟨Z⟩] ⟨p12⟩**)
- T — Set printer tabs
- V — Verbatim file included
- W — Printer pause

THE PRINTER HELP FILE

The Print Help File contains a listing of PaperClip's printer control codes.

CTRL + SHIFT — :

ATARI = Preview the document (displays in 2nd window
- N-next page
- P-previous page
- S-specify page number)

CTRL — :

ESC = Print using defaults
O = Print the document
A = Printer tab

B = Bold
C = Center
F = Pitch
I = Italics
M = Margins
N = Display page number
P = Start Paragraph
R = Block right
S = Super/Subscripts
T = New page
U = Underline
Z = Special
+ = Add to series
– = Subtract from series
/ = Divide series by number
* = Multiply series by num
? = Print series total
= = Print/Clear series total
# = Toggle number format
. = Comment line
1 to 4 = user defined
6 = 6 lines per inch
8 = 8 lines per inch
C = Table of contents
F = Define footer

G = Set line spacing
H = Define header
I = Include a file from disk (eg. [CTRL — ⟨Z⟩] ⟨Id:include.txt⟩)
J = Right just toggle
L = Set left margin for 2nd column
M = SynFile+ Mail merge (eg. [CTRL — ⟨Z⟩] ⟨Md:maillist.txt⟩
first name: [CTRL — ⟨Z⟩] ⟨m⟩
last name: [CTRL — ⟨Z⟩] ⟨m⟩
First [CTRL — ⟨Z⟩] ⟨M⟩ is the filename, subsequent [CTRL — ⟨Z⟩] ⟨m⟩'s are the fields)
N = Set current page #
P = Set paragraph indent and line spacing (eg. [CTRL — ⟨Z⟩] ⟨p4, 1⟩ or [CTRL — ⟨Z⟩] ⟨p12⟩
R = Set right margin for 2nd column
S = Page size
T = Set printer tabs
V = Verbatim file included
W = Printer pause
X = Microspace toggle

THE EDITOR HELP FILE

The Editor Help File contains a listing of all of PaperClip's editing commands.

CONSOLE KEYS:

OPTION — Options menu

SELECT	— Window selection
START	— Start a macro

CTRL + SHIFT — :

⟩	— Move one word right
⟨	— Move one word left
⟩	— Go to end of line
⟨	— Go to start of line
1	— Word count
2	— Typewriter mode
3	— Letter toggle
4	— Word toggle
5	— Delete word
CAPS	— Toggle case
DELETE	— Delete to start/end
SPACE	— Hard space
D	— Delete current window
E	— Go to end of buffer
F	— Find a string
G	— Goto tag
H	— Go to head of buffer
I	— Insert/Replace toggle
M	— Move, Copy, Delete
P	— Paste
S	— Substitute
T	— Set a tag
U	— Undo (global delete)

APPENDIX F GLOSSARY

Boilerplate – Some years ago newspapers were printed directly from castings done in lead. Many feature syndicates sent their features to the newspapers in a form that could be placed within the molds before they were cast. Because of the physical make up of these materials, they were called boilerplate. The term has become synonymous with material prepared long before publication and saved, or for material that is used over and over again.

Boot – To load a program into computer memory when the computer is turned on. The term comes from the phrase "pulling one's self up by the bootstraps".

Buffer – An area in your computer's memory that is reserved by PaperClip for the storage of data. The text you write on your monitor is actually being placed in a Text Buffer.

Carriage Return – On old fashioned typewriters, the user has to physically return the carriage to the left when reaching the end of a line. This advances the paper. Your ATARI Home Computer does not have a carriage, so PaperClip automatically adjusts the printer line length to match your preset printer configuration. But, PaperClip does need to know where the end of a paragraph is and when to advance the paper when you want to skip a line. The Carriage Return accomplishes this when you press **[RETURN].**

Character String – See String.

Cold Start – Starting a program from the very beginning, as though you had just turned on your computer. See Warm Start.

Command Line – The bar at the bottom of the screen that says "PAPERCLIP (c) 1985 Batteries Included". When PaperClip displays the various menus and options or asks you for specific instructions, they will appear on this line.

Configure, Configuration – Putting all the data in the right place so that your computer will know what to do with a particular program such as PaperClip, or a peripheral device such as your printer.

CR – Carriage Return

Cursor – The flashing box that shows your current location in your text.

Cut and Paste – A typographer's term meaning to "cut" a block of text from one area of your document and to "paste" it into another area.

Default – The preset condition of a peripheral device or software program. For instance, the default margins of PaperClip are 0 and 40.

Delimiter – A character recognized by your computer that sets the boundaries (or limits) for strings of characters. For that reason, the delimiting character cannot be a part of the character strings.

Disk Operating System – A program that tells your computer how to work with the floppy disk drive, and how to read data from and store data to the diskette.

DOS – Abbreviation for Disk Operating System.

Filename – The name of a file as it is stored on diskette.

Floating Point Math – Your computer does the mathematical computations using algebra. This can cause the decimal point to "float" within a number.

Format – Preparing a diskette for data. When formatted, a diskette for the ATARI Home Computer will contain 40 circular tracks, each containing 18 sectors per track. Each sector can contain up to 128 bytes (characters) of data in single density and 256 bytes in double density. PaperClip does not support the "enhanced density" of ATARI DOS 3.0.

Flush Left – A typesetter's term meaning that all the printed lines of your text are lined up evenly on the left margin of your page. The right margin will have a ragged appearance. See Justification.

Footers – A special line of text that can be printed at the bottom of each page of your text. This line can contain a page number or other information.

Global Substitution – A feature of PaperClip that allows you to change every occurrence of a particular string of characters in your document to a different string of characters automatically.

Hard Copy – The printed copy that is generated by your printer.

Headers – A special line of text that can be printed at the top of each page of your text. This line can contain a page number or other information.

Justify, Justification – A typesetter's term meaning that the right and left margins of your text are evenly alligned. See Flush Left and Flush Right.

Macro – A feature of PaperClip that allows you to place preselected text into your document with one keystroke. See SECTIONs 3 and 11.

Macro Buffer – A portion of PaperClip's memory that is reserved for Macros. The Macro Buffer, which is a part of PaperClip's Text Buffer will hold a maximum of 2048 characters. This includes the Macro Keystroke code and the equal sign delimiter.

Menu – Just as a menu in a restaurant gives you a choice of entrees, a menu on the sceen gives you a choice of options. The various PaperClip menus are displayed on the Command Line.

Pagination – Printing numbers consecutively on each page of your document. PaperClip allows you to place page numbers in either the Header or the Footer.

Paste – Graphic and commercial artists "paste" text into place on a page to be printed. PaperClip does much the same by "pasting" text you have stored in the Paste Buffer.

Paste Buffer – That area of memory reserved by PaperClip to store text that you have designated for deletion, wish to duplicate, or to move to another location within your text.

Pitch – The number of characters per inch on the printed line. A print pitch of 10 means that the printer will print 10 characters per inch.

Scroll — If you have set a line length greater than 40 columns, PaperClip will keep that line within the editing Window as you are typing. Depending on the editing option you have chosen (see SECTION 3), PaperClip will scroll or move either the Window or the line on which you are typing.

Status Line – The line that appears at the top of the PaperClip screen editor. This line gives you the current stats, including the number of lines still available for your use, the amount of lines of text currently in the Paste Buffer, and the current position of the cursor within your text.

String – A designated series of letters, numbers, or a combination of both. For instance, the word "string" is a string of six characters and "A" is a string of one character.

Subscript – Subscripts are characters that print about half way below the base of the printed line. They are used in chemical formulae, such as H_2SO_4.

Superscript– Superscripts are characters that print about half way above the base of the printed line. They are used in mathematical formulae, such as 2^2.

Text Buffer – That portion of your computer's memory that PaperClip uses to store your text while you are working on it. Your file is read from the Text Buffer when you save it to diskette and read into the Text Buffer when you read a file from diskette.

Toggle – To change from one state to another, such as toggling, or change letters from uppercase to lowercase.

Warm Start – Returning computer control of a program to the very beginning of the program, as though it had already been loaded into memory and run. See Cold Start.

Wordwrap – Unlike a typewriter that will allow you to continue typing until you reach the right margin, PaperClip lets you to continue past the margin you have set, and if the last work is too large for the line, it will place the entire word on the next line.

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John Waller for his help with debugging and coding.

PaperClip is unique in that the program was developed in Littleton, Colorado, U.S.A., published in Richmond Hill, Ontario, Canada, and the documentation was written in Cupertino, California, U.S.A. No mean small feat. A quick and easy means of data communications was necessary to facilitate the passage of program changes among Colorado, Ontario and California. This was accomplished through the use of the CompuServe Information Service.

The terminal program used was HomeTerm – One of the programs in HomePak, by Russ Wetmore, which is published by Batteries Included.

NOTES

Control P = paragraph
Control R = block right
Control + Shift ? = Help
Control + Shift O = Print
Control M = Margins
Control Escape = Print using defaults
Shift + clear = start new

DEFAULTS: Length 66 lines — top margin 6 lines
bottom margin line 60 (6 lines)

Pica type = 1(0) Elite = 1(2) Condensed = 1(5) Expanded (C)ption
User defined commands —
1 - Ignore paper out
2 - Start expanded
3 - cancel expanded
4 - Blank

LOADING:
Remove basic cart.
Turn on printer & disk drive
Plug in key & insert disk in drive PORT #2
Turn on computer
If you can't see cursor push option key then E follow questions til you get to left margin setting — change to 2 then push escape key
Push option key then P driver name is DRIVER
Computer will load driver then return control to you.

ENVELOPES & SINGLE SHEET
Remove tractor
Put lever in F position
Turn DIP switch 2-1 OFF (down)

Envelope pressure switch 1 click toward you
Line up top of envelope with top of printer
switch in F position when lined up
put switch in F position

NOTES

Indent - use "tab"
3 times for envelope
4 times for closing letter

Envelope set left margin at 35

Paper - line up paper like envelope then take off Linda had do 33 line feeds put back on line. Put right side of paper at right side of rubber roller

CARD = special DRIVER for cards length set to 4 in by

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P.O Box

Key behind disks in disk safe