

What is a Word Processor?

Whether you're a student facing a term paper, a business professional with frequent reports to write, or an aspiring novelist, ST Writer can help you beat those deadlines -- with time to spare. No more tedious typing and retyping of drafts; ST Writer lets you edit and reorganize your copy until it's just right.

What exactly can ST Writer do for you? One advantage is that you never have to press the [Return] key to end a line of text while typing -- the program does it for you automatically. Also, you can change all or any incidences of a given word in your text to another word -- for instance, you can instantly change the word "pleased" to "glad" anywhere it appears in your text with just a few keystrokes. ST Writer lets you center text or print it flush against the right margin, and you can print with left and right justification. You can mark a block of text and then delete, copy it, or move it to anywhere else in the text (or to another file!).

Made a mistake? Just press the [Undo] key and start fresh! There's lots more, and you'll find out about it by reading this manual.

Quickly and step by step, this guide shows you everything you need to know to use ST Writer. The first section tells you how to load ST Writer into your ATARI ST computer, and presents an overview of the program. The second section gives you a brief text to enter, edit, and print, along with how-to instructions for each step; after printing your first ST Writer document, you'll also learn how to store and retrieve what you write using a disk drive. By working with a longer passage in the third section, you'll learn about the advanced editing, formatting, and printing features of ST Writer. Finally, you'll find a complete, alphabetical Reference Guide to all the features of ST Writer in the back of the guide.

Getting Started

Here's how to load your ST Writer word processing program into your Atari ST or TT computer.

1. With your computer turned off, turn on your monitor and disk drive(s). Insert your ST Writer disk. If you do not have TOS in ROM, you will have to insert your TOS System Disk instead. Turn on your computer.

2. When the GEM desktop appears, remove your TOS System Disk (if you have used it) and place your ST Writer disk in the drive, or if you have two drives, place the ST Writer disk in the second drive. Open a window for the disk drive by double-clicking on the icon for that drive.

3. Run ST Writer by clicking twice on the icon (or text filename) labeled STWRITER.PRG.

Note: You can run ST Writer in any of the ST's three resolutions: low, medium, and high. ST low resolution gives you 17 lines and 40

columns; with ST medium resolution, 17 lines and 80 columns, and with ST high resolution you get 22 lines and 80 columns. Also, using ST high resolution gives you the option of 37 screen lines (select "Lines" from the "Options" menu, or type "H" for Hires Flip-Flop). On Mega ST computer models running the Moniterm monitor, either 57 or 96 lines are available, and 80 or 160 columns. Simply use the GEM desktop to set the resolution you desire before running ST Writer.

The TT computer gives you 3 additional resolutions to choose from: TT Low, 48 lines and 40 columns; TT medium, 48 lines and 80 columns, and TT high (monochrome) 57 lines and 160 columns (additionally, in flip-flop mode, either 93 lines and 160 columns or 27 lines and 80 columns). You may also wish to change the default screen colors and key repeat rate from the desktop before running ST Writer, although you can change these once ST Writer is running via the Control Panel from the Desk menu.

What's on the menu?

Take a minute now to look over the selections available and see what you can use each one for. While working with ST Writer, you can return to this menu at any time by pressing the [Esc] key in the upper left corner of your computer keyboard, or using the mouse to click on ESC in the left lower command box.

CREATE File - Start writing a new text file.

DELETE File - Erase a file that you've stored on diskette.

EDIT File - Revise a file that you've just printed or loaded from diskette.

FORMAT Disk - Format a data diskette for storing text files you write with ST Writer.

INDEX of Files - Call up a listing of the text files on a diskette.

HIRES Flip-flop (high res only) - switch high res display between 22

lines and 37 lines.

LOAD File – Load a file from diskette into your computer.

PRINT File – Print a text file on the printer, the screen, or to a disk file.

SAVE File – Save a file on diskette.

RECEIVE AtariWriterTM – Receive file transmitted from 8-bit Atari Computer using Atari 850 Interface Module and null modem cable, or load in an intact AtariWriter file obtained by other means (eg., from a bulletin board).

TRANSFORM Colors – reverse screen colors -- black to white and vice-versa.

QUIT – Stop using ST Writer and exit to the desktop.

Additionally, from the GEM drop-down menus, a few more selections are available:

Save As... – You must first save a

file by supplying the filename through "Save As..s" before the "Save" selection is available. This is done to prevent you from accidentally over-saving another file, such as an ascii file, which you just loaded into ST Writer Elite.

Pr. Driver - Allows you to specify another printer driver. See 'Printer Driver' below.

Global Format - You may wish to specify all your formatting parameters here rather than in the format line at the top of the Edit screen.

Deadkey - Allows foreign vowels to be typed directly from the keyboard.

Spec. Char. - Allows typing of ascii characters higher than 128.

Tabs - This allows changing the default Tab setting from 5 to 4 or 8. To actually change the tab settings in the command box, type [Shift][Tab].

Config. STWE - This powerful command

will allow you to save any particular set-up you want with regard to default tab stops, default file specifier, black or white text screen background, and variables in the format line at the top of the Edit screen. Your ST Writer program file is actually changed by this selection, and the next time you load ST Writer Elite, the changes will manifest themselves.

Restore STWE - Resets the variables to ST Writer Elite's native state.

Talking to ST Writer...and making it run.

With the ST Writer menu on the screen, type [C] for Create File, or select Create with the mouse from the Edit Menu. Take a few minutes to become familiar with the edit screen that now appears.

The small flashing rectangle (or square) near the upper left corner of the screen is the cursor. It shows you where you are on the screen while you're working with ST Writer -- whether you're writing,

editing, or responding to the prompts and questions that appear in the Message Window at the bottom of your screen.

On the EDIT screen you can use the mouse to place the alpha cursor anywhere in the text on the screen instantly. You can also exit edit mode by clicking on [Esc] in the last line of the command box, and you can scroll up or down a page by clicking on the up and down arrows on the same line.

Many of the questions that ST Writer asks you require a yes or no response, and appear in an "Alert Box". Simply use the mouse to select the correct response. Occasionally, a typed response will be required. You can answer by typing Y or N.

If ST Writer finds a mistake in an entry or command, or detects a problem in your computer system, it displays an error message in an alert box. In most cases when you see an error message, you must press the return key or click on the appropriate response with the

mouse before continuing.

In this guide you'll find several instructions such as "press [control P]" or "press [Shift Tab]." To execute these keystroke combinations, hold down the first key while typing the second. You may already be familiar with this technique; if not, you'll soon get the hang of it.

Clean copy in minutes

When they first learn to use a word processing system, many people want to tell their friends about it. So here's a letter for you to type, edit, and print that won't just teach you about ST Writer -- you can also use the finished copy to show a friend what a fine word processor you are using.

But first, a couple of features of ST Writer that you'll need to understand to type your letter.

With ST Writer you don't use the Return key on your computer keyboard the way you do on a conventional

typewriter. When you're typing a word that will overflow the right margin of the screen, ST Writer automatically moves the cursor -- and the word -- to the beginning of the next line. Press [Return] (or [Enter]) at the end of each paragraph, or to insert blank lines in what you're writing. ST Writer inserts an inverse video "less-than" sign (<) (colored red in low and medium res) at that point to show the [Return] and moves the cursor to the left margin of the next screen line.

To mark the beginning of a paragraph, press [Control P]. ST Writer displays an inverse video (red in low and medium res) paragraph symbol at that point on the screen.

Now you're ready to go. Select Create File from the ST Writer menu, if you haven't already. The display switches to the editing screen. For now, ignore the Print Formatting Block at the top of the screen. Just enter today's date on the first line, fill in the name of the person you want to write to after the word "Dear," and type away. And

don't worry about typos -- you'll be able to fix them in a jiffy when you edit with ST Writer.

Today's date [Return]

[Return]

[Return]

Dear [Return]

[Return]

[Control P] As you can see, I'm not writing this letter on my old typewriter. Instead, I'm breaking in my new ST Writer word processing program, composing and editing on my monitor screen. When I've finished writing, I can print a copy -- or dozens of copies -- just by pressing a few keys on my computer console.

[Return]

[Control P] And no more typos -- or at least, no more retyping to get rid of them. I can easily delete or change letters, words, sentences, or paragraphs. Or

say I use a word or phrase several times in a piece of writing, and decide later that I want to change it. I can have the computer automatically search out every use of it and substitute something different.

[Return]

[Control P] ST Writer will print the things I write just about any way I want. I can vary the margins, indent paragraphs or blocks of text, and change line spacing just as with a typewriter, but more easily. I can also print pages with justified right margins.

[Return]

Now add a paragraph of your own if you like, preceded by [Control P] and followed by [Return]; then add a closing and press [Return] again.

Quick editing with ST Writer

Now that you've created your first text

file, you can go back and fix any mistakes you made. And if you want to rephrase anything to make it more your style -- by all means!

No need to return to the ST Writer menu and select Edit File; you can edit a text file while still in the Create File mode (select Edit File to revise a text file that you've retrieved from diskette, as explained in "To load a text file").

While editing, you'll probably want to move the cursor quickly around the screen from one problem area to the next. Refer to your Quick Reference Guide (see file QUIKREF.TXT) for the Cursor movement controls you can use to do this.

To start editing at the top of your letter, for example, press [Shift F1] to move to the top of your file. F1 is the first key in the row of ten function keys at the top of your keyboard. Now you can use [down arrow] to scan quickly through what you've typed, and [left arrow] and [right arrow] to move the cursor to anything you want to

change or correct. When you reach the last line of text on the screen, just keep moving the cursor down -- the text will scroll up to show more of what you've written. You can also page through your text file, up or down, by pressing [Shift up arrow] or [Shift down arrow]. Press [Control A], or [Control (left arrow)] to move to the beginning of a line, and [Control Z], or [Control (right arrow)] to move to the end of a line. To move instantly to the end of a file, press F1.

To correct a typo or replace a word or phrase, you first must either delete the wrong characters or words, and type in the correction, or press [Insert] to enter the "type-over" mode, allowing you to type directly over the incorrect text. Be careful, though, not to type over wanted text, as once this is done, the typed-over text is not retrievable. Pressing [Insert] again returns you to the insert mode. Refer to the Delete text commands in your Quick Reference Guide.

After deleting what you want, just type in

your correction or change. ST Writer automatically makes room for as much new material as you want to add. To insert a whole new sentence, paragraph, or more, just position the cursor where you want to add text and type in the new material.

Whenever you delete a line or block of text, the last line or block deleted is retained in the failsafe text buffer of your computer. To restore the deleted text, press [Undo] to insert the deleted text at the current cursor position.

From screen to paper

You're now ready to print your clean, edited letter. Make sure that your printer is properly connected to your computer and turned on. Press [Esc] or click on 'ESC' with the mouse to return to the ST Writer menu, and select Print File by pressing [P] or selecting Print with the mouse from the Files menu.

Then press [Return]. ST Writer looks for a printer configuration file

on your disk (see Printer Configuration File in Reference Guide) then formats and prints your letter. To halt printing at any time, press the [Esc] key (or any other key to pause) on your computer keyboard.

You may have to experiment a bit, adjusting the paper in your printer before printing your files, to get the correct top margin on your printed pages. The top margin on your letter should be about one inch.

How much can you write with ST Writer?

You can enter between 180,000 to 3,800,000 (depending on system) or more characters, or bytes, in ST Writer's text editor. While editing or creating a file, the amount of remaining free memory appears constantly in the Message Window. The free edit space is shown in bytes. A byte is roughly equivalent to one typed character. You can figure on about 1500 bytes for each standard double-spaced page. It's a good idea to leave yourself an adequate margin of free memory in

every file you write, just in case you want to add to a file later on.

When your computer is close to running out of free memory, the message "WARNING - memory low" (at 500 bytes left) or "!!!WARNING!!! Almost out of memory" (at 200 bytes left) appears in the Message Window. If this should ever happen, it's a good idea to stop writing and save what you've written -- you'll need a margin of free memory if you decide to revise or add to the file later on. After saving the text, start a new file to continue the document you're working on.

To save a text file

Here's the procedure for saving a text file. Try it now with the letter you've written about ST Writer.

First return to the ST Writer menu and select Save File by pressing [S] or clicking on 'Save As...' from the Files menu. ST Writer prompts you to enter the Save filename in a File Selector Box.

Insert a formatted diskette (if your disk isn't formatted, you can have ST Writer format it for you -- see Format Disk in the Reference Guide). Click on the appropriate Folder (sub-directory) if you are using one, then type a filename for your text file. Filenames may be up to eight characters in length, optionally followed by a period and an extender of up to three characters (e.g. STWRITER or STWRITER.TXT).

A path name indicates the name of a folder that is to contain the file, as well as the file name, separated by a slash (e.g. LETTERS\STWRITER). See Path name in the Reference Guide for further information. All alphanumeric characters (A-Z, a-z, and 0-9), except a space, and punctuation can be used in ST Writer filenames. If you enter lower case letters, they will be converted to upper case. After entering the filename, click on [OK].

If while saving a file ST Writer finds that there's not enough space on your diskette to accommodate the file, the program gives you the

message Disk is full. Press any letter to return to the main menu and try another disk -- format one if necessary.

If you want to lock (prevent overwriting) a text file that you've saved to diskette, see Locking files in the Reference Guide.

It's always a good idea to make a backup copy of every diskette you store files on -- just so you'll have a duplicate in the event that something happens to your original diskette.

Long documents -- anything that will more than fill your computer's memory -- must be created and saved in segments, with each segment assigned a different filename. This is where the filename extender comes in handy. You can tie together the various segments of a long piece of writing by giving them all a common filename, and use the extender for each to keep track of their proper order. As you saved each segment of a document named REPORT, for example, you could name

successive segments REPORT.1, REPORT.2 and so forth. You can easily print the various segments of such a document in any order you wish; see Chaining print files in the Reference Guide.

To load a text file

Using ST Writer to load a text file from a disk drive into your computer's memory is much like saving a file. You just move the file in the opposite direction. Here's the procedure; try it now with your letter about ST Writer.

Though you've just saved the letter, it also remains in your computer's memory. To load it back in from your disk drive, first return to the ST Writer menu and select Create File by pressing [C] or clicking on 'Create' on the Edit menu. ST Writer asks, "Erase current file in memory, [Yes][No]"? Click on Yes. ST Writer erases the letter from your computer's memory and presents you with an empty edit screen.

Now return to the menu (press [Esc]) and select Load File by pressing L or clicking on Load on the File Menu, at which point ST Writer presents another File Selector Box. Insert the data diskette that contains the file you want to load and type the Drive letter (or click on the appropriate drive letter, depending on which version of TOS you are using). Use the mouse to click on the filename or folder. To see files within a folder, you must click on the folder name to open it. Once you've spotted the correct file, either double click on the file, or single click on the file and click on [OK]. If the file loaded is not an ST Writer file, you will be asked if you want any embedded tabs changed to spaces (4, 5, or 8 spaces per tab). If you simply press [Return], they will be converted. If you are trying to maintain the same tab spacing and are planning to "SAVE ASCII", you may wish not to have the tabs converted. If so, just don't try to print the file if you chose not to convert the tabs, since any lines containing the tab character [Control I] will be blank.

If while loading a file ST Writer overflows your computer's free memory, the loading process is halted and the message Buffer full, file not loaded appears on your screen. That part of the file that was loaded prior to this message is erased from memory.

A word processing wonderland

To show you more of what you can do with ST Writer, this section gives you another text file to type, edit, format, and print. You may recognize it.

Go to the menu and select Create File. If there's a file in your computer's memory, ST Writer asks, "Erase File in Memory [Yes][No]"? Click on Yes to erase the file from your computer's memory.

Again, ignore the Print Formatting Block at the top of your screen for now -- you can experiment with various formats after you've typed and edited the text file. Just type the passage below (from Alice in

Wonderland) as it appears, but do not type the paragraph numbers in the left margin -- they're for ease of reference during the editing you'll do later on. Before you begin typing, here's a tip and a reminder.

To begin underlining some text, press [Shift F3], which inserts an underline character. To turn underlining off, press [Shift F3] again to insert another underline character. All text between pairs of underline characters, including spaces between words, will be underlined. You can underline as you type, or return to a document after it's typed to underline passages.

Don't forget to mark the beginning of each paragraph by pressing [Control P], and the end of each paragraph by pressing [Return].

1 "Why," said the Dodo, "the best way to explain it is to do it."
(And, as you might like to try the thing yourself, some winter day, I will tell you how the Dodo managed it.)

2 First it marked out a race-course, in a sort of circle, ("the exact shape doesn't matter," it said,) and then all the party were placed along the course, here and there. There was no "One, two, three, and away!" but they began running when they liked, and left off when they liked, so that it was not easy to know when the race was over. However, when they had been running half-an-hour or so, and were quite dry again, the Dodo suddenly called out, "The race is over!" and they all crowded round it, panting, and asking, "But who has won?"

3 This question the Dodo could not answer without a great deal of thought, and it stood for a long time with one finger pressed upon its forehead, (the position in which you usually see Shakespeare, in the pictures of him), while the rest waited in silence. At last the Dodo said, "Everybody has won, and all must have prizes."

4 "But who is to give the prizes?" quite a chorus of voices asked.

5 "Why, she, of course," said the Dodo, pointing to Edith with one finger; and the whole party at once crowded round her, calling out, in a confused way, "Prizes! Prizes!"

6 "But she must have a prize herself, you know," said the Mouse.

7 Edith had no idea what to do, and in despair she put her hand in her pocket, and pulled out a box of comfits (luckily the salt water had not got into it), and handed them round as prizes. There was exactly one a-piece, all round.

8 "Of course," the Dodo replied very gravely. "What else have you got in your pocket?" it went on, turning to Edith.

9 "Only a thimble," said Edith sadly.

10 "Hand it over here," said the Dodo.

11 Edith thought it rather absurd to give away her thimble just so the Dodo could give it back to her. But she handed it over, just to humor

the old bird.

12 Then they all crowded round her once more, while the Dodo solemnly presented the thimble, saying, "We beg your acceptance of this elegant thimble"; and, when it had finished this short speech, they all cheered.

Advanced editing with ST Writer

If you recognized the passage you just typed -- it's from Lewis Carroll's whimsical Alice in Wonderland -- you may be aware that it contains some errors. Here are some ST Writer techniques for putting it in order. Each of these major functions is also highlighted in your Quick Reference Guide.

Deleting blocks of text

With ST Writer you can delete a long passage from a piece of writing without having to erase it letter by letter or line by line. In your passage from Alice in Wonderland, for example, paragraph 11 doesn't

belong there and should be deleted.

To delete a block of text you must first place markers at the beginning and end of the text to be deleted. First position the cursor under the first character of the passage you want to delete -- in this case, under the paragraph marker before "Edith thought it..." -- and press [Shift F5]. ST Writer inserts an inverse quotation mark at that point on the screen.

Next, move the cursor down to the end of what you want to delete -- in this case, under the paragraph marker at the beginning of paragraph 12 (in order to include the [Return] symbol at the end of the passage you want to delete) -- and press [Shift F5] again. ST Writer places another inverse quote mark at that point.

To erase the text block, press F5. The block will be erased without any prompts. However, if you change your mind about deleting the block, you can bring it back simply by pressing the [Undo] key. In fact, you can insert the deleted block

anywhere in your text by moving the cursor to the desired location, then pressing [Undo].

Each time you delete a line or block of text, a failsafe text buffer (a temporary holding section of memory) is reinitialized and the deleted text is placed in the buffer, and remains there until the next deletion. The failsafe buffer holds about 40,000 characters. If a block is too large for the buffer, the prompt Too large for Cut Buffer, cut anyway? appears. Clicking on [Yes] will delete the block without saving it in the buffer.

Moving blocks of text

There's also a paragraph in your passage that's out of place -- the Mouse's remark in paragraph 6 should follow paragraph 7. To put things in order, you don't have to delete the out-of-place paragraph and retype it where it should be. ST Writer will move a block of text for you.

The procedure for moving a block of

text is much like that for deleting a block of text. Press [Shift F5] at the beginning of what you want to move and again at the end. ST Writer places an inverse quotation mark at each point.

Finally, place the cursor where you want to reposition the text to be moved -- in this case, under the paragraph marker that begins paragraph 8 -- and press [Shift Insert]. ST Writer deletes the specified text block from its old place and inserts it where it belongs.

Search and replace with ST Writer

In your passage from Alice in Wonderland, the girl who hands out the prizes is of course not Edith, but Alice herself. But with ST Writer, you don't have to go back and change each use of Edith to Alice. ST Writer will search out and replace any specified string wherever it appears in a text file.

To use this search-and-replace function, first position the cursor at

the top of your file (a quick way is to press [Shift F1]), then press [Shift F7]. When ST Writer prompts you to enter the Replace <ESC>: string, type in the word Edith and press [Esc]. Using the [Esc] key to terminate search strings allows you to search for strings that include the [Return] character. This is the text for which ST Writer must search.

Next ST Writer prompts you to enter the text you want to substitute for the search string with the prompt With <ESC>:. Type in the word Alice, then press [Esc]. ST Writer now searches the entire text for the word Edith, and replaces it with the word Alice wherever it occurs.

This is known as a global unqueried search-and-replace, which means that all occurrences of the search phrase are replaced without further prompting. ST Writer can also perform a case-by-case replacement operation, in which you are prompted to confirm each substitution. Press F7 to perform a query search-and-

replace operation.

Notes on Search-and-Replace

When you enter a word or phrase to be searched for, you must type it exactly as it appears in your text file. When the string is a single short word, like son, that might appear in your file as part of longer words, it's a good idea to type in blank spaces before and after it. If you do this, however, be sure to include the same blank spaces before and after the phrase you're substituting for the search string; and keep in mind that ST Writer will not recognize occurrences of such a search string that are immediately preceded or followed by punctuation marks.

You can also use the search-and-replace function as a search-and-delete tool. To do this, simply press [Esc] when ST Writer asks for a replacement string. ST Writer will delete the search string and close up the resulting blank space, whether you proceed with a case-by-case or global search.

Getting your text files in shape

With ST Writer you can print what you write in just about any shape you want by using a variety of formatting commands. Some of these commands, entered in the Print Formatting Block at the top of your screen, control the overall formatting of your text file. Others, entered within your text file while you're creating or editing it, are used to specify variations from the overall format. Others still are used to specify some special formatting features of ST Writer.

In the next several pages, you'll find instructions for using all the formatting commands, along with some suggestions for using most of them to shape up your passage from Alice in Wonderland. The formatting commands are also outlined in your Quick Reference Guide.

Print Preview

As you experiment with various formatting commands, you might wish to

observe the results of these commands on the final printed form of your text without waiting for an actual printout. You can preview your final document on the monitor screen by printing the text to the screen instead of paper. To do this, press [Esc], if necessary, to return to the ST Writer menu, then select Print File by typing [P] or clicking on Print. You are presented with a dialog box with many options in it which you may ignore for now. Use th mouse to click on [Screen], then either press [Return], or click on [OK]. Your text will be printed to the screen exactly the way you've formatted it. Halt printing by pressing the [ESC] key, or stop and start the scrolling text by pressing any other key.

Overall file formatting

By now the Print Formatting Block at the top of a text file should be a familiar sight. Each of the inverse video (colored in low and medium res) letters in it represents a command that will affect the overall formatting of the file. The

number to the right of each letter is the formatting value for that command.

Shown below -- and in the Print Formatting Block each time you begin a new file -- are the default values for overall formatting. ST Writer will use these values to format your file unless, of course, you change them.

To set your own formatting values, just move the cursor into the Print Formatting Block (pressing [Shift F1] is the quickest way), delete the number displayed for the value you want to change, and type in the new value. Try reformatting your passage from Alice in Wonderland to some new values, as suggested on the next two pages, or to values of your own choice.

B12 Bottom margin: 12 half-lines, or 1 inch

D4 Paragraph spacing: 4 blank half-lines (double spacing) between paragraphs

G0 Print style: 10 characters per inch (CPI), or 'PICA'

I5 Paragraph indentation: 5 spaces from left margin

J0 Justified right margin: OFF

L10 Left margin: 10 spaces from left edge of page

R70 Right margin: 70 spaces from left edge of page

S2 Line spacing: 2 half-lines, or single spacing

T12 Top margin: 12 half-lines, or 1 inch

Y132 Page length: 132 half-lines, or 11 inches

Line spacing, 'S', is set in terms of half-lines. For double-spaced printing, delete '2' and type in '4'. For triple spacing, set this value at '6'. Only even numbers can be used. (Entering odd numbers will cause ST Writer to use the next highest even number.)

Paragraph spacing, 'D', is set in terms of blank half-lines between paragraphs. For single spacing between paragraphs, delete '4' and type in '2'. Only even numbers can be used.

Paragraph indentation, 'I', is measured in character spaces from the left margin. For more or less indentation than the default value of 5 spaces, delete the '5' and type in the value you want (up to '20'). The number may be negative for outdenting. For block-style paragraphs, without any indentation of the first line, enter the number '0' (and make sure that your paragraph spacing is greater than your line spacing).

Top and bottom margins, 'T' and 'B', are measured from the top and bottom, respectively of each page. So, to change them both from one inch (12 half-lines) to one and a half inches, set them at '18' instead of '12'. Only even numbers can be used.

Left and right margins, 'L' and 'R', on the other hand, are both measured from the left edge of the page. For wider margins, try substituting '15' for '10' as the value for 'L', and '65' for '70' as the value for 'R'.

You'll probably want to experiment a bit to find the left and right margins you prefer, depending on the print style you select (see below) and the kind of printer you have. ST Writer will accept values '1' through '188' for the left margin and '11' through '198' for the right margin. If you have a 40-column printer, be sure to set your right margin within the range of '11' through '40'.

The justified right margins command, 'J', works like a simple On/Off switch. The default value of '0' gives you nonjustified (ragged) right margins. For justified right margins, delete the '0' after the 'J' and type in '1'.

Page length, 'Y', does not determine the number of lines printed on a

page (that's set by your top and bottom margins). Rather, ST Writer uses the page length setting to determine where the next printed page will begin. Keep your page length set at '132' for 8 1/2 by 11-inch paper. '224' is ST Writer's maximum page length (for 14" paper length and printer setting of 8 lines per inch [Note: default lines are 6 per inch]). Only even numbers can be used.

To print out a text file continuously, without page breaks, set your top and bottom margins to 0.

In print styles, 'G', also known as fonts, your choices depend on what kind of printer you have.

The default print style of ST Writer is 10 CPI (PICA), represented by the '0' next to the G in the Print Formatting Block. To format for bold, delete the '0' and type in '1'; for condensed print, type in '2'; for italics, type in '4'; for ELITE, type in '8'. NOTE: A peculiarity of this formatting command requires deletion of the character or space immediately

following the number in the final printout, so it is suggested that you use a character such as a hyphen '-' after the number, eg., [Control G][2][-]. The '-' will not appear in the printed text.

Although the print styles you select are not represented as such on your screen in print preview, the number of characters displayed per line is normally the same as it will be in your printed file.

For double-column printing, you must enter formatting commands and values for the margins of the second (right-hand) column of print. Enter these commands and values at the top of your text file to format the entire file for double-column printing -- just insert them as if you were adding text at the beginning of the line just below the Print Formatting Block. To set the left margin for the second column, press [Control M], then type the number of the margin setting you want (measured in character spaces from the left edge of the page). To set the right margin for the second column,

press [Control N] and type the number of the setting you want. To discontinue double-column printing, set the second left margin [Control M] to '0' (zero). You cannot change print pitch while printing double-column.

Of course, you may also have to adjust your settings for 'L' and 'R', which control the margins for the first (left-hand) column of print in double column printing. Always be sure that your first-column right margin and second-column left margin do not overlap. Also, do not make the 'T' or 'B' margin settings different for the two columns.

Formatting variations within a file

You can specify variations in the format wherever you want within a file by entering commands directly in your text. In addition, ST Writer offers a number of special formatting features; for these, too, you enter commands directly in your text.

You can enter these commands singly or in combination, when creating

or editing a text file. For best results, enter new format commands on a separate line (that is, don't type text on the same line), type a space after the numeric value for each command, and press [Return] to start subsequent text on a new line. Note: as mentioned already, the one exception to this case is Print style, ([Control G]), with which you can include text on the same line. For example, you can italicize a single word on a line. Follow the [Control G] with the number ('0' through '15') for the print style followed by a hyphen (or any character except for a number. This delimiting character will not be printed in the text. However, remember, you cannot change print pitch while printing double-column. You may do bold, italics, or elongated print in double column, nevertheless.

To specify variations from the overall formatting values displayed in the Print Formatting Block, use the commands shown below, followed by the new value. ST Writer displays the appropriate letter (in inverse

video) and number wherever you enter one of these commands. (These letters and numbers will not appear on your printed pages.)

Bottom margin [Control B]

Double-column printing:

2nd-column left margin [Control M]

2nd-column right margin [Control N]

Justified right margins [Control J]

Left margin [Control L]

Line spacing [Control S]

Paragraph indentation [Control I]

Paragraph spacing [Control D]

Print style(font) [Control G]

Right margin [Control R]

Top margin [Control T]

At the end of the portion of text that you want varied from the overall format, use the same commands to re-enter the original overall

formatting value -- or whatever new value you want for the text that follows.

The special formatting features of ST Writer also require you to enter commands directly in your text. Again, you can enter these commands singly or in combination with other formatting commands, while creating or editing a file. ST Writer displays the appropriate letter or letters in inverse video wherever you enter one of these commands.

Elongated print

With some printers, including the ATARI SMM 804 Dot Matrix Printer, ST Writer enables you to print text in elongated characters, which are twice normal width. Any print style can be elongated.

To format a portion of text for elongated print, press [Shift F9] at the beginning of that portion of text and [Shift F9] again at the end.

If you like, try this feature in

combination with the next feature described to add a striking title to your passage from Alice in Wonderland.

When you examine a formatted text file in print preview, elongated characters are displayed as normal. But keep in mind that when printed they'll be twice as wide as normal, so anything more than half a line of text that you format for elongated print will run over to the next line.

Centering text

To center lines of text -- a useful option for titles and headings -- press [Control C] at the beginning of each line to be centered. At the end of the line, press [Return]. (If you decide to center a line while editing, don't forget to insert a [Return], if necessary, at the end of the line.)

If you like, add a centered title in elongated print at the top of your passage from Alice in Wonderland -- something like:

```
[Control C][Shift F9] Alice Gets a Surprise  
[Return]  
[Control C] For Her Prize [Shift F9]  
[Return]
```

Always be sure that no line of text to be centered exceeds the overall line length determined by the left and right margins that you set.

Blocking text right

To have a line of text print out flush with the right margin of the page, press [Control C] twice in succession at the beginning of the line to be blocked. Each line to be blocked right must be ended with a [Return].

If you like, try this out by adding something like this at the end of your passage from Alice in Wonderland:

```
[Control C][Control C] -- from Alice in  
Wonderland [Return]
```

```
[Control C][Control C] by Lewis Carroll  
[Return]
```

Always be sure that no line of text to be blocked right exceeds your overall page margins.

Headers, footers, and page numbering

A header is a line or two of text that is printed at the top of every page of your final printed output. A footer appears on the bottom of each page. If you want, ST Writer will place headers or footers of one or two lines on each page of your printed text files. By using a page numbering command in combination with a header or footer command, you can also have ST Writer number your printed pages.

To specify a header, press [Control H], then type the text of the header and press [Return]. Enter [Control H], then the text and a [Return] for each separate line of a two-line header.

To specify a footer, press [Control F], then type the text of the footer and press [Return]. Enter [Control F], then the text and a [Return] for each separate line of a two-

line footer.

Headers appear two and four half-lines below the top of the page, and footers two and four half-lines above the bottom of the page.

Therefore, to use headers or footers, the top [Control T] or bottom [Control B] margin settings must be at least 8 to leave room. By default, headers and footers are aligned to the left margin of the printed page; however, you can also have them centered or blocked right (aligned with the right margin) by following your header or footer command with a center text command ([Control C]) or block text right command ([Control C][Control C]) just before your text (and on the same screen line). If you want your headers or footers printed in elongated print, enter a [Shift F9] before and after the header or footer text.

If you want headers or footers on every page of your text file, beginning with the first page, enter the appropriate commands and text at the beginning of your file on the

screen line or lines just below the formatting commands and values displayed on the first line.

If you want headers or footers to begin on a page other than the first page, or if you want to change the text of a header or footer within the file -- say, for a multisection document where you want headers or footers that match each section -- you can enter the appropriate commands and text within the file. In this case, however, be sure to enter the commands and text (preceded if you like by elongated print, center text, block text right, or new left and right margin settings commands) as the only material on a screen line.

No header or footer text line should exceed the overall page margins that you've set (and remember that elongated print is twice as wide as normal). Any header or footer text that exceeds your page margins will be dropped when ST Writer formats and prints your file.

To discontinue printing headers in

your file, type [Control H]
[Control H] [Return]. Use two
[Control F]'s for discontinuing
footers.

To number your printed pages, type the @
symbol ([Shift 2]) at that
point in your header or footer text
where you want page numbers to
appear. ST Writer displays a @ symbol
to show you where your page
numbers will be printed. If you want page
numbers only, just enter @
as your entire header or footer text.

By default, ST Writer numbers the page
where a page numbering command
is entered as '1', and subsequent
pages in order. To specify a
different starting page number -- a
useful option when you're
combining separate text files into a larger
document -- press [Control
Q] after the [Return] that concludes your
header or footer text, then
enter the starting page number you want.
ST Writer accepts starting
page numbers of '1' through '999'. A
negative number (e.g. '-1')
instructs ST Writer to alternate
blocked RIGHT headers and footers

with blocked LEFT headers and footers.

To add a blocked right header with a page number to each page of your passage from Alice in Wonderland, enter this at the beginning of your text file:

```
[Control H][Control C][Control C]ST Writer  
Exercise - [@][Return]
```

You may specify a different print style [Control G][number][hyphen], or different left [Control L][number] or right [Control R][number] margins within your header or footer without affecting the print style or 'L' or 'R' margins within your main text body. The header or footer disregards double column instructions, creating a line length up to the entire width of the page.

Indexing and deleting text files

There are two more selections on the ST Writer menu that can help you manage your text files: Index of Files and Delete File.

Before trying these options, save your passage from Alice in Wonderland -- it will make for a more interesting index and, along with your letter about ST Writer, will give you a choice of files to delete!

For an index of files on a diskette, insert the diskette into your disk drive. If your system has two drives, use either one. Then select Index Disk Files from the ST Writer menu. ST Writer then prompts 'P' to printer, 'S' to screen: S -- press [Return] to accept the default (screen print), or P to send the index to your printer. Next ST Writer prompts you for a Path name: and prints the specifier for the current drive, that is, the drive from which you loaded ST Writer (or from which you last obtained a directory). For instance, if you loaded ST Writer from drive A:, you're prompted Path name: A:. You can change the drive specifier by pressing [Backspace] a few times and entering the new specifier. If you want a directory of a specific folder on your disk, enter the drive

specifier, then a reverse slash (\), then the name of that folder. Then press [Return], at which time ST Writer displays a list of files and folders on the diskette. Folders and files created with ST Writer will be indicated as such in the listing. Also shown is the number of bytes occupied by each file; any file that you've locked (using the GEM desktop) is noted with an asterisk (see Diskette Management in the Reference Guide).

When there are more than 21 files on a diskette, ST Writer scrolls your directory upward on your screen to show you every entry. To halt this scrolling, press any key; press any key again to restart the scrolling.

For a printed directory, simply type [P] at the first prompt, and make sure your printer is connected and turned on.

To delete a file on diskette, you follow much the same procedure as when you save or load a file to or from diskette. First make sure

that the diskette containing the file that you want to delete is in your disk drive, then return to the ST Writer menu and select Delete File. When ST Writer presents the file selector box, use the usual procedures to view the appropriate drive, folder, and filename, then either double click the file to be deleted, or single click on the file to highlight it and then click on [OK]. As a precaution, ST Writer prompts, "Delete file? [OK] [CANCEL]". When you respond by clicking on 'OK', ST Writer erases the specified file from your diskette.

Some further features of ST Writer

Like Alice, the Dodo, and the Mouse, you've probably now been "running half-an-hour or so" at least with ST Writer -- but don't stop yet! Briefly described, here are a few additional features of ST Writer. You can find complete instructions for using each one in the Reference Guide.

Byte count at cursor position. You can

tell at a glance where you are in the file by pressing [Alternate =]. Although this number represents all characters including formatting data and comments, you can get an idea of how far you are in the document.

Chaining print files. If you have a disk drive, this feature allows you to chain text files together in any order to be printed as if they were one file.

Duplicating text. This feature enables you to take a word, sentence, or more from one part of a text file and duplicate it wherever else you want within the same file.

Format disk. You can use this selection from the ST Writer menu to prepare a blank diskette for storing your text files.

Form printing. Especially handy for business or form letters, this feature lets you leave blanks in a text file -- for names and addresses, account numbers, and the like -- and fill them in with

specifics each time ST Writer prints the file. You can, if you like, create a separate DATA file containing the words or phrases, each separated by a carriage return. Just be sure that they match the spaces left in your form, and are in the correct order. The DATA file must be saved using the Save Ascii option in the File menu, or [A] from the keyboard, and given the extender DAT. Alternatively, you can also use mailing addresses created and sorted by DB Master One. Simply print the sorted addresses to a disk file. The computer will prompt you with a file selector box, asking for the file name of your DATA file if you indicate that STWRITER is to use a disk file as the data source. If you do not wish to use a data file as a source of your insert data, you may simply type in each specific as you are prompted to by the computer.

Merging text files. This feature allows you to merge an ST Writer text file on disk together with the file currently in your computer's memory. Files not saved in ST Writer

format should be first loaded separately, saved, then merged with the desired file.

Page eject. Basically a formatting command, this feature enables you to halt printing on a given page and space to the top of the next page before resuming printing. It can be useful when you're formatting and printing a multisection document where you want each section to begin on a fresh page. By typing a number greater than zero after [Control E] you can specify a conditional page eject, with the number representing the number of lines to appear on the same page. If they will not fit, they will appear in a block on the following page. This feature is useful for printing tables and material with fixed numbers of lines. To work with paragraphs and formatable blocks of print with variable numbers of lines, one would first need to print the entire document and count by hand the number of lines in the paragraph which are not be broken at a page break.

Page wait. Also a formatting command,

this feature allows you to print your text files on individual sheets of paper -- a convenient option when you want to do your printing on bond, letterhead, or your personal stationery. If this command is active when printing to the screen, scrolling will halt when the screen is full. Pressing any key except [Esc] continues scrolling. [Esc] cancels printing.

Printer controls. You can send special decimal-code commands to your printer by entering them directly in your text files -- a useful option if you have a printer that ST Writer does not support, and do not have a printer driver.

Section headings. Use this feature to number section and subsection headings in the body of a text file.

Special characters. You can access the special characters in the international character set by typing [Alternate X] from the edit screen, or by selecting 'Spec. Char.'. from the Options menu. A letter 'A' appears near the bottom right of

the edit screen indicating alternate character mode. Use the table in STWCODES.DOC to find what key combinations to use to print the character you want. Foreign characters can be obtained directly without using the [Alternate X] function by using the deadkey function. Type [Control][Clr Home] from the edit screen, or select 'Deadkey' from the Options menu, and a 'D' appears in the status line near the bottom of the edit screen. You can get foreign characters by using the following combination of key strokes:

First type ", ', ~, ` , ^, _ , - , or / ,

then the vowel or letter that the mark is used in combination with.

For example, to get a small umlaut u, type ["] first, then [u]. If you merely want a quote mark ["], you must either exit the deadkey mode by typing [Control][Clr Home], or by typing quote ["] twice in succession while still in deadkey mode.

In addition, you can also include characters with ASCII values between 0 and 31 in your text file. Note, however, that most of these characters are unprintable, and may do strange things if you attempt to print them on the printer. Nevertheless, you can get them by typing [Control X] before and after the character. For example, to get a [Control J] (ASCII 10) to be in the text, type:

[Control X] [Control J]
[Control X]

These characters will not be counted as taking up space on a line like normal characters. The [Control X] is needed to tell the formatter in ST Writer Elite that these are NOT formatting characters, but ones which need to be sent to the output device. All control characters can be printed by using [Control] plus a letter key with the following exceptions:

To get:	Use:
ASCII 0 (null)	[Return]

[Control A]	[Control U]
[Control U]	[Shift F5]
[Control X]	\[Control X]
[Control Z]	[Control :]
[Escape]	[Control [] or
[Control ;]	
ASCII \$1C	[Control <] or [Control
\]	
ASCII \$1D	[Control =] or
[Control]]	
ASCII \$1E	[Control >] or [Control
^]	
ASCII \$1F	[Control ?] or [Control
_]	

Subscripts and superscripts. Especially useful when you're writing about mathematical or chemical formulas or including footnote numbers in your text, subscripts and superscripts can easily be included in your printed text files.

Tabs. With ST Writer you can set and use Tab stops much as you do with a conventional typewriter. Tab stops can be especially useful when you're setting up columns or tables in a text file. The default setting is 5 spaces per tab. You can change this to 4 or 8 with the

Tabs option in the Options menu, then use [Shift][Tab] to activate it.

GEM. By popular request, features of Digital Research's GEM (Graphics Environment Manager) have been added to ST Writer. This allows use of drop down menu items, Dialog Boxes, File Selector Boxes, and use of the mouse. However, one of the best features of ST Writer has been the ability to ignore GEM and the mouse if desired. Thus, almost all GEM menu options are also available from the keyboard.

ST WRITER REFERENCE
GUIDE

ALTERNATE RIGHT AND LEFT BLOCK HEADERS/
FOOTERS. To have ST Writer
take headers and footers set for right
blocking, and on alternate
pages block them left, use a negative
number after the [Control Q]
(page number start) command. This is
useful for pages which will go

"back to back" as in a textbook or newsletter.

ALTERNATE CHARACTERS. Use the Alternate key in combination with the X key to toggle the alternate characters set. A capital 'A' will appear near the bottom right of the screen indicating alternate character mode. Pressing [Alternate X] again returns to normal characters. Since the keys are not marked for alternate characters, you can often find the proper key to use by subtracting 128 from the ASCII value of the alternate character you wish to type, and finding the corresponding key on the keyboard. For example, to print the 'pi' symbol, press [Alternate X], then type a lower case 'c'. For some characters, it will be necessary for you to refer to the ST Writer Key Code Table. Note: If you have pressed the [Capslock] key, a capital 'C' will indicate this at the bottom right of your screen. Also see 6SPECIAL CHARACTERS.

BLOCK TEXT RIGHT. To block right, or print a line of text flush with

the right margin of the printed page, press [Control C] twice in succession before typing the line, and [Return] at the end of the line. When editing, insert [Control C] twice at the beginning of each line to be blocked right, and be sure that each such line ends with [Return]. Always be sure, also, that no line of text to be blocked right exceeds your overall page margins.

CAPITALIZATION. See Upper and lowercase characters.

CENTER TEXT. To center a line of text, press [Control C] before typing the line, and [Return] at the end of the line. When editing, insert a [Control C] at the beginning of each line to be centered, and be sure that each such line ends with [Return]. Always be sure, also, that no line of text to be centered exceeds your overall page margins.

CHAINING PRINT FILES. You can use this feature to tie together any number of files, in any order that you wish, to be printed as if they

were one file. This is especially useful when you want to print a long document that you've written and saved in segments with distinctive filenames or extenders.

Here's how to chain two files named REPORT.001 and REPORT.002, for example. While writing or editing REPORT.001, position the cursor at the end of the file and press [Control V]. Then type REPORT.002 (include the drive specifier, if necessary, before the filename) and press [Return]. It does not matter whether you enter the filename or specifier in upper or lower case. While printing these chained files, ST Writer would display the message CHAINING REPORT.002 as it finished with REPORT.001 and proceeded to find and format REPORT.002 prior to printing it. After printing, the first file is reloaded from disk.

Each file in a chain will be formatted according to the formatting commands and values within it. So if you want consistent overall formatting throughout a chain of files, be sure that the values in the

Print Formatting Block are the same in every file. A header or footer entered in the first file in a chain will be carried through subsequent files -- unless, of course, you modify it -- and a page numbering command entered in the first file will give you consecutively numbered pages throughout the chain.

Note: You cannot load a file, edit it, then print it out while chaining to another file -- if you try, the message Cannot chain appears after the first file is printed. In order to chain properly, save the first file before printing it out. This is because when you load a file and then edit it, ST Writer will not let you load another file without verifying that you want to erase the existing text.

COMMENT. Use [Control K] before and a comment in your text which you do not wish to have printed out. Terminate the comment with a [Return]. Since [Control K] also is used to cancel a search command, you may still search for a [Control K]

character in your text. Use a [Control +] combination of key strokes for this.

CONDENSED PRINT. See Print styles (fonts).

CREATE FILE. Select this from the ST Writer menu to begin writing a new text file. While in the Create File mode, you can write, edit, rewrite, and enter or change formatting commands. Each time you select Create File, ST Writer refreshes the default values for formatting in the Print Formatting Block at the top of your monitor screen.

DEADKEY FUNCTION. This function is toggled on and off with [Control][Clr Home]. If the character you wish to use has an accent mark, for example, type the ['] character followed by the appropriate vowel.

DEFAULT VALUES. Each time you select Create File, ST Writer refreshes the default values for formatting in the Print Formatting Block at the top of your monitor screen. ST Writer

will format your entire file according to these values unless you change them, or modify them by entering the appropriate formatting commands and values within the body of the file. Here are the default values:

B12 Bottom margin, 12 half-lines (1 inch)

D4 Paragraph spacing, 4 blank half-lines (double spacing)

G0 Print style, 10 characters per inch

I5 Paragraph indentation, 5 spaces from left margin

J0 Justified right margins OFF

L10 Left margin, 10 spaces from left edge of page

R70 Right margin, 70 spaces from left edge of page

S2 Line spacing, 2 half-lines (single spacing)

T12 Top margin, 12 half-lines (1 inch)

Y132 Page length, 132 half-lines (11 inches)

ST Writer also defaults to a starting page number of 1 when you enter a page numbering or print file command -- unless of course you enter a different starting page number.

DELETE FILE. To delete a file from diskette, select Delete File from the ST Writer menu by pressing D. Then enter the Path name of the file (see Path name) to delete. As a precaution, ST Writer prompts Type 'Y' to delete file:; Type Y to erase the file. You cannot delete a locked file from the disk -- if you try, ST Writer will give you the message Unable to delete file.

DELETE TEXT. See your Quick Reference Guide for the keystrokes used to delete text. You can delete: a character, line, or portion of a line at a time; all text from the position of the cursor to the end of your text file; a defined block of text, or the entire document.

In case you change your mind about a

deletion or delete something by accident, you can press the [Undo] key to restore the last line or block of text (up to about 40,000 characters) that you've deleted; the restored material is inserted at the position of the cursor. Note: exceptions to this are deleted single characters, blocks larger than 40,000 characters (warning message appears), and deletion of the entire text ([Clr Home]).

DISKETTE MANAGEMENT. In order to load the ST Writer program into your Computer, if you don't have TOS in ROM, you must first load the TOS operating system from your ATARI TOS System Disk. Consult your ST Computer Owner's Manual for further instructions.

Before you can store your ST Writer text files on a data disk, the disk must be formatted -- that is, organized into sectors so that your disk drive can keep track of where information is stored on it. You can format blank diskettes from the GEM desktop (see Owner's Manual). Or use the Format Disk selection from the

ST Writer menu to format a blank disk while in the middle of a work session with ST Writer.

For your own peace of mind, always make a backup copy of any disk you store ST Writer files on -- just so you'll have a duplicate in the event that something happens to your original. Your ST Owner's Manual also contains further details on this and other disk management functions.

DOUBLE-COLUMN PRINTING. You can format a text file for double-column printing on any printer. To do so, you must enter formatting commands and values of the second (right-hand) column. You can do this either at the beginning of your file -- to print the whole file in double columns -- or at that point in the file where you want double-column printing to begin.

To set the left margin for the second column, press [Control M], then type the number of the setting you want. Then press [Control N] and type the number of the setting you want

for the right margin of the column. You may also have to adjust your settings for 'L' and 'R', which control the margins for the first (left-hand) column of print in double-column printing. Always be sure that your first-column right margin and second-column left margin do not overlap, and that T and B margins are set the same for both columns.

When you print to the screen a file that you've formatted for double-column printing, the two columns appear as they will print.

DUPLICATING TEXT. To duplicate a portion of text from one part of a text file to another part of the file, first position the cursor at the beginning of what you want to duplicate and press [Shift F5]. Next, position the cursor at the end of what you want to duplicate and press [Shift F5] again. Finally, position the cursor where you want the text to be duplicated (the cursor must be outside the marked block), and press [F2]. From this point until you perform another deletion or duplication, the marked

block of text is held in a failsafe buffer, and can be inserted anywhere in the document simply by positioning the cursor and pressing the [Undo] key.

You may duplicate a block of text as many times as you like. If you want to duplicate it more than once, however, be careful not to delete anything until you've completed your duplication procedures. A block of text that you duplicate is stored in the failsafe text buffer of your computer, where it will be replaced by the next deletion.

Also keep in mind that the capacity of your failsafe text buffer is about 40,000 characters of text. So if you want to duplicate a block of more than 13 pages or so, do it in segments.

EDIT FILE. Select this option from the ST Writer menu when you want to revise or reformat a text file already in your computer's memory.

ELONGATED PRINT. See Print styles (fonts).

ERROR MESSAGES. When ST Writer finds a mistake in an entry or command that you've given, or detects a problem in your computer system, it displays the appropriate error message in the Message Window at the bottom of your screen. Press any key to continue.

FILENAMES. Filenames may be up to eight characters in length, optionally followed by a period and a three-character extender -- for example, RFGUIDE.001. You must give every file a filename in order to save it on a disk. ST Writer uses the same conventions as your TOS operating system for allowable characters in filenames -- letters, numbers, and punctuation are permissible. Lower case letters are converted to upper case in the actual filename.

FONTS. See Print styles.

FOOTERS. See Headers, footers, and page numbering.

FORMAT DISK. In order to store your ST Writer text files, disks must

be formatted with TOS. While it's always a good idea to keep an extra formatted diskette on hand, (see Diskette management), you can use the Format Disk selection from the ST Writer menu to format a disk during a work session with ST Writer. Simply insert the diskette you want to format in your disk drive and select Format Disk from the menu by pressing 'F' or click on 'Format Disk' from the 'Files' menu. An alert box says, "All data will be erased. [FORMAT][CANCEL]". Click on 'FORMAT' to continue. Click on 'CANCEL' to return to the menu. Next, click on 'A' or 'B' for the drive containing the disk you wish to format. Next you're asked, "How many sides to format? [1][2][CANCEL]". Note that the default response is always 'CANCEL' to prevent loss of data by accident, and you have three chances to bail out. To format single-sided, if you have an SF354 drive, click on '1'. At the prompt Enter name for disk: enter in a disk name following filename conventions (up to eight characters with an optional three-character extender), or just

press [Return] for no disk name. The message Formatting disk appears and the disk is formatted. If there are any problems (such as the disk being write-protected), the message Unable to format disk. appears. Press [RETURN] to return to the menu.

FORMATTING TEXT FILES. How ST Writer formats your text files is controlled by a variety of formatting commands and values entered either in the Print Formatting Block at the top of each file or within the body of the file. Each time you select Create File from the ST Writer menu, the program's default values for formatting are refreshed in the Print Formatting Block, but you can change them or add to them as you wish. You can edit formatting commands and values -- delete or modify them -- just as you can text. See your Quick Reference Guide for a summary of all formatting commands used with ST Writer.

You can examine a formatted text file on your screen prior to printing by using Print to Screen.

FORM PRINTING. (Also called Database Merge.) You can leave blanks in a text file that you want to use as a form, and fill them in -- with names and addresses, account numbers, and the like -- each time you print the file. Wherever you want to leave a blank, press function key F9. An inverse video ? appears at that point on your screen. Press F9 at the desired location for each entry that you'll be filling in.

When ST Writer prints the file, it stops when it encounters each such command and prompts you FORM DATA FROM FILE Y/N? If you have previously created a data file, type Y. The prompt DATA FILE NAME? will appear. Type in the data file name and press [Return]. ST Writer will read the data file and insert the data in sequence into your text. If you do not have a data file, you will be prompted to MAKE ENTRY?. Type what you want to fill in the blank -- up to 55 characters per blank -- and press [Return]. When you complete each

entry, ST Writer continues printing the file.

Alternately, you can supply information for each blank from a text file output by a database management program such as the mailing list option of DB Master One. After sorting the desired addresses with DB Master One, "print" them to disk. See the instructions from compatible database managers for further instructions.

If you're using the hand-entry method and have left a number of blanks, it's a good idea to jot down a list of them, because you won't be able to see the file on your screen when you're prompted to make your entries during printing.

FREE MEMORY. When first creating a file in ST Writer, you start off with approximately 200,000 bytes, or characters, of memory (more or less depending on system) available for your text -- room for over 130 double-spaced pages. This number is reduced if you have any of the accessories such as the Control Panel

installed in your desktop. To remove desktop accessories, use the GEM desktop to change resolution with a non-system disk in the default drive, or if you have a monochrome monitor (cannot change resolution), rename the desk accessories on your system disk and reboot the system. ST Writer constantly displays the available memory, expressed in bytes, in the Message Window at the bottom of your screen. One byte equals roughly one typed character, and you can figure on about 1500 bytes for each standard double-spaced page.

In any case, it's a good idea to leave yourself with a margin of free memory with every file you write, just so you'll have some memory to work with if you want to edit (or add to) a file later on. When your computer's memory will accept only about one more screen full of text, ST Writer alerts you by displaying a "memory low" message. When this happens, save the file and start a new file to continue the document you're working on.

GLOBAL FORMAT. Allows you to set up the Format line at the top of a file you are about to Create. It does not work on files already created in memory.

HEADERS, FOOTERS, and PAGE NUMBERING.

For headers or footers of one or two lines on every page of your printed text file, enter the appropriate commands and text at the beginning of the file, on the screen line or lines just below the formatting commands and values displayed on the first line. To begin headers or footers elsewhere than on the first page, or to change the text of your headers or footers, you can also enter the required commands and text within the file. In this case, however, each header or footer command and line of text (preceded, if you like, by elongated print and center text or block text right commands) must be the only material entered on a screen line. In either case, be sure that no line of header or footer text exceeds your overall page width margins.

To specify a header, press [Control H], then type the text of the header and press [Return]. For a two-line header, enter a [Control H], then the text and a [Return] for each separate line.

To specify a footer, press [Control F], then type the text of the footer and press [Return]. For a two-line footer, enter a [Control F], then the text and a [Return] for each separate line.

To discontinue a header or a footer, type two [Control H]'s or two [Control F]'s followed by a [Return].

For consecutively numbered printed pages, type [@] ([Shift 2]) at that point in your header or footer text where you want page numbers to appear (for page numbers only, use the '@' symbol as the entire text of your header or footer). ST Writer will number the page where you enter your page numbering command as '1', and subsequent pages in order, unless you specify a different starting page number. To do this, press [Control Q] after the [Return]

that concludes your header or footer text, then type in the number of the starting page number you want (from '1' through '999'). A negative value following the [Control Q] indicates that you want your left and right blocked headers and footers to each block to the opposite margin on alternate pages.

Headers or footers appear one full line below or above the top or bottom of your printed pages. By default, ST Writer prints headers, footers, and page numbers in the print style you've formatted for the entire text file, and aligns them to the left margin. If you want to change the print style or left or right margins, or want elongated print, centered or flush right, enter the appropriate commands just after your header or footer commands. The main text body will not be affected by these formatting commands in your header or footer.

INDEX OF FILES. For a directory of files on a disk or within a folder, press [I] from the ST Writer menu

or click on 'Index' from the files menu. At the prompt 'P' to printer, 'S' to screen: S, press [Return] to accept the default (screen print), or [P] for a printed index (make sure your printer is ready). Next ST Writer asks for the Path name: -- see Path name for details. When you enter the Path name, ST Writer reads the disk directory and prints it on the indicated device. Also shown are the number of bytes contained in each file. Files generated by ST Writer and folders are indicated as such, and locked files are marked with an asterisk (see Locking files). If you have more than 21 files and folders on your disk, ST Writer scrolls the directory listing upward on your screen to show every entry. To momentarily pause the listing, press any key; press it again to restart the scrolling. At the end of the directory listing, ST Writer again presents you with the printer/screen prompt, in case you wish to index a different disk or folder. To return to the menu, press [Esc].

INSERTING TEXT. To insert text, simply position the cursor where you want and begin typing. ST Writer pushes the text to the right of and below your insertion as far as necessary to accommodate the new text. Use the same procedure to enter formatting commands within a text file that you've already written. Pressing the [Insert] key toggles between insertion and type-over mode. A capital 'I' near the bottom right of the screen indicates insert mode, and an inverse capital 'T' indicates type-over mode.

INSTALL PRINTER. The Install Printer Control Panel desk accessory from the Desk menu allows you to choose the type printer you will be using (dot matrix or daisywheel, black and white or color, dot configuration), paper use (single sheet or continuous feed), and quality of print (draft or final). If the codes for draft or final have been placed in your printer configuration file, you can select draft or letter quality printing. You may also change ports so that your text gets printed via the modem

(RS232) serial port, rather than to the parallel printer port. (Also see PRINTER CONFIGURATION FILE below).

JUSTIFIED RIGHT MARGINS. The justified right margin command works like a simple On/Off switch. The default value of 0, displayed next to the inverse video J in the Print Formatting Block, gives you nonjustified (ragged) right margins. For justified right margins, change this value to 1. You can change from one to the other within a text file by entering [Control J] and the appropriate value.

LINE SPACING. ST Writer measures line spacing in half-lines. The default value for line spacing is single spacing, represented by the 2 next to the inverse video 'S' in the Print Formatting Block. For double spacing, change this value to 4. To vary line spacing within a document, press [Control S] and type in the appropriate value wherever you want the spacing to change. The new value must be an even number.

When you use [Return]s to create blank lines in a text file, keep in mind that ST Writer inserts blank lines according to the value of 'S' for each such [Return].

LOAD FILE. To load a text file from a disk drive, select Load File from the ST Writer menu by pressing L. At the Load file: prompt, enter the Path name (see Path name) for the file you wish to load. If you've previously loaded or created a text file during the current session, ST Writer first asks, Erase file in memory, Y/N ?. An exception to this happens if you've previously saved the file and did not edit it after the last save -- the new file is simply loaded when you enter its name. If you press Y, the file in memory is erased, whether or not you proceed with the load.

If while loading a file ST Writer finds that your computer's memory is full, Buffer is full, file not loaded appears in your Message Window. That part of the file that's been loaded is erased from memory. If

you load in a non-ST Writer file, the file must be converted to ST Writer format, and this takes some time. Essentially, all line-feeds are discarded, and all carriage returns replaced with nulls. Also, all tabs are replaced with 5 blank spaces. You can toggle off the tab conversion when prompted by answering 'N' (No) to the query Change Tabs to Spaces? In this case, your file may be punctuated with a lot of [Control I] characters, which represents the tab character. This would usually be done only by experienced computer users.

LOCKING FILES. To lock a text file that you've saved to disk, you must return to the GEM desktop (see Quit). Open a window for the drive that contains the file to be locked, and select the file by pointing to its icon (or filename) and clicking the left mouse button once so the icon is highlighted. Then point at the File heading on the Menu Bar, and select the Show Info option.

This is the same Dialog Box you would use

to rename the file. To lock the file, select Read-Only, then OK.

If you load a locked text file, revise it with ST Writer, and then try to save it again under the same filename, ST Writer shows the filename and asks, "ALREADY EXISTS! [REPLACE] [CANCEL]". If you type [Return] the save will be cancelled. If you select 'REPLACE', an error message will tell you that the file cannot be opened, in this case because the file is locked, and must first be unlocked from the GEM desktop.

MARGINS. ST Writer measures a page from top to bottom in half-lines, and from left to right in character spaces. The default values for page margins are represented in the Print Formatting Block as follows:

T12	B12	L10	R70
Top	Bottom	Left	Right

To change any of these margins for the entire text file, simply delete the value shown and type in your own. You can also change margins

within a file; just press [Control] and the appropriate letter, then type in the value you want. Values for the top and bottom margin must be even numbers.

You may have to experiment a bit, adjusting the paper in your printer, to get the correct top margins on your printed pages. With the default value of 12 for T, your top margins should be one inch.

For a continuous printout of a file, without page breaks, set your top and bottom margins at 0 and delete any headers or footers from the file.

MERGING TEXT. You can merge a saved ST Writer file, or other ASCII file from disk with the file currently in your computer's memory with this command. Keep in mind, though, that when merging files you run the risk of overflowing your computer's free memory.

To merge two files, first position the cursor where you want the merged text to appear in the file currently

in your computer's memory.
Then press function key [F8]. Select the
file from the file selector
box.

If while merging one file with
another ST Writer finds that your
computer's free memory is full, a
warning message appears in the
Message Window, the merge is halted and
that portion of the merged
file that has loaded is erased.

MOVING TEXT. To move a block of text
from one place to another in a
text file, position the cursor at the
beginning of the passage you
want to move and press [Shift F5]. Then
move the cursor to the end of
the passage and press [Shift F5] again.
Next, move the cursor to the
point where you want to reposition the
passage, and press [Shift F2].

Remember that you can move only about
40,000 bytes of text (the
capacity of your failsafe buffer) at a
time. If you want to move a
larger block of text, do it in segments.

PAGE EJECT. Use this command when you want

ST Writer to halt printing at a given point in a text file and space to the top of the next page before printing is resumed -- for example, in a multisection document where you want each section to begin on a fresh page. To enter this command, position the cursor where you want a page eject to take place and press [Control E]. A number following [Control E] specifies a conditional page eject. The number is the number of lines to appear in a block, and should not exceed the number of lines between the top and bottom margins. If the block will not fit on the current page, it will appear on the following page.

PAGE LENGTH. When formatting and printing a text file, ST Writer uses this formatting command -- represented by the inverse video Y in the Print Formatting Block -- to determine where the next printed page should begin. Keep your page length set at the default value of 132 (half-lines) for 8 1/2 by 11-inch paper. For a continuous printout of a text file without page breaks, set your top and bottom margins at 0

and delete any headers or footers from the file. Values for page length must be even numbers, and 224 is the maximum value of Y that ST Writer allows.

PAGE NUMBERING. See Headers, footers, and page numbering.

PAGE WAIT. Use this command when you want to print a text file on separate sheets of paper -- for example, on bond, letterhead, or your personal stationery. Enter [Control W] in the Print Formatting Block at the top of your file for a page wait on every page of the file. ST Writer will stop printing at the bottom of each page; after inserting a fresh sheet of paper in your printer, press any key to start printing the next page. You may also invoke this command by using the Install Printer desk accessory, and using the "single" sheet selection. When printing to the screen, [Control W] causes the screen scrolling to halt when the screen is full. Hit any key to continue scrolling, or [Esc] to exit.

PARAGRAPHS. Mark the beginning of every paragraph by pressing [Control P] -- ST Writer displays an inverse video paragraph symbol at that point on your screen. Press [Return] at the end of each paragraph -- ST Writer displays an inverse video 'less than' symbol at that point.

Two formatting commands control how your paragraphs appear when formatted and printed by ST Writer. The default value for paragraph spacing, displayed next to the inverse video 'D' in the Print Formatting Block, is 4 blank half-lines, or double spacing, between paragraphs. To change this value, just delete the '4' and type in the value you want. The default value for paragraph indentation, displayed next to the inverse video 'I' in the Print Formatting Block, is 5 spaces (from the left page margin). For a different paragraph indentation, delete the '5' and substitute the value you want.

To vary paragraph spacing within a new file, press [Control D] and

type a new value where you want the spacing to change, then press [Return]. To change paragraph indentation, press [Control I] and enter a new value. For bibliographies, ST Writer also allows negative indentation (outdenting or undenting). Type [Control I] followed by a negative value (eg., [-5]). Each time a [Control P] is encountered thereafter, the first line of the paragraph will be alligned flush with the left margin, and succeeding lines will be indented.

PATH NAME. Path names are used to indicate files held in folders on your disk. See your ATARI ST Owner's Manual for a description of folders and how to use them. Path names can be entered at any of ST Writer's prompts for filenames or Path names. A path name is similar to a filename, but may also optionally indicate a folder name (or folder names) in order to tell ST Writer what path to take through your various directories and subdirectories in order to access your file.

Say, for example, that you would like to use a folder named TEXT to hold your ST Writer files. To create the folder, follow the instructions for Creating Folders in your ATARI ST Owner's Manual. Then, after invoking ST Writer and creating your file, press [Esc] to return to the main menu and select Save File by pressing [S] or clicking on 'Save as...'. From the file selector, depending on TOS version, you can then type in the above path name (eg., B:\TEXT\LETTERS*.*)). Then you may need to click on the close box to select another folder, or if you are already viewing the contents of the LETTERS folder, just type in the filename under which you wish to save the file (e.g. MYFILE.TXT). Move the mouse inside the File Selector Box and click. All files in the LETTERS folder will be listed. This is because you used a "wild card" specifier [*]. If you only wanted files ending with .TXT, you would have typed:

B:\TEXT\LETTERS*.TXT

[TAB]

(Note: File Selector Boxes use the [TAB] key in place of the [RETURN] key.) You may then click on the file wanted followed by clicking the OK box, or double click on the selected file, and it will load, be saved, or delete, depending which function you had selected.

PRINTER CONFIGURATION FILE. This is an auxiliary file named XYZZX.DAT that ST Writer looks for and reads, if available, each time you print a file to a printer (see PRINTER DRIVER below). ST Writer is already set up for Epson printers and compatibles; however, a program and instructions to let you customize this file for other printers will be available for downloading from the Atari BBS (408-745-5308).

To create a printer configuration file, ST Writer requires a special printer configuration program called CONFIG.TOS. When run, CONFIG.TOS looks on disk for a file named CONFIG.TXT, and reads it into memory. CONFIG.TXT is nothing more than a

'Save'd ST Writer file containing all necessary printer codes for the user's individual printer. After reading CONFIG.TXT, CONFIG.TOS converts the text into special code and saves it back to disk, creating a file named XYZZX.DAT. Upon loading ST Writer from disk, ST Writer searches on the disk it was booted from for XYZZX.DAT and uses its codes to properly interface with the printer. Once you create an XYZZX.DAT file for your particular printer, you never need to go through it again. Be sure to make a backup copy--and remember where you put it. The only two files you need on any disk to operate ST Writer, are the STWRITER.PRG program itself and XYZZX.DAT.

Some versions of ST Writer will also have a file called XYZZX.TXT. This is nothing more than a backup duplicate of CONFIG.TXT.

Before editing CONFIG.TXT, you will need a copy of your printer manual. Next, load a backup copy of CONFIG.TXT into ST Writer and examine it. What you are looking at is

very similar to program source code. Any line of text beginning with an asterisk (*) is a comment for your information only and is ignored by the CONFIG.TOS program. The CONFIG.TXT file contains the proper codes for an Epson-compatible printer. If your printer falls into this category, you need do nothing further. Your printer does not require a printer driver program.

For the moment, let's skip over the first section of the file and edit a fairly simple example. Look for the comment * underline on (you can use the ST Writer search command [F6]). Following * underline on are a list of numbers: '27', '45', '1', '255', '255', '255', etc. Each of these numbers is a printer code in decimal representing the command to turn on the underline. The 255's are fillers where there is no printer code number.

Look in your printer manual for the proper codes to turn on the underline. If your printer codes are listed in decimal--sometimes

shown as `CHR$(27)`, `CHR$(45)`, `CHR$(1)`--
you're lucky. Printer codes are
also often listed in hexadecimal or ASCII
form. Hex is indicated by
either a preceding dollar sign or by
the presence of the letters A
through F. The underline on codes above
would appear in hexadecimal
as: `$1B`, `$2D`, `$01`. In ASCII notation
underline on would be: Esc, -,
SOH. Whichever the case, if your
printer codes are in hexadecimal,
you may enter them by preceding them with
the letters `0x` (that's zero
and lower case 'x') in place of the dollar
sign. Thus, enter: `0x1B`,
`0x2D`, `0x01`. Alternatively, enter the
decimal values. Up to 8 codes
can be entered as either decimal or
hexadecimal numbers, between '0'
and '255'.

Go down the line of `CONFIG.TXT` codes
and replace any codes that
disagree with those codes in your
printer manual. If your printer
requires, say, four codes for a
function that previously contained
three, replace one of the 255's with the
fourth code. Likewise, if
your printer is one code short, replace

the old, extra code number with a '255'. It is very important that each function segment in CONFIG.TXT contains eight codes, so edit carefully. If you are uncertain about a particular function, leave it alone. Change as little as possible. You can always re-edit and try again.

If your printer doesn't support underlining or bold printing, but does support back spacing, you can still get these features. If you use '95' as the first number for underline on, followed by the backspace code (usually a decimal '8'), the printer will print the underscore, backspace one space, then print a character over the underscore. For bold print, below the section labeled bold on, place the back space code. This will print a character twice in the same place.

Go back and look at the top of CONFIG.TXT. A short chart at the top shows the necessary code numbers to use for certain parameters. It is set up for 80-column printers, but if you

have at least 132 columns, substitute '8712' for '5280'. This number is critical if you want more than 160 columns (condensed elite on an 80-column printer). You can get 198 columns (condensed on a 132 column printer) if you use the larger number ('8712'), but don't try printing more columns than your printer can handle

The character translation table may appear confusing, but it merely lists the ASCII representation of all the characters in the character set, from 0 to 255. The numbers are in hexadecimal, so if you are not sure what they represent, see a table or the character set in your printer manual. Beyond the standard range of alphanumeric ASCII characters is an extra character set. The ST sees these extra characters as one thing (see again the chart in your ST BASIC Sourcebook), but your individual printer sees them as another (depending on the printer). Many printers have their own special character set. The character translation table in CONFIG.TXT is

designed to make the two jibe as much as possible.

Currently, the table is set up for Atari printers. If you don't have an Atari printer, you won't have all the special characters, so you can configure your printer driver to print the characters you do have even if they have a different ASCII number. For example, the Star Micronics NX-10 printer has the paragraph symbol located at 0x14 (decimal 20), but on the ST, that symbol has the value 0xbc (decimal 188). Find 0xbc in the table and replace it with 0x14. Now, every time you use the paragraph symbol in text to be printed, it will print as though you were using an Atari printer. If you change values in the table below 0x20, remember that ST Writer can only send these codes if you first bracket the value with [Control X] on both sides on the edit screen (see SPECIAL CHARACTERS below).

Once you have completed editing CONFIG.TXT, save it back to disk under the same name. Return to the GEM Desktop

and make sure that you have both CONFIG.TOS and the newly edited CONFIG.TXT in the same disk directory. Click and run CONFIG.TOS. In a short while, it will create a XYZZX.DAT file on your disk. Place this file on the same disk as STWRITER.PRG and you're ready to go. You might create a short ST Writer file which uses all the printer commands you wish to test. This way you can quickly try out the different functions and see how successful your edit has been. You can also rename the XYZZX.DAT file to, eg., BROTHER.DAT. Although not automatically loaded at boot-up with any name but XYZZX.DAT, you can use the 'Pr. Driver' menu item to load it from within ST Writer Elite.

PRINTER CONTROLS. If you do not have an Epson or Epson-compatible printer (including the ATARI SMM804), you can still format and print your ST Writer text files by entering the desired printer controls directly in your files.

Wherever you want to enter a printer control, first press [Control 0],

then type in the decimal equivalent of the appropriate code understood by your printer. For instance, to send a decimal code 15, type [Control 0][15]. Be sure to type a space after the number -- ST Writer uses this space as a delimiter. You should be able to find a listing of codes used by your printer in the manual that came with it.

Note: when you enter a printer control code with [Control 0] on a page, that entire page will be formatted by the code you enter.

PRINT FILE. You can print your text to the screen (see Print preview), to a disk file, to a serial printer or modem, or to a parallel printer. (Note: To print to a printer or modem connected to your computer's RS232 serial port, first use the Install Printer option in the Control Panel Desk accessory from the Desk menu to set the Printer Port to Modem, -- see your ST Owner's Manual -- then print to the printer as usual.) To print a file, load it in memory if not already present, go to the ST Writer menu, and press [P]. ST Writer

presents the Print Document dialog box. Select the appropriate output device with the mouse. For further instructions on printing to the screen, see Print preview.

The message Searching for printer config file on disk appears in the Message Window briefly as soon as ST Writer has loaded into the computer, and the disk drive spins momentarily. When this happens, ST Writer is looking for the file XYZZX.DAT on your default drive; the drive from which you loaded the ST Writer program. For further information on this file, see Printer Configuration File. Whether or not the printer configuration file is found, ST Writer still can print your file.

From the ST Writer menu, to print your file to a printer, press [P] or click on Print. To send the formatted text to a disk file that you can later transmit to another computer or print out directly from the GEM desktop, click on 'Disk' in the dialog box. ST Writer prompts you for a file name and then sends the

formatted text to that file. The 'Spooler' option lets you print to a disk file with all your printer control codes embedded along with your text. A properly formatted file for your printer can later be printed directly to your type of printer from the GEM desktop.

The default number of copies is '1'. You may set this for up to '999' copies.

The default pages to print begins with '1' and ends with '999'. If you wish some other range, edit the appropriate numbers.

The default print quality depends what is set in the printer configuration part of the control panel. You may change it, however to either draft or letter quality in the selector box.

To stop printing press 'ESC', and to temporarily halt or resume printing, press any other key.

Hint: Printing your file to a disk file is a convenient way of

creating documentation on disk for a program you've written. Users can show a file printed to disk on the screen or print it out from the GEM desktop by double-clicking the file's icon or filename. Type instructions for your program into ST Writer, then use 'Save Ascii' to print the text to a file named README.DOC, then write "Show (print) README.DOC for instructions" on your disk label. Remember to adjust the left margin to one.

PRINT PREVIEW. This feature of ST Writer lets you examine a formatted text file on your monitor screen prior to printing it. You can use Print preview at any time while creating or editing a file.

For a print preview, press [Esc] from the editor to return to the ST Writer menu, then select 'Print'. From the dialog box, select 'Screen'. Change any of the other options you wish, but note that draft and letter quality make no difference when printing to the screen. Page breaks are simulated by a dotted line across the screen

width. To cancel printing and return to the ST Writer Menu any time, press [ESC]. To pause and then resume print preview, press any other key except [ESC].

PRINTER DRIVER. If you examine the 'File' drop-down menu carefully, you will see the menu item 'Pr. Driver'. This feature allows you to load in a different printer driver without re-booting, useful if, say, you have both a parallel and serial interface printer connected at the same time.

Selecting this menu item will allow switching from one printer and driver to another. WARNING: DO NOT CONNECT OR DISCONNECT PRINTERS TO YOUR COMPUTER WHILE EITHER IS 'ON' OR YOU MAY FRY YOUR CIRCUITS!!

PRINT STYLES. (fonts). ST Writer offers you a choice of sixteen combinations of print styles or fonts -- check the manual that came with your printer to see which ones your printer is capable of.

The default print style of ST Writer, represented by the '0' next to

the inverse video 'G' in the Print Formatting Block is Pica, or 10 characters per inch (CPI). To format your entire file for condensed print (16.7 CPI), change this value to '2'. For bold print, change it to '1', and to print in italics, change it to '4'. To print in Elite style, type '8' after the inverse video 'G'.

To vary the print style within a file, position the cursor where you want a new print style to begin, press [Control G], and type in the value desired. You can add the above values to use more than one style at a time -- use this table:

CONTROL G CODE	STYLE
0	Pica
1	Bold
2	Condensed
4	Italics
8	Elite

To combine print styles, add the values for the required styles. For instance, to print Bold Elite, type [Control G][9], then a hyphen,

then the text. The hyphen will not appear in the text printout. The print styles you select are not represented as such in Print preview except for elongated, which appears as letters with single spaces in between.

The GLOBAL FORMAT dialog box simplifies this task. See GLOBAL FORMAT.

QUIT. Use this command to exit ST Writer and return to the GEM desktop. From the main menu press [Q]. If you have made any changes to your text file since the last time you saved it, ST Writer prompts, "Quit without saving file in memory? [Yes][No]". Select 'Yes' to exit ST Writer, or [Return] to return to the main menu.

RECEIVE ATARIWRITERTM. Use this function to transfer a file from an ATARI 400, 800, XL or current XE Computer using AtariWriter or AtariWriter Plus to your ST. You must have an ATARI 850 Interface Module (or equivalent) connected to your 400, 800, XL or XE Computer

and a "null-modem cable" (see below) in order to make this transfer (300 baud). You may also load in an 8-bit AtariWriter file from disk, and ST Writer will convert the file.

A special cable called a "null modem cable" is required to connect the two computers. You probably will not be able to find such a cable ready-made -- you must either make it yourself or have it made for you. Most cities have stores that will custom-make a cable for a reasonable fee. To make the cable, obtain a female 25-pin connector for the ST end, a female 9-pin connector for the 850 end, and a length of cable with at least five wires. Connect these pins on the two connectors:

25-pin pin #	T0:	9-pin pin #
-----	---	-----

2

4

3	3
4	8
7	5
8	7

To transfer a file, first load AtariWriter or AtariWriter Plus and the file to be transferred into your ATARI 400, 800, XL or XE. Make sure that you have downloaded the RS232 handler from the 850 -- follow the instructions with your DOS manual. If using AtariWriter Plus, make sure your 850 Interface is connected and turned on before you load the program disk. Next, on your ST, run ST Writer. Connect the two computers with your cable. Next, press [R] on the ST keyboard or click on 'AtariWriter' from the menu. ST Writer asks, "Get AtariWriter file via null modem or from disk file? [MODEM][DISK][CANCEL]". Click on the appropriate response (ie, in this case, MODEM). Then press [S] on the 8-bit computer's keyboard to Save File. When prompted for DEVICE:FILENAME, enter R: and press [Return]. The file is then transferred to the ST Writer text buffer,

where you see it appear. After the transfer is finished, it's a good idea to save the transferred file to disk for safekeeping before editing it.

SAVE ASCII. This is a MENU selection, but you may also just type 'A' from the keyboard. Selecting ASCII SAVE allows you to write an ASCII file to disk. This is the same as printing to disk, as every line gets a carriage return and line feed appended to it. The major exception is that the left margin will be 1, and the right can be set up to 160 (for an 80 column printer driver). All blank spaces at the end of a line or page will be discarded. If you MUST have blanks at the end of a line, use the Elongated text control [Shift F9] followed by exactly 1/2 the number of blank spaces needed, and then a terminating [Shift F9]. This tricks the formatter into writing blank spaces at the end of a line or page. SAVE ASCII files will not re-load into ST Writer Elite without conversion to ST Writer format, but can be easily loaded into other word

processors or text editors.

It is a good idea to use a ".DOC" extender on ASCII filenames so as not to confuse them with files saved in ST Writer format.

SAVE BLOCK. After marking the beginning and end of a block of text with [Shift F5], you can save the marked block to a disk file. Mark the block, then press [Shift F8]. Use the file selector box to select the filename to save the block on disk. You can merge this text with another file with the F8 key (see Merging text.) Hint: an easy way to delete the block markers after saving the block (40,000 bytes or less only) is to press [F5] to delete the block, then [Undo] to restore it.

SAVE FILE. To store a text file on a diskette, select '/Save As...' from the ST Writer menu, or press [S]. Insert a formatted disk in your disk drive (if you don't have a formatted disk on hand, you can have ST Writer format one for you -- see Format Disk.) Then type a new filename or click on an existing

filename (optionally including Path name -- see Path name), and click [OK].

If your file already has a filename associated with it (i.e. you must have previously saved it to disk during this editing session), ST Writer enables the 'Save' menu item. Clicking on this item eliminates the need for the file selector box, and saves the file to the same filename, overwriting the previous file.

Important Note: In this case, even though the filename already exists on disk, ST Writer does not present a warning alert box. Therefore if you wish to retain an original copy of the document you are editing, save the edited version under a different filename.

SEARCH AND REPLACE. Use this feature of ST Writer to search for, replace, or delete any string of text up to 57 characters in length. On command, ST Writer executes a search from the current position of the cursor to the end or the beginning of a text file, in either

direction.

There are four ways to search; Search Reverse, Search Forward, Replace, and Query Replace. To conduct a Forward Search, from the cursor position to the end of a file, press function key F6. ST Writer then prompts Forward search <Esc>: in the Message Window. Enter the character, word, or phrase you wish to find, then press the [Esc]. Using the [Esc] key as a terminator in the search phrase allows you to search for phrases that include the [Return] character. You can also search for other non-alphanumeric characters, including all [Control] key combinations. Pressing [Esc] activates the search, whereupon ST Writer moves the cursor to the first incidence of the sought phrase. If it does not appear in the text, the Message Window shows String was not found.

If found, to search again for the same phrase, press F6 again. The Forward search <Esc>: prompt reappears, followed by the last search phrase. Simply press [Esc] to search for

that phrase. To search for a different phrase, press any key and the old search phrase is automatically deleted, making room for a new search phrase.

To search backwards in your file, press [Shift F6]. Reverse Search works identically to Forward Search, except that it searches from the cursor position to the beginning of the file, rather than to the end. Forward Search and Reverse Search use the same buffer for the search phrase.

If you want to replace the phrase you're searching for with a different phrase, use function key F7. Pressing F7 alone causes ST Writer to confirm each replacement operation with you, and [Shift F7] effects replacement of all occurrences of the sought phrase without verification, also known as global replace. After pressing either, ST Writer prompts: (Query) Replace <Esc>:. Enter the search phrase (including presses of [Return], if applicable), then press the [Esc] key. Next, ST Writer prompts: With

<Esc>:. Enter the phrase that is to replace the search phrase. For instance, you can use Replace to change the name John to Jack through your entire manuscript. If you have selected Query Replace, and the search phrase is found, the message window prompts: Type 'Y' to replace string:. Pressing Y replaces the phrase and moves the cursor forward to the next occurrence of the search phrase (if any). Pressing any other key does not perform the replacement, but still moves the cursor to the next incidence of the search phrase. Note that Replace and Query Replace search forward only from the cursor position.

Note: if, while entering a search or replace phrase, you decide not to make the search after all, press [Control K] to abort the process and return to editing your document.

If you press [Shift F7] for global replace, all incidences of the search phrase are automatically replaced by the replace phrase without query. This is a powerful command, and

should be used carefully!

When entering a search phrase, you must type it exactly as it appears in your file. When the string is a single short word that might appear in your file as a part of longer words, it's a good idea to type in blank spaces before and after it. If you do this, though, include the same blank spaces in your replace phrase. And keep in mind that ST Writer will not recognize occurrences of such a search phrase that have punctuation marks immediately before or after them.

To halt a search-and-replace operation, press [Esc].

To abort a search-and-replace operation before starting, press [Control K].

SECTION HEADINGS. Use this feature of ST Writer to number section and subsection headings in a multisection document. The easiest way to explain its use is with an example.

Say you're writing a text file about nutrition. In outline, it

includes the following sections and subsections:

Fruits and vegetables

 Fruits

 Fresh fruits

 Preserves

 Vegetables

Dairy Products

To number each of these section and subsection headings when entering them in your file, press [Control U] and type the number of the section level, then the text of the heading and [Return]. In this case, Fruits and vegetables is the highest level of headings, so you type 1 after [Shift F8]. The section level for both Fruits and Vegetables is 2, and 3 for both Fresh fruits and Preserves. For Dairy products, you return to a section level of 1. You can specify section levels of 1 through 9. Wherever you enter a section heading command and number, ST Writer displays a European paragraph symbol followed by the section level number you've entered.

When it formats and prints your file, ST Writer numbers your section headings, raising the numbers for each occurrence of a section heading command at a given level. In other words, the section headings in your file on nutrition would be numbered as follows:

- 1 Fruits and vegetables
 - 1.1 Fruits
 - 1.1.1 Fresh fruits
 - 1.1.2 Preserves
 - 1.2 Vegetables
- 2 Dairy products

You should format your section headings according to your preferences. Add as many spaces between each section level number and heading as you want between the section number and heading. And use paragraph markers, center or block text right commands, and print style commands in combination with your section heading commands to format your headings the way you want them.

To reset your numbering of section headings -- say, in a large document where you want a numbered system

of headings in each chapter
-- press [Control U] and type the number
0. Then press [Control U]
again and the desired level number when you
enter your next heading.

SOURCE FILES. You can create source
code files in BASIC, LOGO, C,
etc. with ST Writer. Just be sure to use
the 'Save Ascii' option. Be
certain that none of your lines of
code exceed the 160 (80 column
printer driver) or 198 character (136
column printer driver) limit
without an intervening carriage return.
It is a good idea to also
Save (ie., ST Writer format) your text file
under another name in case
you wish to edit it later.

SPECIAL CHARACTERS. Ordinarily, all ST
characters with ASCII values
less than 32 (\$20 Hex) cannot be used
in your text, as these have
special meaning to printers, and are used
internally by ST Writer as
formatting directives. However, using
[Control X] before and after
such characters will temporarily shut off
the interpretation of such
characters in their usual meaning and

will actually insert them into your text (particularly useful if you are planning to 'Save Ascii' and the disk file you are creating requires such characters to maintain its integrity. This feature is for experienced programmers. Most control codes can be produced using [Control X][Control {Key}][Control X]. You may use as many [Control {key}] characters between the [Control X] formatting commands as needed, but no normal characters (ASCII numbers greater than 31, \$1F Hex) with the exception of [\] which is used solely before a [Control X] to differentiate it from a terminating [Control X] formatting command. Exceptions to the normal {key} characters are:

To get:	Use:
ASCII 0 (null)	[Return]
[Control A]	[Control U]
[Control U]	[Shift F5]
[Control X]	\[Control X]
[Control Z]	[Control :]
[Escape]	[Control [] or
[Control ;]	
ASCII \$1C	[Control <] or [Control

\]
ASCII \$1D [Control =] or
[Control]]
ASCII \$1E [Control >] or [Control
^]
ASCII \$1F [Control ?] or [Control
_]

SUBSCRIPTS AND SUPERSSCRIPTS. Printed a half-line below or above the line, subscripts and superscripts are especially useful when you're writing about chemical or mathematical formulas or including footnote numbers in your text files. (Check the manual that came with your printer to see if it's capable of printing subscripts and superscripts.)

To specify a subscript, press function key F10 before typing the material to be subscripted and [Shift F10] after. To specify a superscript, press [Shift F10] before and F10 after the material to be superscripted.

ST Writer displays inverse video up and down arrows where these commands are entered. So the chemical

formula for water would appear on your screen as H_2O , and Einstein's famous Theory of Relativity as $E=mc^2$. If you wanted to use a superscript 0 as a degree symbol, the boiling point of water would appear as 212^0F .

TABS. The series of arrows that appear every five spaces along the top of your Message Window each time you begin a work session with ST Writer are the default Tab settings of ST Writer. To remove any of the default Tab settings (or stops), first move your cursor to a Tab stop and press [Shift F4]. ST Writer prompts you, "Clear current tab stop? [Yes][No]" -- clicking 'Yes' clears the stop and removes its arrow from the Message Window. Conversely, to set a new Tab stop, simply position the cursor at the desired setting and press function key F4.

To clear all Tab stops, press [Control Tab], and to restore ST Writer's default tab stops, press [Shift

Tab].

Here are some important facts to know about using Tabs. Using the Tab key alone always inserts spaces to the next Tab stop. To tab forward to the next stop without inserting spaces, press [Shift (right arrow)], and to tab backward to the previous tab stop, press [Shift (left arrow)]. Also, Tab settings are saved along with your text file; thus, you don't need to reset them each time you load and edit the file.

Tabs are perhaps most often used to create columns of numbers or words. In such applications, we highly recommend that you use ST Writer in TOS's medium or high resolution to take advantage of the 80-column screen for proper layout of your document.

UNDERLINING TEXT. To enter underlined text in a file, press [Shift F3] before typing in the text. An inverse video underline character appears. Press [Shift F3] again to return to ordinary text.

UPPER AND LOWERCASE CHARACTERS. To enter a single upper-case character, of course, you hold down the [Shift] key while typing the character. For all upper case letters, press the [Caps Lock] key, whereupon the letter C appears in the right half of the message window, and press it again to return to all lowercase.

With ST Writer you can also change letters that you've already entered from lower to upper case or vice versa. To do this, position the cursor on the letter you want to change and press function key F3. To change a series of characters, simply hold down the F3 key.

Formatting commands

Enter value, where appropriate, following command.

Bottom margin	Control B
Block text right [Return] after	Control C Control C before each line,
Byte Count at cursor	Alternate =
Center text [Return] after	Control C before each line,
Chain print files drive [Return]	Control V at bottom of file, followed by specifier and colon, if necessary, filename to be chained, and
Control Character insert in text after prints file.	Control X before and the control character temporarily turns off formatter and the character in your

Double-column printing:

2nd col. left margin	Control M
2nd col. right margin	Control N
Elongated print	Shift F9 before and after text
Form printing form	F9 for each blank in form
Headers and footers then each line	Control H for header, Control F for footer, text and [Return] for each line
Justified and nonjustified margins	Control J and 1 (justified) or 0 (nonjustified)
Left margin	Control L
Line spacing	Control S
Merge files	F8
Mouse on	Click mouse button

Mouse off Options menu.	Click on Mouse in
Page eject	Control E where page break is desired
Page length continuous bottom	Control Y (for printout, set top and margins at 0)
Page numbering footer; other header value left blocked alternate	@ (Shift 2) in header or for starting page number than 1, Control Q after [Return] that concludes or footer, then desired page number. Negative alternates right and headers and footers on pages
Page wait	Control W

Paragraph Indentation Control I

To make an outdent, use a negative value after Control I.

Paragraph spacing Control D

Printer controls Control 0 and decimal code

Print styles

Pica Control G and 0

Bold Control G and 1

Condensed
(16.7 CPI) Control G and 2

Italics Control G and 4

Elite Control G and 8

To mix print styles, add the numbers that follow Control G. (Note: the number after [Control G] must be followed by a hyphen.) In GEM mode, print styles can be selected prior to

Creating
a file by clicking on the appropriate
buttons
in the Global Format dialog box.

Right margin	Control R
Section headings text,	Control U, section level number (1-9), heading and [Return]
Subscripts after	F10 before, Shift F10
Superscripts after	Shift F10 before, F10
Top margin	Control T
Alternate Character set (toggle)	Alternate X
Deadkey function (toggle)	Control Clr Home
Cursor movement	
Up	(up arrow)

Down	(down arrow)
Left	(left arrow)
Right	(right arrow)
Beginning of line	Control (left arrow), or Control A
End of line or	Control (right arrow), Control Z
Top of file	Shift F1
Bottom of file	F1
Page up	Shift (up arrow)
Page down	Shift (down arrow)
Next Tab stop (inserts spaces) (no insert)	Tab Shift (right arrow), or Shift (left arrow)
Underline	
New or existing after text text	Shift F3 before and

Upper and lowercase characters

Switch between upper and lowercase	CapsLock
------------------------------------	----------

Change existing text to upper or lowercase	F3
--	----

Paragraphs

Begin paragraph	Control P
-----------------	-----------

End paragraph	Return
---------------	--------

Type-over text/ or Insert (toggle)	Insert
--	--------

Delete text

Character under cursor	Delete
------------------------	--------

Character to left of cursor	Backspace
-----------------------------	-----------

To end of line	Shift Delete
To end of file	Control Delete
Entire file	Clr Home
Restore last line or block delete	Undo
Text blocks beginning and --	Shift F5 to mark end of text block, then
Delete block	F5
Duplicate block [F2]. duplication and cursor, reduplicate block.	Position cursor, then After initial before any line or block deletions, position then [Undo] to
Move block [Shift F2]	Position cursor, then
Save block	Shift F8, then enter

filename

Save ASCII You can only set
160). right margin (10 to

Search and replace

Search forward F6

Search reverse Shift F6

Global replace Shift F7

Query replace F7

Tabs

Clear all Control Tab
Tab stops

Restore default Shift Tab
Tab stops

Clear Tab stop Shift F4
at cursor

Set Tab stop F4
at cursor

Halt printing Esc

Return to menu Esc