

a  
word  
processor

# EasyWriter™

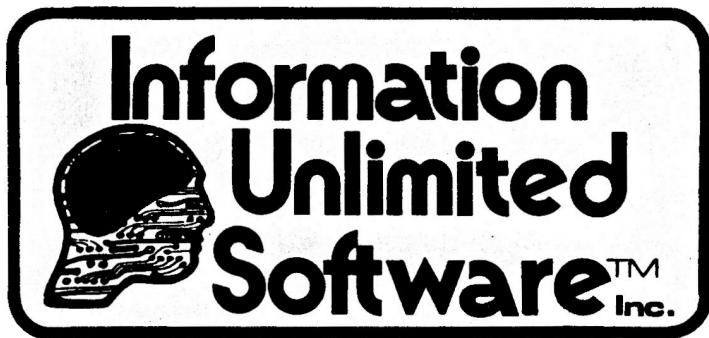
from

Cap'n  
Software



# EasyWriter™

is  
distributed  
by



146 N. Broad Street

Griffith IN 46319

Phone: (219) 924-3522

Published by  
Information Unlimited Software, Inc., 146 N. Broad Street,  
Griffith IN 46319, (219) 924-3522

Printed and assembled in the United States of America

This manual Copyright © 1979 by Information Unlimited Software, Inc. and Cap'n Software Company.

All rights reserved. No part of this manual may be reproduced in any manner whatsoever without the express written permission of the publisher. The sole exception to this: computing club newsletters, company house organs, school and college newspapers and publications and non-profit publications, which may reprint small passages so long as notice of copyright accompanies such passage and a copy of the publication in which passage is reproduced is forwarded to the publisher.

EasyWriter program Copyright © 1979 by John T. Draper  
(Cap'n Software), P.O. Box 575, San Francisco CA 94101  
(415) 841-6500

EasyWriter and the EasyWriter trademark are the sole and exclusive property of John T. Draper and his associated company, Cap'n Software, with exclusive license for distribution granted to Information Unlimited Software, Inc. Any person or persons reproducing all or any portion of this program in any and all mediums, for any reason whatsoever (except as outlined in this manual, shall be guilty of the criminal offense of Copyright violation and infringement, and shall similarly be subject to civil liability at the descretion of the copyright holder.

# **EasyWriter**™

a

word processor

for

Apple computers

by

**John T. Draper**

This user's manual authored

by

**Ken Silverman**

and

**John T. Draper**

Editing, cover design and graphics

by

**Gregg DesElms**

Cap'n Software drawing by Raetta Harper



# Acknowledgements

Cap'n Software and Information Unlimited Software, Inc. would like to gratefully acknowledge the cooperation and assistance of the following persons, without whose help the production of EasyWriter would have been a much, much more difficult task:

Ken Silverman

Larry and Karen Weiss  
(Eaglebeak & Kosmic Kareena)

Andy Hertzfeld

The entire membership of  
the San Francisco Applecore

# CONTENTS

ITEM	PAGE
Forward .....	1
All about EasyWriter .....	3
What EasyWriter can do .....	5
System requirements .....	6
On selecting a printer .....	7
Getting started .....	8
To begin using EasyWriter .....	9
On accidentally pressing RESET .....	10
Some things you should know .....	11
Text editing .....	13
Capitalization & data entry .....	13
Terminating lines & paragraphs .....	14
Table of editing commands .....	15
The Disk Filing System .....	22
Entering & exiting the system .....	22
Initializing and formatting disks .....	23
Saving files for the first time .....	25
The File Printing System .....	30
Explanation of parameters .....	31
Justification .....	33
Form feed .....	33
I/O routines .....	33
Multiple file printing .....	34
Catalog command .....	34
Changing the default values .....	34
Formatting commands within the text .....	35
Titling feature .....	36
User-defined character substitution .....	38
Tabulation & tabular data printing .....	40

SECTION	ITEM	PAGE
---------	------	------

## APPENDICES

A	Editing command summary (and removable reference card) .....	41
B	Print system formatting commands .....	43
C	Apple ASCII character set listing .....	45

## ILLUSTRATIONS

I	Sample display screen: Logo design .....	9
II	Sample display screen: Editing commands .....	15
III	Sample display screen: Disk Filing System .....	22
IV	Sample display screen: File Printing System .....	30

# Forward

Early in 1979, John Draper stood in a Sunnyvale, California computer store and spoke with customers and programmers. From his conversations, he learned that what the world needed, almost more than anything else, was a good word processor for Apple computers.

“Heck, I didn’t even know how to spell it, let alone what one was,” John told me later.

But others soon spoke of the need for a good program to satisfy the word processing needs of Apple users. So, in March of 1979, John set out to complete the task.

After intense research on the computer languages he might use, as well as research on word processors in general, he was ready to begin. The language he chose was FORTH, because of its compact size and efficiency. And the program he created was called TEXTWRITER.

Later “brainstorming” between John and a few of his associates yielded the new name, EasyWriter (a little catchier, don’t you think?), and it became the first product of his new company, Cap’n Software.

We saw a rough version of EasyWriter at the Fourth West Coast Computer Faire. We contacted John and asked him if Cap’n Software would like our company to distribute EasyWriter for him. Needless to say, he liked the idea.

It has taken most of the summer to get EasyWriter into the marketable form it is in now. A better word processor for Apple computers simply has not been written, and Information Unlimited Software is standing firmly behind it as one of the finest and clearly most useful micro computer programs anyone has yet to offer for Apple systems.

Good luck with your new EasyWriter! You’ve picked a winner!

Gregg DesElms,  
Director of Marketing

# All about EasyWriter

EasyWriter is a unique new word processing system for your Apple computer. It will help you perform two very important tasks:

1. You can compose and edit your text on the video display monitor of the computer.
2. You can format the completed copy for output to a standard printer.

EasyWriter is essentially a “paperless” typewriter, capable of doing everything a normal typewriter can do, with one major exception: EasyWriter absolutely refuses to help you waste your time manually writing, rewriting and correcting countless drafts of your text on paper.

EasyWriter eliminates that troublesome and time-consuming effort by allowing you to create your text files right in your Apple’s computer memory. These files are called “soft copies” (a term we’ll be using later), and can be revised and edited at the touch of a button.

This system allows you to search through your files for mistakes or specific key words that you might like to correct or delete. You can delete a character or word and replace it with a brand new one in a matter of a few key strokes. (Just think of all the money you’ll save on correction fluid.)

You can insert, delete or move entire blocks of text to suit your specific needs. You can chain together different files during the print-out function, and perform many other tasks usually available only on more complex and expensive computers or word processing systems.

Mini diskettes are used to magnetically store the typed text files. After you’ve composed and edited on EasyWriter for a while, you may save your copy on a disk (in case you want to add to it or edit it later), or you may direct EasyWriter to output the text to a printer for a “hard copy” (as opposed to the “soft” copy we spoke of earlier) of your file.

Approximately 110,000 characters can be stored on these convenient little diskettes. They can be mailed for as little as 30 cents. Just think, for the price of two normal-sized letters, you could send a seventy-page document to another EasyWriter user through the U.S. Mail — at a tremendous savings.

The disk system has been optimized for text file storage and retrieval. Simply stated, this means that accessing your file, once you’ve stored it on your disk, will be much faster than you’re probably used to on your Apple computer.

There are countless other features in EasyWriter — far too many to list completely here. But some of the features that we are particularly proud of, and that you'll learn more about later are:

- The system's ability to constantly display the status of your disk and how much space is left on it for your use.
- All text files are displayed, along with their lengths.
- Extensive error checking is done to remind you that certain operations might erase or modify a file and the computer will conversationally ask questions like, "Are you sure?" when you are about to tell the computer to do something that might send your work into computer oblivion.

Almost any standard printer will work with EasyWriter, and upper and lower case characters may be printed, despite your Apple's inability to display lower case characters on the screen. You may format your text during the printing stage of your text production by either entering the formatting data from the keyboard or by saving the formatting commands within the text, where they may be permanently stored for later use.

EasyWriter is written in a computer language called FORTH. It's an extensible language that allows easy modification and high speed operation. FORTH is an extremely condensed language that can be stored in a very, very small amount of your computer's memory. In fact, the entire EasyWriter program takes little more than 20K of memory, even though it is actually three separate programs:

1. A powerful text editor.
2. A very fast disk operating system.
3. A print formatting system.

# What EasyWriter can do.

Let us assume for a moment that you intend to compose a text file that, when printed-out, will be 54-lines-per-page; 80 characters-per-line. Based on that format, your computer can hold approximately ten pages of text in its memory at any given time.

So, you can “scroll” through the text — without having to wait for the disk drive — and quickly review your completed copy for errors. When you are confident it is finished, you can save it as a new text file or use it to replace an old, uncorrected file which had been previously saved on diskette.

Once you have saved this error-free file, you may keep it on disk for later use or print out as many copies as you need — you are limited only by the speed of your printer.

When you do begin to print, you may use the pre-set default parameters in the print system, or you can specify your own. Print options such as left margin placement, line length, page spacing, auto form-feed setting (if your printer has it), right margin justification, line indentation and starting page number are just a few of the variables you can control in the print system.

And, you can save these variables right in the text so you don't have to enter them all over again every time you want to print particular file.

No special lower case character modification is required to use EasyWriter, despite your Apple's inability to display lower case letters on the screen. We solved this problem by displaying characters to be capitalized when printed, in “inverse video” on the monitor screen. Later in this manual, we'll tell you how to use this feature. But for now, just trust us. When its time to print out the file, both upper and lower case characters will be output on paper.

# System requirements

To operate EasyWriter, you will need three things:

1. An Apple-II micro computer with 48K of memory.
2. An Apple disk drive, model Disk-II (and controller board, of course).
3. A printer and printer interface (although not having a printer doesn't necessarily prevent you from using EasyWriter for typing-in your text files. Later, when you need the printer, you could probably rent printer time from your local computer store).

**Important note on the Apple Disk-II drive:** EasyWriter utilizes the standard Apple disk drive (the Disk-II), but the disk format used in EasyWriter is *very* different from the one used in Apple's standard Disk Operating System (DOS).

This difference doesn't mean you have to buy a special DOS program — that's already in Easywriter. It only means that you will *not* be able to mix your EasyWriter files with other Apple programs or files.

**A final word:** All the information you'll need to operate EasyWriter easily and successfully has been painstakingly written in the pages that follow. We've made every attempt to make it easy for you, but let's face it — there are probably a few places where we didn't make ourselves very clear.

Fear not! We are available for your questions. Both Cap'n Software (the developer of this program) and Information Unlimited Software, Inc. (the distributor) may be contacted during any business day. If we can't answer your questions, by golly we'll find someone who can!

Just call us at (219) 924-3522, or drop a note in the mail to:  
Information Unlimited Software, Inc.  
146 N. Broad Street  
Griffith IN 46319  
Attn: Customer Services Department

Good luck with your new EasyWriter word processing system. It's extremely functional and easy to use, and with a little practice you'll be using your old typewriter as a door stop in no time!

# On Selecting a Printer

Before we actually get to the business of using EasyWriter, let's take a moment to talk about printers.

If you don't already have a printer and are contemplating buying one, here are some things you should consider before you spend a lot of money.

First, choose a printer with upper and lower case character capability and whose print quality looks good to you. IBM Selectric typewriters, modified to interface with the Apple are adequate, but you should carefully check the type of interface card that comes with the printer and make sure that it has compatible firmware built into the card. Ask the person selling you the printer card if the machine has the proper "built-in" firmware. (*For further information on serially interfacing your apple to a printer, you should refer to the "Apple-II Serial Interface Card A2L008 Installation and Operating Manual, publication WP-A2L008-130-0012."*)

If you are well-versed in using the Apple, and know how to program in assembly language, you should assemble your I/O routine into the \$300 to \$3FF area of memory. **DO NOT USE ANY LOCATIONS ON PAGE ZERO (\$00 to \$FF) BECAUSE THESE LOCATIONS ARE USED BY EasyWriter.**

Make sure the printer works correctly with your Apple computer before you try it on EasyWriter.

If you intend to do much high-quality printing, it is recommended that you purchase a dependable printer such as a *Qume*, *Diablo* or *Spinterm*. These quality printers are more expensive than the dot-matrix type, but are well worth the added cost because of their outstanding print quality. These machines also provide you with a wide variety of type styles and usually have proportional spacing capabilities. EasyWriter also has proportional spacing capabilities.

**One final note:** If you are using a serial or parallel interface card, make certain you note the slot into which the printer card is plugged. Later, you will have to tell EasyWriter which slot you're using when you are ready to print your text.



# GETTING STARTED

It is very important that you read through this manual at *least* once before attempting to use EasyWriter. Although you needn't read each and every word three times over, we *do* recommend you take some time and *really* get to know this book.

Pay special attention to the CAUTIONS and WARNINGS as well as the SPECIAL NOTES. These notices could save you untold problems later, when you are actually using EasyWriter.

However, don't let this warning fool you. EasyWriter is still *easy*. We've done our best to make it as uncomplicated as possible. But there are at least two things you can do to make your learning period faster. They are:

1. *Know* your Apple-II computer and the things it is capable of.
2. *Know* this book and the things it is attempting to tell you.

If you've never used an Apple-II computer before, and intend to get one for the purpose of using EasyWriter, we recommend that you read the disk Operating Manual that comes with the Apple Disk-II drive (publication A210012).

With this publication, you will learn a lot about the mechanical procedures of handling your diskettes and using the drive.

## CAUTION:

**NEVER, NEVER attempt to plug-in or unplug a disk controller card, printer interface or I/O card when the computer is on! (Consult your Apple user's manual.)**

# To BEGIN USING EasyWriter

First, make sure there is no disk in your drive. (If you have the new "auto-boot" ROM in your Apple, please consult your owner's manual. You may be able to leave a disk in the drive.)

Turn on your video monitor and your Apple-II computer. (Before you turn the machine on, you should make sure your disk drive controller card is properly plugged-in to the proper slot. Slot Number 6 is recommended by the Apple user's manual. We will assume your card is also in slot 6.)

Type **6, CONTROL-P** (or, if you have the new ROM, **PR#6**). Your disk drive should begin running and EasyWriter will load into memory. In a few seconds, the EasyWriter logo will appear on the screen.

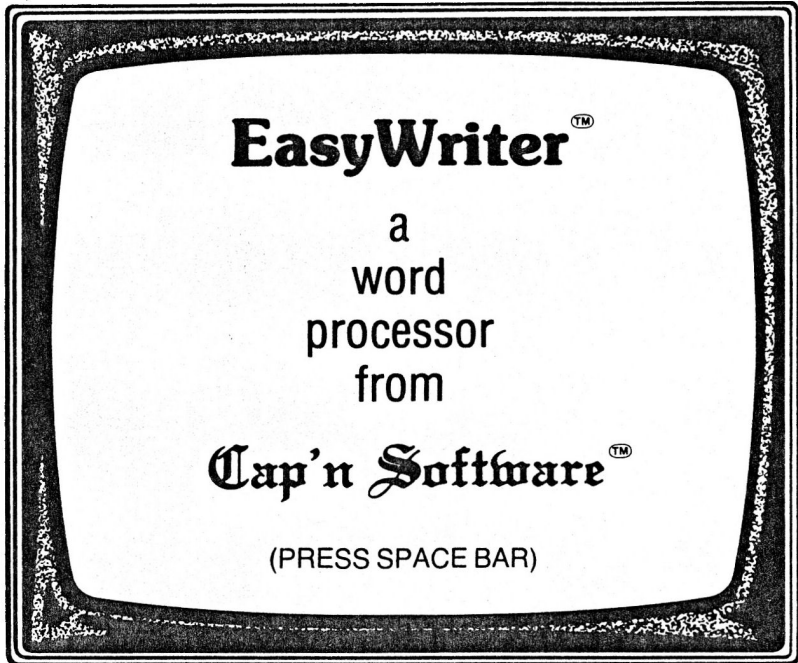


Illustration I

Sample display screen: EasyWriter logo.

Now, press the space bar and the actual operating system will load into memory. After a few seconds, the editing command table will be seen on the screen. (If you get any other response, it either means your computer isn't working properly or your system hasn't the required memory.)

A complete explanation of the editing command table will be discussed later in this manual.

To begin typing your text, press the space bar again and the screen will go blank. The cursor will position itself in the upper-left-hand corner of the screen. Just exactly what to type, now that you're this far, and how to type it will be explained in a moment.

However, let's first discuss a *common* problem with Apple computer users...

## On accidentally hitting the RESET key

Don't feel bad if, after you've really gotten started on some important text editing with EasyWriter, you accidentally press the **RESET** key. It happens, even to the *best* of us.

It's probably a good idea, until you get used to EasyWriter, to write-out your rough draft by hand before you begin to enter it into the system. This way, you have something to go back to if you have a problem keeping your finger away from the **RESET** key. Once you become accustomed to EasyWriter, you can begin entering "raw" text directly into the machine.

But, until that time, if you hit **RESET** a lot, here are some things you can do. (*This procedure may seem a bit advanced, since you haven't even begun to enter text yet, but just glance through it and remember where you found it. You'll need it later.*)

It is simply *not* possible to recover all the text that may have been lost from an accidental **RESET** because EasyWriter stores its text in the monitor. You will lose at least two lines, which would have scrolled off the screen; once when you originally press the **RESET**, and again when you re-enter EasyWriter.

If you should accidentally press **RESET**, and lose the two lines of text, you can recover by first entering BASIC (by typing **CNTRL-B**, **RETURN** as per your Apple-II owner's manual) and then typing **CALL 3075** at the prompt. Then hit **RETURN**. (Make no attempt to clear the

screen because what's on it is your *only* source of previously entered text.)

After you type **CALL 3075, RETURN**, your copy should scroll-up again, causing the top line that happened to be on the screen at the time to be lost.

We realize that you may feel like nothing will have happened at this point, but, in fact, you have now entered directly into the "editor" portion of EasyWriter. You should edit-out the **CALL 3075** command and *try* to remember which lines you lost so they may be re-entered.

Of course, you could eliminate this problem altogether by either covering or protecting the key, so you can't press it, or you could buy a special monitor ROM from Apple Computers Inc. that could prevent this problem. In either case, you'll probably be glad you read this section and remembered where it was in this manual next time you accidentally hit that unfortunately-placed **RESET** key yourself. Good-luck!

## **SOME THINGS YOU SHOULD KNOW:**

Here are a few things you should be aware of before you actually begin to type-in text on EasyWriter. (Yes, we know you're anxious, but this stuff is important. Read on.)

There are some minor limitations in displaying text on the monitor of your Apple computer. These limitations are not the fault of EasyWriter and, unfortunately, are inherent to the computer itself. But they are nothing we can't all live with, and they are discussed below:

- Since the Apple monitor can only display 40 characters per line, the text you type into memory shows on the video monitor in a different form than you will want it to appear in the printout.

No worry! This is only a small inconvenience because the print formatting commands "embedded" in text, or used in the File Printing System as standard default values will cause your text to correctly print out, in the line-lengths and indentation amounts you have specified.

- Only *printable* characters may be kept in EasyWriter files. This might be somewhat undesirable in some special cases because some intelligent terminals require control characters that enable them to change character sizes and fonts. (See the use of "User Defined Function" in the File Printing section of this manual.)

There are three reserved characters used in EasyWriter that you simply cannot send to the printer without using special methods,

which will be explained in detail in the File Printing System section of this manual.

These three characters have been reserved exclusively as commands to the print system. They are:

- The right bracket (**SHIFT M**) (not marked as a right bracket on the Apple keyboard).
- The “up” arrow (**SHIFT N**) which is used in the “titting” command. and
- The period (.) when used on the extreme left portion of a line, against the left margin. (Normally, a period will not occur there.) All of these will be discussed later in this manual.
- On entry into the Disk or Print systems, the text will scroll all the way up to the end of the file. This is to get text data all in one place in memory so the disk system doesn’t have to “hunt” for it. It’s really a timesaver!
- At least two printable characters *must* be on a line. Single characters on a line will be lost while scrolling. All empty lines will be closed-up when scrolling occurs. (This compacts the data in memory and conserves valuable memory space.) Extra spaces, when entered into the computer will be compressed to a single space while scrolling. (There are ways of embedding extra spaces between words, which are all detailed in the User Defined Character Substitution section of this manual.)
- It is important that you realize the differences between EasyWriter DOS diskettes and your other standard Apple DOS disks. The EasyWriter disk system is NOT compatible with Apple DOS. (We did this to make EasyWriter’s DOS more efficient with text files for both speed and ease of operation.)

An EasyWriter diskette cannot be “cataloged” except through EasyWriter itself. EasyWriter disks cannot be copied except as outlined elsewhere in this manual, but “master” disks, which will automatically load the EasyWriter program, can be created. (See the section on creating “master” and “slave” diskettes in the Disk Filing System section of this manual.)

# TEXT EDITING CAPITALIZATION AND DATA ENTRY

Finally, we're ready to type something into the system. Here's how we make capital letters:

Since the Apple-II displays only upper case characters, EasyWriter uses "inverse video" characters (a black character in a white field) to indicate upper case letters on the monitor. An inverse video letter is recognized by the printer as an upper case letter. All letters not in inverse video will print as lower case letters. **Remember this.**

To capitalize, press the **ESCAPE** key one time. **DO NOT HOLD IT DOWN AND DO NOT PRESS IT TWICE.** Now type a word and notice that EasyWriter capitalized *only* the first letter by placing it in inverse video. You do not have to press the **ESCAPE** key again to continue. EasyWriter will continue to display lower case characters until you press the **ESCAPE** key again to capitalize.

To capitalize an *entire* word or words (as you might use to title a section of text, much the same as the shift-lock key on a typewriter), press the **ESCAPE** key twice. Now, type a word and notice that every letter is in inverse video.

EasyWriter will *continue* to display in inverse video, thus interpreting those letters as capitals, until you release it by pressing the **ESCAPE** key once again. Now all letters you type will be lower case again.

## TWO FEATURES YOU'LL APPRECIATE

1. When you reach the end of a line of text, any word that doesn't fit on the 40-character-wide display of your monitor automatically "wraps around" to the next line. Go ahead, try it! Try using-up 36 characters on any line. Now, space over for the next word and type-in a five-letter word. Bingo! It dropped to the next line didn't it?

This outstanding feature eliminates divided words and also eliminates hitting the **RETURN** key at the end of each line of text. You could actually type your entire text without ever hitting the **RETURN** key.

2. When you are typing-in text and you approach that point when there are only 300 or 400 characters left in memory for your use, Easy-

Writer warns you that you are about to run out of memory space by sounding a “beep” every time you press a key. This is EasyWriter’s way of telling you it’s time to save your text to the disk and clear your computer’s memory of all text files.

This allows you to continue to type more text than the memory will actually hold, but which can be saved onto your disk and added to the original file when printed.

## TERMINATING LINES & PARAGRAPHS

Here’s how to tell EasyWriter when you want to end a paragraph and begin a new one:

**Remember this:** ALL EasyWriter TEXT MUST BEGIN WITH TWO (2) **SHIFT M** CHARACTERS ( which appear on the screen as a right bracket).

EasyWriter uses the **SHIFT M** character (or right bracket) for creating carriage returns and line feeds. You may use the **SHIFT M** character to terminate a line or paragraph. By inserting more than one **SHIFT M** character, one after another, you can signal EasyWriter that you are ending a paragraph and (with the additional **SHIFT M**’s) adding spaces between lines, paragraphs or other sections of text.

But, be advised, it won’t actually make paragraphs on the screen. If you want to end in the middle of one line and begin the next paragraph down on the next line, you’ve got to press the **RETURN** key and begin a new line. If you do this, you are only doing it to make the characters on the screen appear easier to read or follow. Whether you manually send the cursor to the next line or not, all you need to tell EasyWriter that you want to end a paragraph and/or add spaces between lines is press the **SHIFT M** character the appropriate number of times.

### CAUTION:

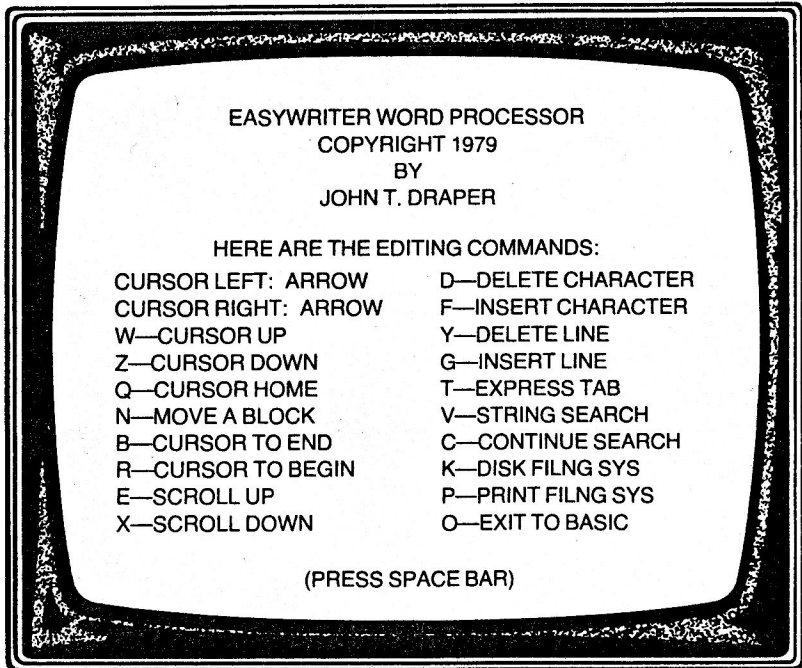
If you need to use this symbol in the contents of your text, see the section of this manual on User Defined character substitution. By using two or more **SHIFT M**’s, not only will one or more blank lines be inserted in the final text, but the first line of the text following the last **SHIFT M** will be indented automatically (provided you have pre-set the indent value to something other than zero — we’ll get to that later).

A paragraph **must** be separated by two or more **SHIFT M**’s, thus giving you one or more spaces between paragraphs. For further

information on setting indent values, see the section on Print Formatting Commands.

## TABLE OF EDITING COMMANDS:

In case you don't remember the table of editing commands that came-up on the screen just after the EasyWriter logo, we've reproduced it again for you, here.



### Illustration II

Sample display screen: Editing Commands



All of these **CONTROL** characters perform editing or system-controlling functions. With the exception of the "arrow" keys that move the cursor left and right, all of these control characters are activated by first pressing the **CONTROL** key and, while still holding it down, pressing the appropriate control letter key as listed below.

These characters are *extremely* important to know in order to use EasyWriter with speed and proficiency. Needless to say, however, there are a lot of characters listed here for you to remember all at once.

Therefore, we have printed a separate card and placed it in the back of this manual. On the card you'll find all of these characters as well as a few other important commands you'll need to remember in order to successfully use EasyWriter.

Until you've used the system enough to memorize these symbols, the card will be a handy tool to keep near your computer.

Briefly, here is a summary of these important control characters and their respective functions:

**CURSOR LEFT:** Left arrow located near right side of keyboard. Moves cursor to the left.

**CURSOR RIGHT:** Right arrow located next to left arrow. Moves cursor to the right.

**CONTROL W:** Moves the cursor up one line. When the cursor is on the uppermost line of the display screen, further key strokes will cause text to scroll down, one line at a time.

**CONTROL Z:** Moves the cursor down one line at a time. When the cursor is on the lowermost line of the display screen, further key-strokes will cause text to scroll up, one line at a time.

**CONTROL Q:** Sends the cursor to the uppermost left hand corner of the display screen, commonly referred to as "home."

**CONTROL N:** EasyWriter provides a method whereby you may move blocks of text from one section of the total text to another, or accumulate small sections of text in memory for relocation elsewhere.

(**NOTE:** In case you're interested, this is done by using a temporary "buffer" area in memory which can store 1,024 characters without affecting any other part of your text.

In EasyWriter, the "buffer" is a small area of memory set aside from the rest of memory and is used for storing small amounts of text characters temporarily.)

To use the "block move" feature, align the text so the first line of the

block of copy you want to move is at the top of the display screen. Position the cursor so it sits on the last line in the block of text you want to move (using **CONTROL Z** or **W**, whichever is appropriate).

If the block is larger than what is showing on the screen, position the cursor on the bottom line. You have now “defined” to EasyWriter which characters will go into the buffer area.

First, however, you must make sure the buffer is empty.

To clear the buffer area, do not move the cursor or undo anything you have just done. Merely type **CONTROL N**. Release the **CONTROL** key and type the single character “C”. You should hear a “beep” sound indicating that the buffer area is clear.

Now you are ready to transfer your text to the buffer. Type **CONTROL N** and follow with the single letter “S.” (Do NOT hold down the **CONTROL** key while typing “S.”)

The block you defined earlier will now scroll-up and leave the screen from the top. It is now in the buffer.

In a moment, we will explain how to replace this text in the area of your total text that you want to transfer to.

First, remember this: The **limit** of characters you may store in the buffer area is 1,024 characters. This translates into approximately one and one-half screens of text. To play it safe, always attempt to transfer no more than a paragraph at a time, unless your paragraph is more than one screen long. Then, pay special attention to how much of the *second* screen you attempt to transfer to the buffer.

After you decide where you want the block to go in your total text, align the line of text which is to *follow* the last line of your inserted block to the top of the screen, using the **CONTROL Z & W** keys.

When the text is positioned correctly, you are ready to bring what you saved in the buffer back to the screen, this time in its new position in the overall text.

Move the cursor down the screen **AT LEAST AS FAR AS IT WAS** when you originally saved the block to the buffer. **THIS IS IMPORTANT!** (If you can't remember exactly how far down you positioned the cursor originally, just place it at a position that you know is **FURTHER** down than before.)

Type **CONTROL N**, followed by a single character “R.” (Do not hold down the **CONTROL** key while typing “R.”) The block of saved text will now scroll down from the top, just as it left the screen.

The position of the cursor tells the computer how much of the saved block to move back to the screen. If you have moved the cursor above

the point on the screen that it was originally placed when you saved the text to the buffer, some of the text would not have returned. If you had saved a block larger than what showed in one screen, you would have to move the cursor to the bottom of the screen before you type the first **CONTROL N** and "R".

However, this will only pull part of the block back onto the screen. If your block was larger than one screen, some of it will still be in the buffer, and you may bring it back to the screen by leaving the cursor at the bottom of the screen and typing **CONTROL N** and "R" again, just as you should have typed **CONTROL N** and "S" twice to get the added text *into* the buffer in the first place.

**CONTROL B:** Scrolls the entire body of text up (toward the end of the entire text).

**CONTROL R:** Scrolls entire text to the beginning of the file and positions the cursor there.

**CONTROL E:** Scrolls the entire text down, one screen at a time (toward the beginning of the total text).

**CONTROL X:** Scrolls the text up, one screen at a time (toward the end of the total text).

**CONTROL D:** This character will allow you to delete one or a number of individual characters. If you want to delete a character, type **CONTROL D**. This places the computer into the "delete mode," and any character over which the cursor is placed at the time you press **CONTROL D** will be deleted and the rest of the text on that line will "close-up" that space.

You may repeatedly type **CONTROL D** and delete a number of characters on the line up to the end of that line. If you want to delete characters on the next line, however, you must first move the cursor down to that line. When deleting, characters will not "wrap around" from the lower line.

**CONTROL F:** This is the character insert mode of EasyWriter. If you want to insert a character or characters between other characters or words, first move the cursor onto the first character of the word that currently occupies the space into which you intend to insert a word or characters.

Type **CONTROL F**. EasyWriter is now in the character insert mode. Any character you type will be inserted into that line and a new space will open up with each new keystroke as the text after your insertion moves to the right and, when necessary, wraps around to the next line.

For example: If you wanted to insert the word “on” between the words “located the.” Place the cursor on the “t” of the word “the.” Type **CONTROL F** and then type the word “on.” Notice that each letter you type will push the word “the” over to the right. As words reach the limits of the line, space will be opened on the next line to accommodate the last word that was pushed off. If the word won’t fit on the next line, an empty line will be opened up, pushing the rest of the lines down, and the pushed-off word will be placed there.

There are three important things to remember about this feature:

1. You must *exit* from this mode when you are through inserting by typing any control key. (Usually you will have to type a control key anyway to move the cursor back to wherever you were *before* you decided to insert copy, so you will leave the insert mode automatically.)

2. If you are inserting characters and/or words and the next line opens-up when you hit **RETURN**, you have inadvertently switched to the “line insert” mode (which is normally attained by typing **CONTROL G**). If your cursor is on an empty line, type **CONTROL Y** (to delete the line). Backspace (using the arrow) or move the cursor to the place it was when you backspaced to correct your typing error. Press **CONTROL F** and resume typing the word.

(It’s probably faster to just continue typing after you’ve made a mistake while inserting, then go back and correct it later. Of course, this is up to your personal preference.)

3. **CAUTION:** If you make a mistake while inserting characters and use the left arrow to go back and retype the correct letter, you will have *exited* from the character insert mode. Pressing **RETURN** will also take you *out* of insert mode.

*One last note on the character insert:* It’s not desirable to place the cursor between words unless you are sure the inserted text will stay on the same line. If you have the cursor between words and you push the last word off the line and keep typing, you will be automatically placed in the line insert mode.

**CONTROL Y:** This is the “delete line” mode and is used fairly simply, (Actually, we’ve already shown you how to use it when we explained how to recover from an accidental switch to the “line insert” mode in a previous paragraph.)

Simply stated, however, you delete a line by placing the cursor anywhere on the line you want to delete. Merely type **CONTROL Y**

and the line will disappear. This can also be used to eliminate empty spaces between lines. Merely treat the empty space as a line and place the cursor in it. Type **CONTROL Y** and the space will disappear and the lines of remaining text will “close-up.”

**CONTROL G:** This is the “insert line” mode of EasyWriter. Merely place the cursor anywhere on the line **above** where you want the text to “open-up.” (For example: If you want to insert text or a space after line 2 and before line 3, place the cursor on line 2.)

Type **CONTROL G**. A “beep” will be heard. Now, type a **RETURN** and a space will open-up between the two lines.

**IMPORTANT:** The inserted text will keep pushing lines down until you exit from this mode by typing **CONTROL G** again.

**CONTROL T:** This is the “express tab” function of EasyWriter. Briefly, it allows you to send the cursor from the left side of the screen to the right side in a matter of a few keystrokes.

Each time you press **CONTROL T**, the cursor moves eight spaces to the right. It works in much the same way as a tabulator on a typewriter.

**CONTROL V:** This is the “string search” or word search function of EasyWriter. In order to understand why we call it “string search,” just consider that any word is nothing more than a *string* of characters. Therefore, a string search command (**CONTROL V**) will help you search for a given *string* anywhere in the text.

For example, suppose you want to find each occurrence of the word “simple” throughout your entire text. Here’s how to do it:

First, type **CONTROL R** to scroll the entire text to its beginning. Then type **CONTROL V**. The screen will clear and a single word will appear in the center of the screen. That word will be “WORD:”

Type the word or group of words (in this case, “simple”) that you want to “search” for. (NOTE: The maximum number of characters you may search for is 34.)

Now, press the **RETURN** key. Instantly, the text will begin to scroll. When it stops, you will find the cursor has found the first occurrence of the word or phrase in the text.

Now, make whatever correction you want to make (such as capitalization, etc.) and move on. To continue the search, and move on to the next occurrence of the word or phrase, just type **CONTROL C** and the text will scroll until another occurrence of the word is found or the text ends. To go back to the beginning, type **CONTROL R**.

**IMPORTANT:** The string search will only find the *first* occurrence of any words on a given line, if the word appears more than once on that same line.

Here's an added little feature you might like: EasyWriter will search strings of *like* characters using a "don't care" character (such as the "#"). In this way, you can search for words having a certain pattern, instead of particular words.

For example, if you want to search for each occurrence of words beginning with "w" and ending in "l" and are four letters long, just type "W# #l" when you tell the system what word to look for.

Thus, EasyWriter will search for each occurrence of both words like "well" and words like "wool" at the same time. It disregards the "#" symbol and looks for four-letter words beginning in "W" and ending in "l" (or whatever letters you choose.)

**CONTROL C:** This is the "continue search" command and is well explained in the previous "string search" explanation. Briefly, however, it is used to make EasyWriter continue searching for your pre-assigned word or phrase after it has found an occurrence of it.

**CONTROL K:** This command sends you into the disk filing system, which will be explained in detail in a moment.

**CONTROL P:** This command sends you into the File Printing System, which will be explained in detail in a moment.

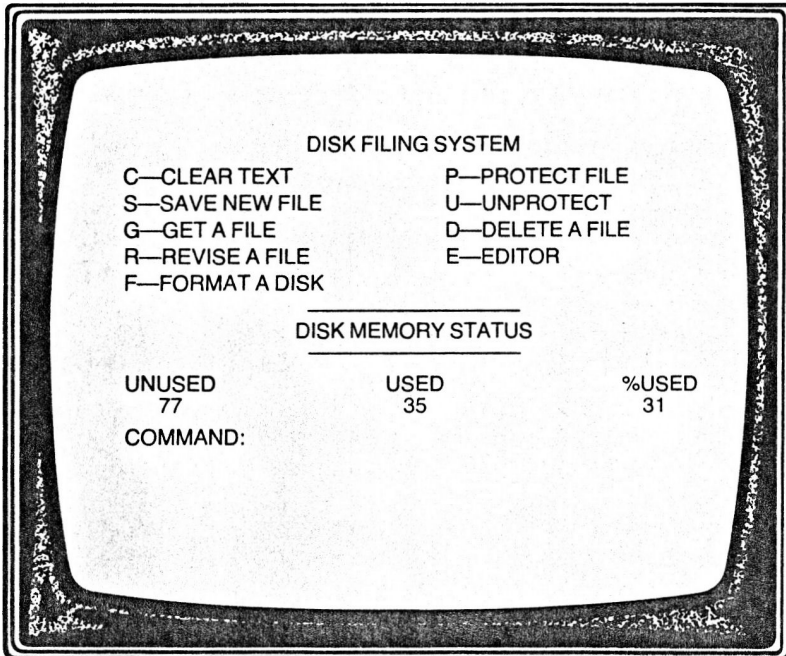
**CONTROL O:** This command merely causes you to exit the EasyWriter program and go to your resident BASIC language.

# THE DISK FILING SYSTEM

## ENTERING AND EXITING

Once you have successfully completed typing your text into Easy-Writer, you must enter the Disk Filing System to tell EasyWriter what you want to do with it.

To enter, type **CONTROL K**. The text in the file you have just completed will scroll off the display screen and the table of commands for the Disk Filing System will be displayed. You have never seen this table before, so study it carefully. (We have also reproduced it for you here.)



### Illustration III

Sample display screen: Disk Filing System

We'll explain these characters momentarily, but first we thought we'd tell you how to exit the File Printing System. It's simple: Just type **CONTROL E** and you will go back to the editor, where you've been working on your text.

**CONTROL K:** Enter Disk Filing System (from editor).

**CONTROL E:** Exit Disk Filing System ( to editor).

## INITIALIZING AND FORMATTING YOUR DISK

The information you are about to read about is a little tricky, so pay attention.

There is something you *must* know:

EasyWriter diskettes are not compatible with regular Apple-II DOS disks. EasyWriter should be clearly marked and never mistaken for your other disks.

EasyWriter DOS is completely independent of the Apple operating system and the commands are much easier to understand for the person unfamiliar with computers.

After you "boot-up" or load the program from diskette, you'll find that you won't be able to "catalog" the disk as you do with your Apple disks, nor will you find that it behaves like your present Apple DOS disks.

Now, here's another term we'd like you to know about:

"Master" and "Slave" diskettes. Simply stated, a "master" diskette is one which is capable of storing *both* the EasyWriter program as well as your text files. It follows naturally, then, that a "slave" is a diskette that only stores your text files, and if that's what you guessed, you were right.

As you might imagine, there is more room to store text files on a slave diskette than there would be a master because you are not taking-up part of the disk's capacity with the EasyWriter program.

And, therein lies the advantage to having "slave" disks. By using a master and slave-type system, you can store your text files more economically on fewer disks, because each slave disk has 20 per cent more storage capacity than a master.

In a master/slave system, you "boot-up" the EasyWriter program from your master (or a copy of your master, thus saving wear and tear on your originally purchased disk).



Then, after you are into the program and have done your editing, you can enter the disk filing system and save the text onto a separate "slave" disk.

In order to utilize this option (and please remember, it is *only* a suggested option — you might not use EasyWriter enough to warrant multiple disk usage), you must go through an "initialization" process. In fact, to even use the program at all on a brand-new disk, you must initialize it.

The actual process of initializing a new (out-of-the-box) diskette shouldn't actually concern the final user, but for your information, it involves putting "track" information onto the diskette so the computer will know where the data is stored. The "track" information is actually like putting addresses or special "pointers" onto the disk which are used to help the computer locate a particular spot on the diskette.

For now, let's concentrate on creating a master diskette.

**CAUTION:** Before you turn on the computer, make sure there is no diskette in the drive. After turning on the computer, place the master EasyWriter diskette into the drive with the label side facing up. (See the Apple disk-II manual for details on how to handle diskettes and how to use the drive. Also, if you have "auto-boot" ROM, see your manual.)

To create a master disk: "Bring-up" EasyWriter as described earlier in this manual.

In case you don't remember, here's a summary: With the EasyWriter diskette in the drive, type **6, CONTROL P** (assuming your drive controller card is in slot #6). (If you have the new auto-boot ROM, type **PR#6**.)

After the EasyWriter logo appears, press the space bar to enter into the Table of Editing Commands. Now, press the space bar again. When the drive has stopped and the cursor appears in the upper left corner of the screen, type **CONTROL K** to enter into the Disk Filing System.

Now, type **CONTROL F** (the command for formatting a new disk). Remove the disk from the drive and replace it with a new diskette, fresh from the box. (NOTE: If you have already entered text into EasyWriter, the information will *not* be destroyed when you initialize a disk.)

After typing **CONTROL F**, the screen should go blank. The following question should appear on the screen:

**“DO YOU HAVE AN EMPTY DISKETTE IN THE DRIVE?”**

At this time, make certain that you have replaced your master diskette with a new one. Then answer “Yes” by typing “Y.”

EasyWriter will then inform you:

**“THIS OPERATION WILL ERASE ANY EXISTING DATA ON THE DISKETTE. DO YOU WANT TO DO THIS?”**

If you answer “Y” for yes, EasyWriter will ask:

**“DO YOU HAVE TO INITIALIZE THIS DISKETTE? (Y/N)?”**

If the diskette is a brand new one, type “y.” If you are using an old diskette that has been used before, but don’t care about erasing what’s on it already, the disk has already been initialized and you should answer “N.”

EasyWriter will then ask:

**“DO YOU WISH THIS DISK TO AUTOMATICALLY LOAD THE EASYWRITER SYSTEM FROM A COLD START? IF SO, THIS TAKES UP 20% OF DISK SPACE THAT COULD OTHERWISE BE USED FOR FILES (TYPE Y/N)?”**

Here is where you must decide if you want a master or a slave diskette. As mentioned earlier, if you typed “Y” you will create a master diskette. It won’t get the logo, but it will function as EasyWriter in every other way.

If you answer “N” you will get more space available for files because the EasyWriter program itself will not be on the disk. (You will have to load EasyWriter, however, from a master each time you use the program, be it the original one you bought from Information Unlimited Software, or one you’ve copied.)

**IMPORTANT NOTE:** The procedure for initializing a disk, be it master or slave, is exactly the same until you get to that last question, when you must decide which you want.

Remember: A yes, “Y” answer will create a master disk. A no, “N” answer will create a slave diskette.

## **SAVING FILES FOR THE FIRST TIME**

Now, lets get back to the Disk Filing System.

If you’ve been following along with us throughout this manual, you are probably sitting in front of your machine with the Disk Filing System on the screen in front of you.

You have probably entered a few lines of text as we described the features to you and you are now ready to begin saving this file to the disk as we said we would teach you to do before we started telling you about all this initialization hocus pocus.

Well, in case you're not at that point, let's go back for a moment to when you were in the editor, entering text.

Assuming you were in the editor and you want to save the text you've just entered onto the disk, type **CONTROL K** to exit the editor and enter the Disk Filing System.

A table of disk filing system commands will appear on the screen, with a description of the one-letter commands. These commands control the disk and manipulate the text files. (Refer to the earlier illustration.)

**To save a file:** Type the letter "S." The computer will "prompt" you with the question "FILE NAME:" Type any name of your choice for this file. Pick a word or words less than 10 characters in length that will be recognizable to you as an appropriate title for this file of text.

Then type **RETURN**. The screen will momentarily go blank. Then you will return to the disk filing system display again. Notice that the file name you typed a moment ago appears under the table of commands and the file has been assigned a number. From now on, EasyWriter knows this file **ONLY AS THAT NUMBER!**

The larger number, to the right of the file name, indicates the actual length of the file in characters. (The maximum size any file can be is 22,000 characters, which is the maximum size file your computer memory can hold.)

**NOTE:** There is a limit to the number of named files you may store on a diskette. That limit is 31 files.

A slave diskette can hold 110,000 characters. This is enough to hold 56 pages of normal, single-spaced text with 54 lines per page and 80 characters per line.

A master diskette holds less because space must be reserved for the actual EasyWriter program. This amounts to about 85,000 characters, or about 42 pages of normal text.

(Having small files of less than 10,000 characters is no limitation because you can print out more than one file at a time, even if they are on different diskettes. We'll tell you about that one later.)

After "saving" the file to disk, if you want to continue working on your text, just type "E" to exit the Disk Filing System. You will be returned

back to the editor, where you may continue adding to it or changing it. However, if you want to save these new changes to the disk, you must consider it a “revision” procedure instead of a normal “saving” procedure, as we explained above.

**TO REVISE A FILE:** Enter the Disk Filing System from the editor by typing **CONTROL K** (as before). This time, type the letter “R” to indicate a revision. The computer will ask:

“ARE YOU SURE?” and sound a “beep” from the speaker. This alerts you to the fact that you are about to alter your original text and gives you a chance to change your mind in case you accidentally pressed the “R” key.

Indicate “yes” by typing “Y.” The system will “revise” the original file with the one you have been working on. Now, the newest file is on the disk and the original is gone. (You will notice the character count change.)

**NOTE:** If your file won’t fit on the disk because there is no more room left, a message will print out when you enter the Disk Filing System telling you there is no more room to save a file.

At this point, you must type “E” to exit the Disk Filing System and either replace the diskette with a new one (which will have to be initialized if it is “brand” new), or, if you have no other diskette, you may re-enter the Disk Filing System (**CONTROL K**) and delete an old text file, (“D”).

**CAUTION:** The revise command only works if you have previously saved a file, or have gotten one from the disk.

In any case, you may return to the editor to work on the file more, or you may start a new one (especially if the file is getting too large — over 10,000 characters).

To do this, “revise” your file for the last time (as outlined earlier). Type “C” to clear the computer’s memory.

Now, this is kind of tricky, so listen-up!

When you are ready to save this *second* portion of your work, you may re-enter the Disk Filing System with a **CONTROL K**. This time, however, you will have to save the file under a *new* name (or at least a new file number) because you’ve essentially started from scratch. The system won’t allow you to use the “revise” feature just yet because it doesn’t know which file you want it to revise. Once you save it, however, under a new name (or at least a new number), you may “revise” it just like the last one.

(REMEMBER: You can have more than one file with the same name. The files are reference by *number* only as far as EasyWriter is concerned.)

So, in essence, what you've done is this: You saved a second, completely separate file, under a separate name (or at least number) as an addition to or update of another previously named and saved file. Your main reason for doing this, though, would be if your original file was getting too large. Later, we'll explain how to get those two "separate" files together as one in the File Printing System.)

**HOW TO "PROTECT":** As a precaution, if you are satisfied with your text, as written, you may "write protect" your file to keep from accidentally deleting it later.

A "protected" file cannot be deleted or revised until it has been "unprotected."

To "protect" a file: Type "P" and then type the file number you want protected. The screen will flash and update the display. The file number now will be displayed in INVERSE VIDEO (as are capital letters in your text).

To "unprotect" a file: Type "U" then type the file number. The file number will no longer be in INVERSE VIDEO, and the file can be deleted or revised.

### **GETTING A FILE:**

Let us assume that a few days later, you want to examine or work on your files more. To do this:

Bring-up the system as described earlier. After you have gone past the logo and the Table of Editing Commands, type **CONTROL K** to enter into the Disk Filing System.

Now, type "G" to "get a file." You will need to type in the file number you want. The computer will load it from the disk. Now, to examine the file, type "E" to exit the Disk Filing System and return to the editor, where you can add to the file, examine or edit the text.

To incorporate the changes on the diskette, you have to "revise" the file as described earlier. Or, perhaps, you want to keep this old file on hand for comparison. In that case, you may save it under a new file name, following the file "saving" procedure, outlined earlier.

**DELETING A FILE:** Deleting a file is simple, but sometimes undesirable. After all, people *do* make mistakes, and once you've deleted a file, it is gone forever!

So, to prevent a possible mistake, the system prompts you with the

question, "ARE YOU SURE?" which is followed by a "beep" from the speaker. This alerts you to the fact that you are about to write over a file and perhaps destroy valuable text.

Stop and think for a moment about what you are doing. If you aren't sure about "deleting" this text, answer "no" by typing "N" and the **CONTROL D** command will be aborted.

If you type "Y", your file will be deleted permanently.

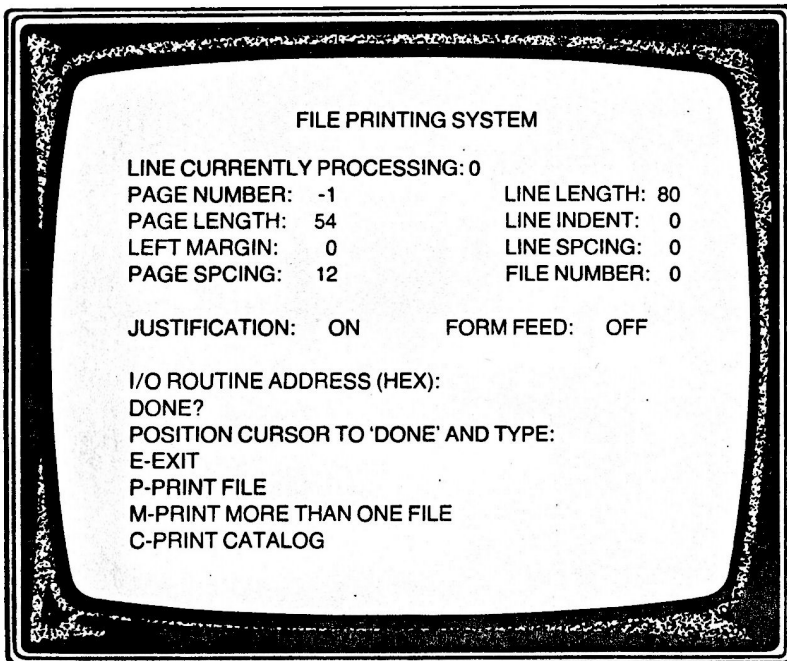
# FILE PRINTING SYSTEM

The file printing system is a print sub-system within the EasyWriter program. It's the whole reason we created EasyWriter because, after all, what good is a word processor if you can't print-out a letter or "hard" copy?

This File Printing System allows you to take the information you typed as text and convert it into a meaningful set of characters with meaningful commands for margin setting, indentation, characters per line and other important parameters that a printer can understand.

(NOTE: Refer to the section on how to select a printer. If you skipped it before, you need to read it now.)

An illustration of what the File Printing System looks like on the screen accompanies this information. Look at it and study it.



## Illustration IV

Sample display screen: File Printing System

As you might have imagined, if the file printing system is so darned important, it must also be a little more complex. Well, you're almost right. It *is* a little more complex, but you'll get the hang of it. If you haven't had any trouble until now, the File Printing System shouldn't "throw" you.

After you've successfully edited and revised and/or saved your text, you might want to print it out.

To enter the File Printing System, type **CONTROL P**. You should then exit from the editor and enter the File Printing System.

A table of print formatting values will appear on the display screen, with the cursor aligned to the first one.

The values shown on the display are the most commonly used values and are, therefore, the ones we've selected as normal "default" values (the ones the computer will use if you don't give it any new ones).

These print formatting parameters are fairly self-explanatory and refer to such things as margins, spacing, etc. (We'll explain them in detail in a moment.)

But before we do, just remember this:

There are two (2) ways to enter any new values to these formatting parameters. They are:

1. By positioning the cursor to the appropriate numerical value using the **RETURN** key ONLY! (Forget all the cursor moving commands you learned earlier when you are in the File Printing System.) You'll find that repeated pressing of the **RETURN** key will send the cursor to all of the values and then start again at the beginning.)

When you have reached the value you want to change, enter the new number over the old one. By pressing **RETURN**, you can move to the next one and change it if you wish or just press **RETURN** again and move to another.

2. By "embedding" the parameters into the text itself using special characters at the beginning and throughout the text which inform the printing system what format the final output will take. We'll discuss "embedding" later.

For simplicity's sake (and to avoid confusion), let's just consider the first method we just described: *Entering directly from the keyboard to the parameter listing shown on the File Printing System display.*

Here's an explanation of the parameters:

**PAGE NUMBER: -1** A display of -1 means page numbering is deacti-



vated. If you wish to number your pages, type in a "1". Remember to set this value to "1" each time you print out the file, or use the embedded command that performs this same function, which will be illustrated later. It should be noted that the page number actually displayed is one *less* than the value shows. This is because immediately after the page number gets printed, its value is incremented, always showing the next page number while the current one is printing. So SUBTRACT one from the actual page value and the displayed number will correlate with the actual page number being printed.

**PAGE LENGTH: 54** Number of lines on a page. If page numbering is activated, the page number counts as two lines. One for the page number and one for a space separating it from the rest of the text. If "titling" is activated, an additional 2 lines are added. A **RETURN** when the cursor is aligned after PAGE LENGTH will leave the value as is. If single spacing is used, a normal page length is 54, but when double spacing is selected, the page length should be set to 26.

**LEFT MARGIN: 0** A value from 0 to 100 positions the left margin of the text. This depends on where your printer head is positioned in relation to the paper. If left margin is set to 20, and your maximum carriage width is 80, your line length must be set to 60 or less so it will not exceed the maximum carriage width of 80.

**PAGE SPACING: 12** Some printers do not have a form feed option. This value prints blank lines between pages if the form feed option is turned off. If your printer uses form feed, and you have it on, this value is ignored.

**LINE LENGTH: 80** The maximum number of characters allowed in a line of text. If the justification is set to "on", extra spaces will be inserted between words to align the right margin to the maximum. If the justification is "off", the maximum line length will be whatever you choose for this value. This allowable range is from 25 to 125. If you choose values out of this range, a print formatting error will occur, and printout will stop. There will be two spaces after a period.

**LINE INDENT: 0** Each paragraph indents the first line by the number of characters specified by this value. Usually 5 is a good value. Default is zero, and negative values will "out-dent" or cause the line to be moved to the left. The allowable range of the line indent value depends on what the left margin value is set on. If the left margin value is set for 5

spaces in, then the maximum value of the negative indent would be -5. There is also a maximum limit for this value which is dependent upon the line length. If the line length is set on 80, the maximum value would be 55 (25 characters less than the line length.)

**LINE SPACING: 0** A "1" for this value will double-space, a "2" will triple-space. A default of zero is single-space. If you double-space, **you must remember to reduce by half the page length value.** On some printers a default value of "1" will cause single-spacing. So, for spacing, the actual numbers to be inserted in text can be used as the assigned value.

**JUSTIFICATION: ON** If you type a "Y" here, justification will be turned on. The default value is "ON". To turn it off, type "N".

**FORM FEED: OFF** Some terminals respond with a form feed. This causes the printer to automatically eject the paper and align it to the top. Type a "Y" if you want the form-feed on. It resets to OFF when you exit the Print Sub-System or if you type "N".

**I/O ROUTINE ADDRESS (HEX):** Here is where you tell EasyWriter which slot your card is plugged into. If your card is plugged into slot 2, type "C200", if in slot 1, type "C100" etc. Some people might use their own I-O routines. If you do, we recommend using Hex address 300. (See the section near the rear of the manual regarding using your own printer/driver routines).

If you wish to output formatted text to the screen only, type "FDFO", the output will appear to be garbled because the display cannot understand actual lower case but the format will be visible. If your text was typed-in using all caps (inverse video), the characters will also be readable when they are displayed on the monitor using the "FDFO" address.

**DONE?** — With the cursor here, you may exit, print, or print multiple files. All commands typed into the File Printing System must be done when the cursor is aligned here. The three options are:

E - Exit directly back to the editor.

P - Print out the text using above displayed formatting values.

M - Print out additional multiple files (chained in sequence).

C - Print Catalog of disk files

**MULTIPLE FILE PRINTOUT:** Multiple file printout is possible using EasyWriter. Each additional file added to the current file to be printed will be automatically loaded into the memory while the printing is going on. The file number displayed on the File Printing System display shows the current file being printed.

It's possible to print out many diskettes full of files, but the user must be ready to insert another diskette after the printing of the last file. For example, if you enter from Disk A the command to chain files 1, 2, 3, and 4 for printout and file numbers 2, 5, 1, 4 from Disk B, your printout command "M" will be entered as 1, 2, 3, 4, 2, 5, 1, 4 and unless Disk A is removed after printing the last file (4), and Disk B inserted, the File Printing System will recycle and print files 2, 1, and 4 from Disk A again.

There is a limit to the maximum number of files you can print. This maximum is 42. In most cases, this encompasses several disks filled with text. You can store and then print several hundred pages this way using more than one diskette.

When "M" is typed, the system accesses the disk and displays a list of files found on the diskette. In this way, you can see and decide what other files you want to print. You can choose the files in any order. It's a good idea to keep your files sequential on the diskette if possible. If you can't do that, keep a list of the order you want them printed.

You must have the first file loaded into the computer from disk. Then you enter additional files separated by commas. Do not enter the first file, because it already has been loaded from disk. At the last entry, type a **RETURN** then the files will immediately print out in numerical order entered.

**CATALOG COMMAND:** If you type a "C" next to 'DONE' EasyWriter will output to your printer the names and lengths of all your files in the Disk Filing System.

**CHANGING DEFAULT:** The printing default values can be changed to new values. This is done by entering the new values into the File Printing System and then going into the Disk Filing System. When in the Disk System press "F" to format a new disk. As the new diskette is formatted, it will have the new default values contained on it. (See Disk Filing System section on creating new EasyWriter diskettes.)

# FORMATTING COMMANDS WITHIN TEXT

EasyWriter provides a method of storing print format data within a text file. Text formatting commands will not print out on the printer, instead, they will modify the print formatting parameters *while* the text is printing. (The displayed parameters always show the current values and will reflect changes if any.)

All print formatting commands must start on the left margin and the preceding line must be terminated with one or more line-feeds, (SHIFT M).

These are called “embedded” commands.

Commands must start with a period (.) followed by a letter, the letter may only be typed using lower case.

## **CAUTION:**

INVERSE VIDEO WILL NOT BE RECOGNIZED BY THE FILE PRINTING SYSTEM AS A PRINT FORMATTING COMMAND.

The letter is used to choose the formatting parameter, followed by a number, which is its value. There cannot be any spaces between the characters that comprise the commands. Some formatting commands have no number following. An example using a number would be in setting the line length. The letter “L” is used, and assuming we want a line length of 65, we would type:

```
.L65
```

When the print system encounters this command, the line length will automatically change from the default values of 80 to 65 characters. The text line previous to the command must have a line feed character (SHIFT-M) at the end.

## **CAUTION:**

YOU CAN HAVE MULTIPLE COMMANDS WITHIN THE TEXT, BUT EACH COMMAND MUST BE ON A SEPARATE LINE. THIS DOESN'T USE ANY EXTRA MEMORY WHEN THE TEXT IS STORED, IT JUST MAKES IT EASIER AND FASTER TO INTERPRET THE COMMAND.

Here is a sequence of commands that sets the margin to 5, line length to 50, turns off the justification, and sets the indent to 5.

```
.M5 Left margin set to 5
.L50 Line length set to 50
.J1 Turn off the justification
.I5 Set the indent to 5
]] Must have these here when starting text.
The text starts after these commands.
```

**TITLING FEATURE:** Here is an example of how you can use the “titling” feature that will print a title on each page. Let’s assume that we want the title “EASYWRITER” at the top of each page, line length of 70, page length of 26 lines, double spaced, start numbering pages from 10, indent paragraphs to -5 (out-dent), left margin to 9, form feed on, justification on and automatic pause, to enable you to feed in another sheet of paper to the printer, then by pressing any key, the page starts to print.

```
.L70           Line length to 70
.G26           Page length to 26
.S1            Double spaced text
.N10           Start page numbering from 10
.I-5           Indent set to -5 (out-dent)
.M9            Left margin set to 9
.F1            Form-feed turned on
.P1            Pause feature turned on
©© EASYWRITER Title inserted here
]]             Extra line feed to separate the title (required)
```

The text starts here .....

**NOTE:**

If you do a great deal of the same formatting you might wish to set up a “header file.” Just type in your normal header (like above) and save it to the Disk Filing System. Anytime you need it, “get” your file and start your text.

A complete list of the text formatting commands is detailed in Appendix A. Here are a few important rules you should follow:

1. A print formatting command must be on the left most margin.
2. A formatting command must follow a line terminated by a **SHIFT-M** (]) character
3. Embedded commands have **PRIORITY** over entered commands.

4. All letters following the (period) i.e. the "L" in ".L80", must be entered into the screen in NORMAL video, (not reverse video).
5. All formatting values must be within the proper RANGE. A "PRINT FORMATTING ERROR" will result if not.
6. No spaces are permitted in the sequences of letters comprising an embedded command.

Example:

.L70	CORRECT
. L 70	INCORRECT
.L 70	ALSO INCORRECT

#### AN IMPORTANT NOTE ABOUT APPLE PARALLEL (PRINTER) INTERFACE CARDS:

We have tried to make EasyWriter as uncomplicated as possible. But, as with any computer program, we are all slaves to the limitations of the hardware.

We discovered a hardware problem that you will probably discover if you intend to use the Apple parallel printer interface card in your computer.

With EasyWriter, this card will always reset back to the default values, regardless of when you try to change them.

To alleviate this problem, you must initialize your card using Apple's own "warm start address." We called Apple Computers, and they told us it goes like this:

1. Get into your Apple monitor. To do this (if you are using the older monitor ROM), merely type RESET. If you are using the newer "auto boot" ROM, then boot-up EasyWriter; press the space bar to get past the logo and table of editing commands and get into the editor. Then type CONTROL O.

You are now in the monitor. Now type:

PR#n (where n is the slot number the card is plugged into); then type CONTROL I 135n (this sets the COL width); finally, type CALL 3072 to re-enter EasyWriter (if you booted it up previously).

2. Now, here's the second step. Get into EasyWriter's File Printing System. Then, when the system asks for the I/O routine address, type: Cn02 (remember, n is the slot number the card is plugged into).

That's it! From now on, there's nothing else you have to do.

Sorry for the inconvenience.

# USER-DEFINED CHARACTER SUBSTITUTION

You probably have noticed that, you cannot have more than one space between words, because when you type them into the editor and scroll the lines off the screen, the spaces will be compacted and removed. Sometimes it's desirable to have more than one embedded space between words on a line or elsewhere in the body of the text file.

A special user-defined character substitution is available that allows you to change the meaning of any printable character you can type using the editor, into any OTHER character (printable or not), when it comes time to print the text.

Each character (printable or not) is actually stored into the computer as a binary number. These numbers are ASCII code representations of the alphabet including control characters. (See appendix in rear of manual for complete list. You must use this appendix to select the character you want substituted during printout.)

Here is the way it's used to define a character:

- .U            Clears all previous definitions.
- .U#160      The "#" is a chosen character, which gets translated to ASCII 160 which is a "space".

## CAUTION:

USE CAUTION WHEN CHOOSING CHARACTERS YOU WANT TO HAVE CHANGED DURING PRINTOUT. AVOID USING A-Z OR OTHER COMMONLY USED CHARACTERS. USE SUCH CHARACTERS AS %, #, °, =, ETC.

## EXAMPLE

SCREEN SHOWS:

```
.U            Clear user variable
.U%160      Convert % to space at printout time
HERE IS SOME TEXT WITH EMBEDDED SPACES
%%%%%% HERE IS SOME MORE TEXT.
%%%HERE IS ANOTHER WAY TO ADD EXTRA
SPACES AFTER END OF SENTENCE. %%REMEMBER,EVERY
TIME YOU USE
THE %, A SPACE GETS PRINTED WHEN YOU RUN
THIS TEXT TO A PRINTER]]
YOUR PRINTER WILL PRINT THIS:
```

**HERE IS SOME TEXT WITH EMBEDDED SPACES            HERE  
IS SOME MORE TEXT.    HERE IS ANOTHER WAY TO ADD  
EXTRA SPACES AFTER END OF SENTENCE.    REMEMBER,  
EVERY TIME YOU USE THE            , A SPACE GETS PRINTED  
WHEN YOU RUN THIS TEXT TO THE PRINTER]]**

Only one character substitution can be used at a time. But it can be changed as often as you like. The example below shows how you can print the ] which normally cannot be done because the ] is interpreted by the File Printing System as a line-feed.

SCREEN SHOWS:

```
.U  
.U#93        NOTE: 93 is ASCII value of the "]", see ASCII table.
```

```
]]  
HERE IS SOME TEXT WHERE I CAN PRINT  
THE # AS OFTEN AS I LIKE #####]]
```

```
.U  
.U#160      Redefine the user character  
NOW THE # IS NOT THE SHIFT-M ANY MORE,  
AND NOW IT IS SOME ##### SPACE. ###  
WHICH CAN BE INSERTED FREELY WITHIN THE TEXT]]
```

YOUR PRINTER WILL PRINT:

**HERE IS SOME TEXT WHERE I CAN PRINT THE ] AS OFTEN AS I  
LIKE ]]]].**

NOW THE        IS NOT THE SHIFT-M ANY MORE, AND NOW IT IS  
SOME            SPACES WHICH CAN BE INSERTED FREELY  
WITHIN THE TEXT.

Another example is the use of underlining in the text. In order to accomplish this you must be able to turn off the LINE FEED on both the printer and default it on the interface between the Apple and the printer.

SCREEN SHOWS:

```
.SO  
.U  
.U%223  
THIS IS A TEST OF UNDERLINE  
%%%%%%%%%
```

YOUR PRINTER WILL PRINT THIS:

**THIS IS A TEST OF UNDERLINE**

---



When you UNDERLINE you have both auto line feeds turned off. You also turn off the one EasyWriter puts out (.SO). You must put it back after the underline is used. Add (.S1) after you have completed the line and your printer will auto line feed again.

## TABULATION & TABULAR DATA PRINTING

Very often, it's required to printout tabular data, or text grouped in columns. As an example, it may be desired to print out text like the following:

<u>COMMAND</u>	<u>RANGE</u>	<u>DESCRIPTION</u>
L	25-125	LINE LENGTH
M	0-100	LEFT MARGIN
A	4-20	PAGE SPACING

This can be done by using the (.t) function (TAB). The example was typed like this:

```
.T           clears previous tabs
.T*18       I choose an "*" as tab, 18 as column.
.T*28       Second tab position to 28.
```

```
]])
L*25-125* LINE LENGTH]
M*0-100*LEFT MARGIN]
A*4-20*PAGE SPACING
```

```
]])
.T           Although it's not necessary, we recommend that
              you clear all tabs when done, so you can use the
              "*" again when you need it
```

A symbol must be used with the TAB function to define the TAB, and a number must be typed in after the symbol for the amount of columns over you wish. Use a symbol that you would not normally use in your text. (You can set a maximum of 8 eight TABS on a line and they react just like a typewriter. If you wish not to put something in a column you must still TAB past it.)

NOTE: On a typewriter if you don't use all TABS on a line it doesn't matter. When you line feed, you start from the beginning again. In the case of EasyWriter, you must use all TABS set on each line or your formatting will come out wrong. If not used just press the symbol as many times as you have TABS set.

If you wish to format numbers with your TABS use a combination of the user-defined (.U) for a SPACE.

# APPENDIX A

## EDITOR COMMAND SUMMARY

- CONTROL - Q:** "Homes" the cursor to the upper left corner of the screen.
- CONTROL - A:** Moves the cursor to the left, the left arrow also does this function .
- CONTROL - S:** Moves the cursor to the right, same thing for the right arrow.
- CONTROL - W:** Moves the cursor up one line on the screen. If the cursor is at the top of the screen, the text will scroll down each time the key is struck.
- CONTROL - T:** Tabs the cursor over to the right 8 spaces. If you move it over past the end of the line, the cursor will displace itself 4 lines down. You should then hit CONTROL-Q and space the cursor down on the line you were on and try again.
- CONTROL - Z:** Moves the cursor down one line on the screen. If the cursor is on the bottom line of the screen, the text will scroll up each time the key is struck.
- CONTROL - X:** Causes the text to scroll up one screenfull.
- CONTROL - E:** Causes the text to scroll down one screenfull.
- CONTROL - R:** Causes the text to scroll to the end making the last part of the text at the bottom of the screen.
- CONTROL - B:** Scrolls the text so the beginning of the text is at the top of the screen.
- CONTROL - F:** Goes into the character insert mode so each character typed will push the following words on the line over to the right. Any other control character command will automatically exit such as a left arrow or a right arrow.
- CONTROL - D:** Deletes the character under the cursor, the rest of the letters on the line will be moved over to the left.
- CONTROL - G:** Goes into the line insert mode. Place the cursor on the line to insert AFTER, then hit the CONTROL-G key, you will hear a beep, then hit a RETURN, a space will be opened up so you can start typing in your text. When you get to the end of a line, a new line will open up. This will continue until you're

done inserting text and hit another CONTROL-G to exit.

**CONTROL - Y:** Deletes the entire line where the cursor is. All other text will move up to fill the opened space.

**CONTROL - N:** Block move commands. See details on block move. (S) puts block from text into a temporary buffer, (R) replaces block from temporary buffer back into the main text.

**CONTROL - V:** Goes into a search mode. The screen goes blank, you type in the word or words you wish to search, and the text will scroll down looking for the word. If the word gets found, the cursor will align itself to the front of the word. A CONTROL-C will continue the search. You should hit a CONTROL-B to scroll text to the top of the screen. The search always starts at the top of the text and works down.

**CONTROL - C:** Continue search. Word will stay in memory until you change it.

**CONTROL - O:** Exit to BASCI. You should never exit unless you're done using EASYWRITER. There is no D.O.S. because EASYWRITER writes over the D.O.S.

**CONTROL - P:** Goes to the PRINT SUB SYSTEM so you can print out your file. Once you enter the print system, you have a different set of commands to print one file or many. Once in the print system, you can:

P - Print one file

M - Print many files

E - Exit back to editor.

C - Print catalog.

**CONTROL - K:** Goes to the DISK FILING SYSTEM to get, save, or modify a text file from disk. Once you leave the editor and go into the DISK SYSTEM you have a completely different set of commands, which are:

C - Cold return, erases text

S - Save new file

G - Get or load a file

R - Revise a file

P - Protect a file

U - Unprotect a file

D - Delete a file

E - Return to editor without erasing text.

# APPENDIX B

## PRINT SYSTEM

### FORMATTING COMMANDS

### ("EMBEDDED" COMMANDS)

These commands have to appear in the text, not necessarily before the text (except the "tilling" commands). The print formatting commands are entered into the text as normal video characters. This means they are not capitilized using the "ESCAPE" key.

**TWO SHIFT N CHARACTERS:** Starts a title that gets printed out at the top of each page. Must be immediately preceding the start of the text. It CAN follow any of the print formatting commands. A title MUST have a (I) SHIFT-M character following the text in the title.

- .NO** Disables the page numbering feature. Page numbers on display during printout will show up as -1.
- .N5** Starts numbering pages starting at "5". You can put any number in there including negative numbers. The range is from -32768 to +32767.
- .P1** Causes the printer to pause so you can manually feed paper into it at each page (This will also occur when you first start to print your text). Hit any key to resume printing after you insert next empty page (or at the start of printing).
- .PO** Turns off the pause feature.
- .C** Centers the following line of text, provided:
  - a) Line is terminated by a (I) (SHIFT-M) character.
  - b) Indent set to zero.
- .M5** Sets the left hand margin to 5 spaces from the left. The allowable range is from 0 to 100.
- .I3** Indents the following paragraph by the number following the "I". The indent can be negative provided the left margin value is set to some value. If the margin value is set to 10, then the lowest indent value can be -10. A -11 will cause a formatting error.
- .SO** Sets the number of spaces between lines. Note: Some printers give an automatic line feed at the end of the line, or when a carriage return is sent. If so, then "SO" will single space and "S1" will double space. If your terminal or

## A SPECIAL ADDED FEATURE:

Just to prove to you that we are constantly improving EasyWriter for you (without improving on the cost to you), here is a special added feature that Cap'n Software put into the program so recently that this manual was already being printed. Therefore, we had to put this information on a separate, unnumbered page and insert it later. (Now you see why we chose a three-ringed binder.)

At any rate, here it is: EasyWriter has built-in variable spacing capabilities. Now, your printer might already have variable spacing capabilities. That's one thing. We're talking about variable spacing WITHIN EasyWriter. So, it doesn't matter what your printer has got. You can now have variable spacing within your printed text, and EasyWriter is the only Apple word processor on the market (at the time of this printing) that has it!

Variable spacing simply means that, when you have your justification ON, each of the words on each of the lines will be more evenly spaced. There will be no more large gaps between words in order to make the spacing work out so the right margin will even-up. Instead, EasyWriter now has the ability to calculate incremental spaces between individual characters (instead of words), thus making the line of copy look very, very professional and evenly spaced.

You can turn this feature on and off, too. Here's how to use it (it's easy):

You turn variable spacing ON by "embedding" a special command within the text, prior to that text that is to be right justified and variably spaced.

The command is .Dn, where n is the Horizontal Motion Index (HMI) of your Diablo or Qume brand printer (since those are the only two we've had a chance to test at this early date).

The HMI is merely the amount of incremental space EasyWriter will put between the letters. IMPORTANT NOTE: You will never want to make this HMI number less than 10 or more than 20. The normal range is 11 to 14, and a typical variable spacing command would be .D12

Making the HMI number low (10 or 11) will putsh your letters more closely together. Making the HMI number high (15 to 20) will put more space between individual letters (a possibly desirable situation if you want to emphasize a particular word or phrase).

Turn variable spacing off by entering:.DØ

# Editing Command Reference Card

**(Remove & place near your computer)**

Here is a summary of the editing commands for your  
easy reference.

Cursor right: Right arrow

Cursor left: Left arrow

CNTRL W: Move cursor up

CNTRL Z: Move cursor down

CNTRL Q: Send cursor "home"

CNTRL N: Move a block of text

CNTRL B: Move cursor to end

CNTRL R: Move cursor to beginning

CNTRL E: Scroll text up

CNTRL X: Scroll text down

CNTRL D: Delete a character

CNTRL F: Insert a character

CNTRL Y: Delete a line

CNTRL G: Insert a line

CNTRL T: Express tab

CNTRL V: String search

CNTRL C: Continue search

CNTRL K: To Disk Filing System

CNTRL P: To File Printing System

CNTRL O: Exit to BASIC

**EasyWriter**  
**Apple-II Word Processor**