FRANKLIN ACEWriter II

REFERENCE MANUAL

FRANKLIN
COMPUTER CORPORATION

ACEWriter II™

WORD PROCESSING SYSTEM

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Documentation
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For Franklin ACE 1000 & ACE 1200 Computers

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Don't Skip This Just Because It's A

PREFACE

Some of you are old hands at computers; some of you have never had anything to do with them before. Some of you know word processing, and some of you probably still have a manual typewriter. And finally, some of you are raring to go, and some of you are scared stiff.

The one thing you have in common is that you're all new to ACEWriter II and need to learn to use it.

There are three basic barriers to learning anything. The first is thinking you already know it (a "why bother" attitude). The second is deciding you *can't* learn it. And the third is going past words in your reading that you don't fully understand.

Perhaps we've helped those of you who think you already know by just pointing this out. After all, if you've never used ACEWriter II before, no matter how much you do know about computers and word processors, there's probably still something we can tell you (or else why read the manual at all).

As far as the second goes, no one can *guarantee* that you can learn it. But, starting off thinking you can't makes it a lot more difficult. In a sense, thinking makes it so. So try to adopt an attitude that it's at least possible for you to learn it. Things will go much more smoothly.

Handling the third is a mutual responsiblity. You have to make sure you understand the terms, and we have to make sure we've provided a decent explanation. We have tried to include a definition for each new technical term the first time it's introduced. This is to point out to you when a word you may be familiar with in a different context is being used in a specific way in "computerese" (technical computer jargon). It's also so you don't have to go hunting around the manual to try to figure out terms before you can proceed.

This manual is a kind of reference/workbook combination. It includes descriptions and explanations, exercises, and outline summaries at the end of sections so you don't have to reread everything if you just need a refresher.

Once you have completed this manual you will know everything about operating ACEWriter II. You may, however, need more information about your Franklin ACE computer or printer hardware. These topics are best handled by the reference manuals you recieved with your computer equipment. As you read through the ACEWriter II manual, keep the other manuals handy for reference and clarification.

We hope learning ACEWriter II will be easy for you, and that soon you'll be an ace writer too!

1. GETTING TO KNOW US

1.1 System Master Diskette

The system master has all the instructions that make it possible to enter, store, retrieve, and print documents. When you insert it in the disk drive and turn power on, these instructions are loaded into memory and you've got a word processor.

The master diskette also contains the Driver Configuration Program (DCP). This program contains routines to create various video displays and the special typefaces available with some printers.

The diskette supplied by ARTSCI is a "master" diskette because it contains all the options and drivers, but it is not configured for any one system. You use the Driver Configuration Program to create a "slave" driver diskette that has the correct files for your configuration.

1.2 Creating a Slave Driver Diskette

To execute the Driver Configuration Program, boot the ACEWriter II system master diskette. "Booting" simply means giving something a kick to get it going. In this case, it refers to getting the information from the ACEWriter II system master into memory so you can use it.

To boot ACEWriter II, insert the system master diskette in the disk drive and close the door. Then, turn on the computer (remember, the switch is in the back) and the monitor.

ACEWriter II will boot automatically when you do this.

If you're in BASIC (where you might be if you had just exited another program), type:

P R # n (n is the slot the disk card is in) (RETURN)

NOTE: The keystroke conventions in this manual are as follows: The + means that you hold down keys simultaneously. For example, CTRL + SHIFT + @ means that you hold down both the CTRL and SHIFT keys while you press @. Keys with just space between them (such as P R # 6 above) should be pressed separately in the order given.

Also, all letter keys are shown in upper case, so you don't mistake an I (L) for a 1, for example. You type them in lower case, however.

When you boot the system master, the following menu appears:

```
ACEWRITER II

PLEASE SELECT VERSION:

1 - 40/80 COLUMN (MORE FREE SPACE)

2 - 40/70/80 COLUMN (LESS FREE SPACE)

3 - DRIVER CONFIGURATION PROGRAM

YOUR SELECTION?
```

Figure 1.1 - ACEWriter II Boot Menu

1.2.1 Driver Configuration Program

Press the number 3 key. The Driver Configuration Program will be loaded and soon you will see the title page. Once the title page is up, DCP will read some data files that tell it what devices and drivers are available for use. This takes about five seconds, after which the first menu is displayed.

NOTE: Do not remove the system master diskette until prompted to insert another diskette. As you answer the menu questions, DCP may try to load driver programs off the master diskette.

The Video Variety menu list the different video display options supported. They include the standard 40 column, Franklin 80 column interface card and ARTSCI 70 column software, as well as some other popular video interface cards. Each device is listed by number. Enter the number you wish after the WHATCHA WANT prompt, then press RETURN. You may (or may not) be asked which slot the video interface card is in. If the WHICH SLOT prompt appears, enter the slot number (usually 3) then press RETURN.

The Printer Potpourri menu is displayed next. Enter your printer selection after the WHATCHA NEED prompt then press RETURN. If your printer is not listed, pick UNLISTED PARALLEL PRINTER or UNLISTED SERIAL PRINTER as appropriate. Enter the slot number of the printer interface after the WHICH SLOT prompt then press RETURN.

When you have completed these menu selection, a list of what you have selected is displayed.

If the list is *not* what you want, type N after the WHATCHA SAY, OK? Y/N prompt then press RETURN. The Video Variety menu will reappear so you can start again.

If the list is correct, type Y after the prompt then press RETURN. The prompt REMOVE MASTER DISKETTE...INSERT SLAVE (BLANK) DRIVER DISKETTE is displayed.

Remove the ACEWriter II system master diskette.

If you insert an initialized diskette and press RETURN, the configuration files will be saved onto it. The diskette may have other files on it, they will not be disturbed. If you insert a blank (unformatted) diskette and press RETURN, a message is displayed telling you that DCP cannot read or write to that diskette and asks if you want it initialized.

If it really is blank (you didn't leave the door open, etc.), type Y and press RETURN. The diskette will first be initialized (destroying any files that where on it) then the configuration files will be saved onto it.

If the diskette is not blank (you did leave the door open) and you do not wish it to be destroyed, type N then press RETURN.

Correct the problem that caused the error then press RETURN to save the files.

You have now made a slave driver diskette. Remove the slave driver diskette and label it. Put the ACEWriter II system master diskette back in the disk drive.

NOTE: The slave driver diskette now contains a file called SYS.OPTIONS. It tells ACEWriter II the video and printer slots and whether video or printer driver programs are needed. The file VIDEO (if required) contains the video driver program. The file PRINTER (if required) contains the printer driver program.

A final prompt is displayed, asking if you would like to make another slave driver diskette. Type N then press RETURN.

You will be left in BASIC with the] prompt. To start ACEWriter II, you must reboot the ACEWriter II system master diskette.

1.2.2 Slave Drivers and Hard Disks

DCP will only produce slave drivers on floppy diskette. Once created, the slave driver can be copied onto a hard disk volume using the standard disk copy utilities supplied with the hard disk system software.

1.3   Booting ACEWriter II

To boot ACEWriter II, insert the system master diskette in the disk drive, gently close the door, and turn on the power to the computer. The system will boot automatically.

If you are already in BASIC, with the] prompt, you may also boot the system by typing:

P R # n (n is the slot the disk card is in) (RETURN)

NOTE: The system must be in the 40 display mode when you boot ACEWriter II. If you just turned on the power, it will be. If you boot from BASIC, you may have to turn off the 80-column display. Pressing RESET assures a 40-column display.

1.3.1   Booting ACEWriter II with a Hard Disk

When you boot a floppy diskette, as described above, the Floppy Disk Operating System (DOS for short) is loaded into memory. The floppy DOS does not know how to talk to hard disks. For this reason, a special boot procedure is required if you wish to use your hard disk for file storage. As an example, let's assume you have a hard disk in slot 6 and the floppy drive is in slot 4.

First boot the hard disk. Use the procedure outlined in its manual (typically P R # 6 (RETURN). When the hard disk is up and running, insert the ACEWriter II diskette in the floppy disk drive and catalog it:

CATALOG,S4 (RETURN)

Your will see a BASIC program called HELLO in the directory listing. This program simulates a floppy diskette boot, but does not load the floppy DOS. It leaves the hard disk's DOS intact. Run the HELLO program:

RUN HELLO (RETURN)

The boot menu will appear, just as it does after a normal floppy disk boot.

NOTE: The ACEWriter II system master diskette is copy protected. You cannot copy it directly onto your hard disk system. It can only be loaded from the floppy disk into memory as described above. Additionally, the ACEWriter II program is not listed in the directory and can only be loaded by booting the diskette or running the HELLO file.

1.3.2   ACEWriter II Boot Menu

After a successful boot, a menu is displayed offering two versions of the ACEWriter II program.

```
ACEWRITER II

PLEASE SELECT VERSION:

1   40/80 COLUMN (MORE FREE SPACE)

2   40/70/80 COLUMN (LESS FREE SPACE)

3   DRIVER CONFIGURATION PROGRAM

YOUR SELECTION?
```

Figure 1.2 - ACEWriter II Boot Menu

1.3.3   40/80 Column Version

If you have *not* selected the 70 video display when making your slave driver diskette, type 1. The 40/80 column version of ACEWriter II will then be loaded into memory. This version gives you about 25 kilobytes of free memory for your document files.

1.3.4   40/70/80 Column Version

If you wish to use the 70 column display (and have made a slave driver diskette specifying that), type 2. The 40/70/80 column version of ACEWriter II will be loaded from the master diskette. This version gives you about 13 kilobytes of free memory for your documents.

The 40 and 80 column displays are generated by hardware. The 40 column hardware is built-in and the 80 column hardware can be optionally added. These hardware devices are self-contained and do not require any additional memory space to operate.

The 70 column display is implemented in software, as a video driver program. It requires a high-resolution graphics page to display the characters (8 kilobytes of memory) and memory space to hold the character set definition and driver program (another 4 kilobytes).

Here are the trade-offs:

1. Pay money to buy an 80 column card and have all the memory available for your document.

2. Pay nothing for the 70 column display but only have half the memory available for your document.

3. Pay nothing, have all the memory available but only see 40 characters at a time using scrolling.

The ACEWriter II was designed to take advantage of 80 column display cards. Although they are not required, and cost extra money, we think they are well worth their cost and offer the best performance with ACEWriter II.

1.4 Title and Copyright Page

Once you have decided on one of the two versions, and pressed the number (1 or 2, do not press RETURN), it is loaded from the ACEWriter II system master diskette into memory. The title and copyright page is then displayed.

ACEWriter II

40/80 Column Display

Copyright 1983 ARTSCI Inc.

All Rights Reserved

Insert Slave Driver then press RETURN.

(Opt. enter ,Ss,Dd,Vv before RETURN.)
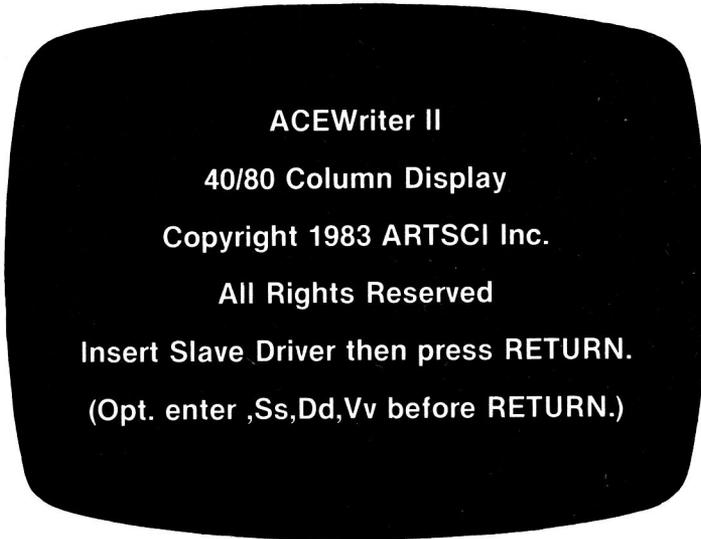
1.4.1 Configuration Boot

At the bottom of the screen is the prompt to Insert slave driver then press RETURN. This is the slave driver diskette you created using the Driver Configuration Program. It contains the configuration files that tell ACEWriter II what video and printer devices and drivers you wish to use.

Just as you "booted" ACEWriter II to get the program into memory, this prompt is called the Configuration boot because it "kicks" the configuration files from the slave driver diskette into memory and turns them on.

Insert your slave driver diskette then press RETURN.

1.4.2 Optional Drive Specification

If you have more than one floppy disk drive or are using a hard disk and have copied your slave driver disk onto one of its volumes, you can optionally specify which slot, drive or volume the system can find the configuration files on. You do this by entering the drive specification before pressing RETURN.

This is the form for entering the optional disk drive specification:

,S(slot number),D(drive number), V(volume number) (RETURN)

You *must* begin with a comma, then type the letter and number. Each letter and number pair is separated from the others by commas. You do not have to enter all three.

If you wanted to use a second floppy drive you might enter:

,D2 (RETURN)

To use volume 23 on a hard disk in slot 6, enter:

,S6,V23 (RETURN)

1.4.3 Default Configuration

If you wish to skip the configuration boot, for whatever reason, press ESC. The standard 40 column video display will be used, the printer slot will be set to 1, and no drivers will be available.

Once the configuration files have been booted, the system will switch from the 40 column display mode to the display selected by the configuration files. The screen will be cleared and the ACEWriter II system menu will be displayed.

1.5   The ACEWriter II System Menu

The ACEWriter II System Menu is a list of the major areas of function available in the program. Since the program itself is a "system," each area of function is called a "subsystem." Here's what the menu looks like:

```
ACEWRITER II SYSTEM MENU

 1. EDITOR SUBSYSTEM
 2. FILER SUBSYSTEM
 3. PRINT SUBSYSTEM
 4. FORMAT SUBSYSTEM
 5. CONFIGURATION SUBSYSTEM
 6. EXIT TO BASIC.

SELECT NUMBER OR LETTER, PRESS RETURN
```
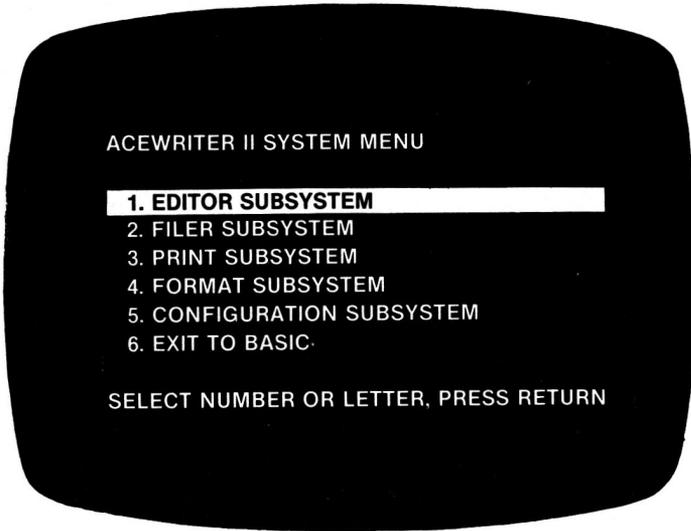
Figure 1.4 · ACEWriter II System Menu

The following is a brief description of each subsystem:

1. EDITOR SUBSYSTEM—If you select the Editor, a blank video "page" comes to the screen. This is the space in which you type and edit text. It simulates the format of the document.

2. FILER SUBSYSTEM—This subsystem contains all the functions for creating data diskettes and saving and retrieving data from disks, including giving a file a name, deleting a file, and clearing the file that's on the screen (in the system's memory). When you select the Filer, another menu comes to the screen so you can tell the system which Filer function you want.

3. PRINT SUBSYSTEM — This is the subsystem that allows you either to print your document on paper (hardcopy) or copy it onto another disk for transmission to another terminal (softcopy). When you select the Print Subsystem, another menu comes to the screen so you can select the kind of copy you want to print (hard or soft), the number of pages to be printed, whether the printer should stop at the end of each page, the number of copies to be printed, and so on.

4. FORMAT SUBSYSTEM — This lets you define for the system the physical size of your form and text by setting text length and width, margins, and vertical spacing.

5. CONFIGURATION SUBSYSTEM — This allows you to adapt ACEWriter II to your hardware. By answering the menu, you can tell the system such things as which slots hold the video and printer devices and whether they require drivers.

6. EXIT TO BASIC — This command gives you a convenient way to exit ACEWriter II. Once you exit, you must reboot to return to ACEWRiter II.

1.6 Menu Operations

1.6.1 Selecting a Subsystem

If you haven't started experimenting on your own yet, the screen should have a bar across 1. EDITOR SUBSYSTEM. This indicator is simply a kind of extended cursor. It tells you which function will be executed. There are two ways to select and execute a function.

1. Notice that each subsystem has a number. To select (that is, move the indicator to) the one you want, just type its number. Then either type the number again or press RETURN to execute (in this case, enter that subsystem). Without typing the same number twice in a row or pressing RETURN, type any numbers from 1 to 6 and see how the indicator moves.

2. The other method of selection is one which ACEWriter (one) owners are familiar with. Pressing the cursor arrows moves the indicator one line at a time up and down the menu. Once it's positioned, either type the number or press RETURN to execute. Try moving the indicator around with the cursor arrows, but don't execute yet.

As you can see, it is faster to just type the number than use the arrows. Therefore, the directions in the exercises will be for method 1.

Notice the line of directions across the bottom. This is called a "prompt" because it prompts you to do what's needed to achieve what you want. It says:

SELECT NUMBER OR LETTER, PRESS RETURN

There are no letters in this menu, but there are letters in the menus for the subsystems. Since this is the standard prompt for each menu, that direction is given here as well. As mentioned previously, pressing RETURN is a standard signal to the system to execute a function and can always be used in place of typing the number or letter a second time. Thus, it is given as the instruction in the prompt.

1.6.2 Changing Subsystems

Before we get into the exercises, here's a general note about the way the system functions. When you are "in" (that is, using) a particular subsystem and you want to change to another, you first have to go back to the ACEWriter II System Menu, then make the new selection.

For example, let's say you wanted to print something you had stored on disk. First, you would have to go into the Filer to load the document into memory. There's no way to go directly from the Filer to the Print Subsystem, so you would first return to the ACEWriter II System Menu, then select the Print Subsystem from there. To exit any subsystem except the Editor and return to the ACEWriter II System Menu, you can either press ESC; or position the indicator on function 1. ACEWRITER II SYSTEM MENU, then type 1 or press RETURN.

NOTE: If you press RESET, the ACEWriter II System Menu comes to the screen. However, this function interrupts any activity of the system, which can result in erasing text from memory or electronically damaging an initialized data diskette, leaving your files in a shambles. You can use the RESET key to interrupt the system when you've made an error programming, for example, and need to stop the function. However, *DO NOT* use RESET to return to the ACEWriter II System Menu. Always use the menu function.

1.6.3 The Exception—Exiting the Editor

The Editor is the only subsystem that has no menu. The Editor's function is to provide a space in which you can type and edit a document. When you enter the Editor, all you see is a blank "page." Because there is no menu, there is no 1. ACEWRITER II SYSTEM MENU function to select. You can only exit by pressing:

<div align="center">

ESC

</div>

Let's try it. If the indicator isn't on 1. EDITOR SUBSYSTEM, type 1 to select the Editor, then type 1 again or press RETURN to execute the selection. You should now have a blank page on the screen. To return to the System Menu, press the ESC key. You should now have the System Menu on the screen, with the indicator on 1. EDITOR SUBSYSTEM.

1.7   Subsystem Menus

Let's use the Format Subsystem menu as an example.

```
FORMAT SUBSYSTEM

    A. PAGE LENGTH..............................66
    B. TOP MARGIN .............................. 6
    C. TEXT LENGTH ............................54
    D. PAGE WIDTH .............................85
    E. LEFT MARGIN.............................10
    F. TEXT WIDTH .............................65
    G. DOUBLE SPACE.........................NO

    1. ACEWRITER II SYSTEM MENU
    2. CHANGE OPTIONS

SELECT NUMBER OR LETTER, PRESS RETURN
```
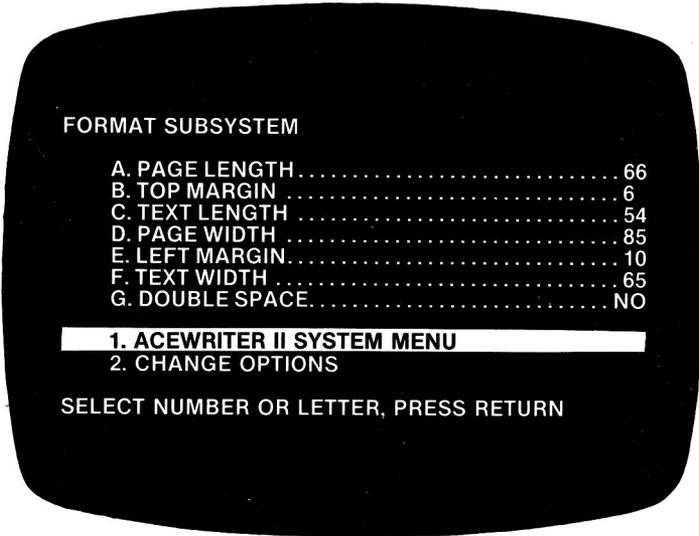
Figure 1.5 - Format Subsystem Menu

The form of all the subsystem menus is the same. The top is a list of options with default answers. (In this case, the values are set for the format of standard 8 1/2" by 11" paper.) The bottom is a list of functions. (In this menu, there are only two functions to choose from.) 1. ACEWRITER II SYSTEM MENU is the first command in all subsystem menus so you can easily return to the System Menu. 2. CHANGE OPTIONS is always the second command. Below the list of functions is the same prompt that was below the System Menu.

1.7.1   Function Selection

This works the same as it did in the System Menu. Type the number of the function you want or use cursor arrows to position the indicator. Then type the number or press RETURN to execute.

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1.7.2 Option Selection

In order to change a value, you first have to position an indicator on the option you want to change. There are two ways to do this:

1. The simplest is just to press the letter of the option you want to change. This causes another indicator to appear in the upper, or options, section of the menu on the option you selected. If there is already an indicator in the options section, you can move it to the one you want by typing the appropriate letter.

   To try this, press 4 twice to enter the Format Subsystem. Then press any letter from A through G once. The indicator will have appeared on the option you selected. Now either type 1 or press ESC to exit the options section and return to the functions section.

2. The other way to change options, which is familiar to ACEWRiter owners, is to move the indicator to 2. CHANGE OPTIONS by either typing 2 or using cursor arrows. Then either type 2 again or press RETURN. This will also cause an indicator to appear in the options section. However, with this method, the indicator will always appear on the first option listed. If you want an option other than option A, you have to move the indicator either by typing the appropriate letter or using cursor arrows.

You can use ESC to exit the options section of any menu. When you press ESC, the indicator in the options section disappears, and the indicator in the functions section automatically returns to 1. ACEWRITER II SYSTEM MENU. You can also exit by typing the number of the function you want; the options indicator will disappear, and the functions indicator will move to the function you selected.

NOTE: Since this menu has only two functions — ACEWRITER II SYSTEM MENU and CHANGE OPTIONS — 1 is the only function number you can use to exit the options section. This is because the function of the CHANGE OPTIONS command is to get an indicator into the options section, not out of it.

1.7.3 Changing Options

There are two types of options: numerical, which has a number as an answer; and logical, which has YES or NO as an answer.

To change a numerical option, position the indicator on it, then either type its letter again or press RETURN. The prompt ENTER VALUE FROM *min* TO *max* will appear, followed by a flashing cursor. Type the value you want (within the limits given) and press RETURN. The new value will be recorded by the system, and the number on the option line will change.

To change a logical option, position the indicator on it. Then either type the letter again or press RETURN to change to the alternate answer (YES to NO or vice versa). This is called "toggling." It means that with each press of the key (either the letter or RETURN), a circuit is opened and closed in sequence. When it's open, the system receives a signal meaning YES; when closed, a signal meaning NO.

1.8 Exercises

To do these exercises, you must be in the Format Subsystem. If you're in the System Menu, type 4 twice to select and execute the Format Subsystem command.

Exercise 1

First, let's change the page length from 66 to 12. At 6 lines to the inch, this would make a good-sized mailing label (2"high). Type A to position an indicator on A. PAGE LENGTH, then either type A again or press RETURN to bring the prompt to the screen.

This prompt tells you to ENTER VALUE FROM 1 TO 112. The number we're using, 12, falls within these limits. Type 12. It will appear at the point of the flashing cursor, immediately following the prompt. Press RETURN, and the 12 will replace the default of 66.

At this point, the prompt SELECT NUMBER OR LETTER, PRESS RETURN comes up again so you can either change another option or return to the function part of the menu.

Exercise 2

This time, let's change the top margin to 3. Type B to move the indicator to B. TOP MARGIN. Type B again or press RETURN and the prompt ENTER VALUE FROM 0 TO 111 will appear, followed by a flashing cursor. Type 3 and press RETURN. The 3 will replace the 6 default value.

Again, you will see the same prompt (SELECT NUMBER...) across the bottom of the screen so you can either change another option or return to the function part of the menu.

Exercise 3

Let's practice by changing another option and experiment with recovering from mistakes. After all, you're not worried about what will happen or what to do if you get everything right.

Type C twice to move the indicator to C. TEXT LENGTH and cause the ENTER VALUE prompt to appear. Let's put in a value we don't want. At the flashing cursor, enter 9. Now let's change the value to 6. To do this, use the left arrow to backspace to the position of the 9. Now type a 6 over the 9 and press RETURN. The default value of 54 has been replaced with the 6.

Exercise 4

Let's try something else now. Press F twice to move the indicator to F. TEXT WIDTH and cause the prompt to appear. The limits given are 20 to 160. Enter 180 and press RETURN. You see that the system automatically rejects a value outside the limits given.

Exercise 5

For our last experiment with errors, leave the cursor on F. TEXT WIDTH and type F so the prompt appears. Let's say you wanted to enter 44, but got a little heavy-handed on the keyboard and entered 444. Go ahead, type 444 after the prompt. Just as in the previous example, use the left arrow to backspace over the error (the last 4), then press RETURN. As you can see, the value in the menu is now 44. The system will register only the value that *precedes* the cursor.

Exercise 6

So far, we've dealt with changing numerical options. Now move to the last one on the menu, G. DOUBLE SPACE. The default value is NO, and the only other choice you have is YES. To change the NO to a YES, just type G or press RETURN. Press either one a few times to see how the toggle action works.

Now let's exit the options section. You can either type 1 or press ESC. In either case, the indicator in the top section will disappear, and the indicator in the bottom section will be on 1. ACEWRITER II SYSTEM MENU. The answers to the options you changed are now recorded by the system.

NOTE: Remember, in menus that have more than these two functions, when exiting the options section, you can type the number of whatever function you want and the indicator will move to that function.

Exercise 7

Let's see how the page in the Editor responded to the option changes. Type 1 or press RETURN to exit the Format Subsystem. The indicator will be on 1. EDITOR SUBSYSTEM in the System Menu. So, type 1 or press RETURN again to enter the Editor. You can see that the page length is much shorter. When you looked at it the first time, there was no bottom line showing where the page ended.

Exercise 8

These options will remain in force until you change them or turn the power off. Since you will probably want the default values for most of your work and you will need them for the exercises in the following sections, let's return to the Format Subsystem and change them.

To exit the Editor, press ESC. When the System Menu appears, type 4 twice to select and enter the Format Subsystem. Change PAGE LENGTH to 66, TOP MARGIN to 6, TEXT LENGTH to 54, TEXT WIDTH to 65, and make sure the answer to DOUBLE SPACE is NO. You can check the default values in the menu in this manual to correct any others you may have changed.

While we've used the Format menu exclusively, the same rules apply to all the menus — and there are prompts with each in case you're undecided what to do. We hope you feel fairly comfortable with the concept and handling of menus now.

1.9   Summary of Menu Selection

1. To select and execute a function, type the number of the function twice.

2. To select and execute a change in a numerical option:

   a. Type its letter twice.
   b. Enter the desired value.
   c. Press RETURN.

3. To select and execute a change in a logical option, type its letter twice.

4. To exit the options section:

   a. Type the number of the function you want, or
   b. Press ESC.

5. To enter another menu:

   a. Type 1 twice to select and execute the 1. ACEWRITER II SYSTEM MENU command and reenter the System Menu.
   b. Select and enter the subsystem you want by typing its number twice.

2. FILER SUBSYSTEM

```
FILER SUBSYSTEM

    A. DISK SLOT ................................. 6
    B. DISK DRIVE ............................... 1
    C. DISK VOLUME ............................. 0

    1. ACEWRITER II SYSTEM MENU
    2. CHANGE OPTIONS
    3. SAVE FORMATTED FILE
    4. LOAD FORMATTED FILE
    5. FILES DIRECTORY
    6. UNFORMATTED FILER SUBSYSTEM
    7. DOS COMMAND
    8. CLEAR FILE IN MEMORY

SELECT NUMBER OR LETTER, PRESS RETURN
```
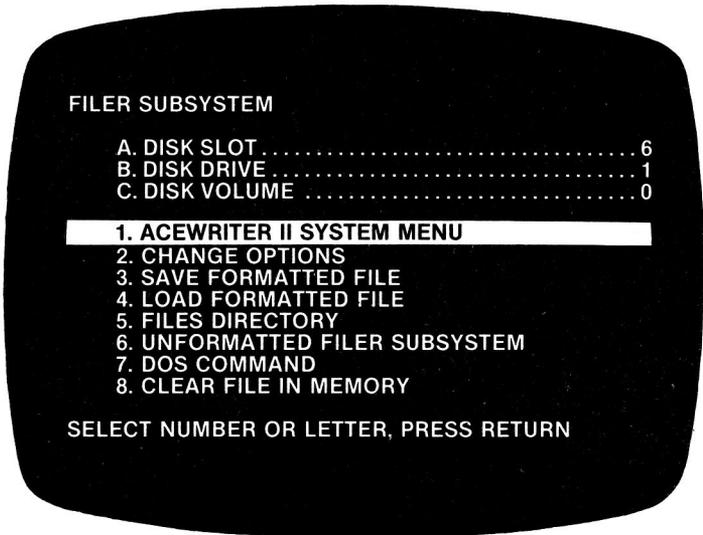
Figure 2.1 - Filer Subsystem Menu

The Filer Subsystem provides all the functions necessary for handling document and text files — from initializing a data diskette so you have a storage medium; to saving, loading, deleting, and clearing a file from memory. It also allows you to tell the system about your disk drive configuration. The following is general information you'll need about files and disks before discussing the menu.

2.1 File Types

2.1.1 Formatted Files

A formatted file is an exact duplicate of the document as you typed it, including margins, spacing, and tab stops. It is considered one complete unit. You can't separate sections of a formatted file and transfer them to another file.

When written (saved) to disk, a formatted file retains the format you specified in the Format Subsystem. When read (loaded) into memory from disk, you get back exactly what you saved.

2.1.2 Unformatted Files

An unformatted file looks exactly like a formatted file when you type it and when you load it into memory from disk. However, it is stored without the format information (margins, tabs, and so on), and each line is considered a separate unit. This means that you can save as an unformatted file any portion of text in memory (available to be seen on the screen), without having to take the entire file. You can also load any portion of an unformatted file that you wish. And, finally, you can transfer any amount of text in an unformatted file — from one line to the entire file — and merge it into a formatted file.

(Since handling unformatted files is a specialized function and it is a subsystem with a menu of its own, this area will be covered in detail in Section 7 — Unformatted Filer Subsystem.)

2.2 File Names

Each file you save, whether formatted or unformatted, must be given a name so you can distinguish it from other files. A file name must not exceed 15 characters in length. It must start with an alphabetic character, but may include spaces, numbers, and special characters. When entering a file name, lower-case letters are converted to upper-case.

One good way to keep track of files that are all part of one larger document is to name them all with the same root word that signifies subject or content, then add numbers sequentially. For example, the first file of a report on beekeeping might be BEE1; the second BEE2, and so on. If you are saving the same text as both unformatted and formatted files, you might use the same name, but preface the unformatted files with a U (e.g., U-BEE1, U-BEE2). This makes it easy to correlate the same content in different file types.

2.3   Disk Management

2.3.1   Disk Space

A disk has 560 sectors (16 sectors per track, 35 tracks). Some of this space on an initialized diskette is taken up by the Disk Operating System. For storage purposes, it is wise to figure on about 400 available sectors.

The number of sectors each file has used is listed with the file name when you call up the files directory (a list of all the ACEWriter II text files stored on the disk in the disk drive). It is also in the directory that appears when you are saving a file on disk. With some quick addition, you can tell if your disk is getting full. If you try to store a file on a disk that has no free space, the prompt DISK FULL, PRESS RETURN TO CONTINUE comes to the screen. To save the file, you must replace the full disk with one with free space or delete some of the existing files on the one you're using.

2.3.2   Disk Back-up

Disks, like anything else, wear out. Most manufacturers recommend that you retire them after three months of constant use. One way to make sure that you don't lose text is to copy your files onto another (back-up) disk.

Here is one standard method of disk management that both prolongs disk life and ensures that you have back-up copies of your files: Label disks by the day of the week and use each disk on its specified day. At the end of each day, copy that day's files onto the disk for the following day. Then, on Monday for example, delete all files from the Monday disk and start again with a blank disk. With this method, you have your most current files on the disk for the day, and you have a week's worth of back-up. Standard documents and form letters that you will be using over and over again should, of course, be stored on disks that are not rotated.

Options Menu

The options allow you to tell the system which slot your disk interface card is in, and which disk drive or volume you're using.

2.4   Disk Slot

This tells the system the number of the slot the disk drive interface card is in. The default is 6, since that's the slot most often used. The limits are 0 to 7. These are the numbers of the eight slots, counting from left to right, starting with 0. Change this option if your disk card is in a slot other than 6.

If you have two disk drives, they may both be connected to the same disk card or they may each have one in a different slot. If you have a floppy disk drive and a hard disk, each will have its own disk card. You must change this option to match the slot for the drive you are using.

2.5   Disk Drive

This tells the system the number of the disk drive you are using. The default is 1, which tells the system to access the disk in disk drive 1. If you are alternating between disk drives, you must change this option accordingly, each time you change disk drives. The range is 1 to 255 to accommodate hard disks.

2.6   Disk Volume

While it varies from brand to brand, the amount of storage on a hard disk may be equal to that of 100 or more floppies. Volume is a numerical address used by a hard disk. The correct volume must be entered to access it. There are no volumes, as such, on floppies, and the default value of 0 acts as a "wild card." You need never change the value when using them.

Functions Menu

2.7 ACEWriter II System Menu

If you type 1 or press RETURN with the indicator on this command, you will return to the System Menu.

2.8. Change Options

If you want to change any options in the top section of the menu, position the indicator on this command and type 2 or press RETURN. Another indicator will appear on option A. (You can also skip this and just type the letter of the option you want.)

2.9 Save Formatted File

This command allows you to save on disk whatever is in memory. To save the file in memory, type 3 twice or press RETURN with the indicator on this command.

2.9.1 Saving a New File

If you have entered completely new text, a directory of formatted files comes to the screen. If there are no files on the disk, the prompt (NO FILES) will come up. This directory contains each file name, preceded by the number of sectors the file has used. This allows you to keep track of disk space.

007 TIGER1
013 TIGER2
042 LION

FILE NAME —>

Below the directory is the prompt FILE NAME and a flashing cursor. Type the name you are giving to the file and press RETURN. The directory will update to show the number of sectors and the name of the new file. When you press RETURN again, you will reenter the Filer Subsystem.

2.9.2 Updating an Existing File

If the file you want to save was loaded into memory from disk, when you execute, the prompt UPDATE AS *"FILE NAME"?* comes to the screen. This prompt asks if you want to save the file under its original name.

If you want it saved under its original name, type Y for YES. The system will automatically save the file over the original, and give it the same name. (If you are not saving the file on the same disk the original was on, you, of course, won't overstore it by using the same name.)

This feature saves time and prevents saving a file under the wrong name.

If you want to save the file under a different name, type any character other than Y. The files directory will come to the screen, followed by the FILE NAME prompt and the flashing cursor. Enter the file name and press RETURN to save it as a completely new file.

2.10 Load Formatted File

This command allows you to retrieve files you've stored on disk and load them back into memory for editing and printing. To load a formatted file, position the indicator on this command and type 4 or press RETURN.

If there is no text in memory, or if what's there has just been saved, the directory of formatted files will come to the screen. In this directory, each file name is preceded by a number. The number is not the file size (as it is with save) but is the *file number.* Below the directory is the prompt FILE NUMBER and a flashing cursor.

1. TIGER1
2. TIGER2
3. LION

FILE NUMBER –>

Type the number of the file you want to load and press RETURN. The system will load the file into memory.

Typing a number rather than a file name is faster and reduces the possibility of a file not being found because of typos. If, however, you type a number or other character(s) not in the directory, the Filer menu automatically comes up so you can start again.

2.10.1 File Not Saved Warning

If you have entered the Editor and there is a file in memory that hasn't been saved, (even if it is a blank page) the prompt WARNING: FILE NOT SAVED! CONTINUE Y/N ? will come to the screen. This safety feature reduces the possibility of accidentally loading a file over unsaved text.

If you don't want to save the file, type Y for YES and press RETURN, and the system will continue with the load operation. The directory of formatted files will come to the screen, followed by the prompt FILE NUMBER and the flashing cursor. Enter the number of the file you want and press RETURN. The system will load the file into memory.

If you do want to save the file, type any character other than Y, then press RETURN. The Filer menu will come to the screen so you can execute the save operation.

2.11 Files Directory

This command brings up a listing of all the document files stored on the disk in the disk drive — formatted and unformatted. Each item begins with an F for formatted or U for unformatted, and includes the number of sectors the file takes up and the file name.

> **F008 BEE1**
> **F034 BEE2**
> **F016 ANT**
> **F046 BIRD1**
> **U046 BIRD1-U**
> **F023 BIRD2**
> **U023 BIRD2-U**

If there are no document files on the disk, the prompt (NO FILES) will tell you so. If there are files on the disk, they will be listed in two columns, starting on the left side of the screen. Each column can hold 20 items. When the left column is full, the list continues beginning at the top of a column on the right. Press RETURN to reenter the Filer menu.

2.12   Unformatted Filer Subsystem

When you select and execute this command, another menu comes to the screen with the options and functions needed for saving, loading, and/or transferring all or part of an unformatted file. This will be covered in detail in Section 7.

2.13   DOS Command

DOS stands for Disk Operating System. This system provides instructions relating to managing the files on a disk. When you select and execute this, the screen clears and the prompt DOS COMMAND comes up, followed by a flashing cursor. Type the command you want, including any necessary file name(s) and suffix(es), and press RETURN. The DOS COMMAND prompt will come up again after each command is executed. Either type another command, or press RETURN to reenter the Filer menu.

Below are listed the DOS commands available on ACEWriter II their functions and how to use them.

NOTE: Whenever you have to enter a file name, you must include the .MW suffix. That is the way the name is listed in the DOS catalog, and it is considered part of the file name. If you omit the .MW suffix, you will get the error message FILE NOT FOUND, PRESS RETURN TO CONTINUE. When you press RETURN, the Filer menu will return to the screen and you'll have to start again.

2.13.1   CATALOG—Complete File Listing

Type CATALOG after the prompt and press RETURN. This brings to the screen a list of all the files on the disk in the drive.

DOS COMMAND —> CATALOG (RETURN)

B 058 ROSE.MW
B 016 ORCHID.MW
B 006 DAISY.MW
T 006 DAISY.MW
B 002 SYS.OPTIONS

NOTE: B prefaces formatted files because they are "binary" files. T prefaces unformatted files because they are "text" files. SYS.OPTIONS has no .MW suffix because it is not a document file.

2.13.2 DELETE—Deleting Files

To delete a file, type DELETE *FILE NAME*, then press RETURN. The file will be erased from the disk. A deleted file is irretrievable.

DOS COMMAND —> DELETE BEE1.MW (RETURN)

2.13.3 INIT—Initializing Diskettes

To initialize a blank diskette, type INIT *FILE NAME* and press RETURN. INIT will format the diskette so it can be written and read and write a copy of DOS on it. INIT also creates an initialization (or "hello") file using the file name you provided. This file has no meaning to ACEWriter II and is automatically deleted.

DOS COMMAND —> INIT HELLO (RETURN)

2.13.4   RENAME—Renaming Files

To change the name of a file, type RENAME *OLD NAME,NEW NAME* then press RETURN. If you forget the comma, you'll get the error message SYNTAX ERROR, PRESS RETURN TO CONTINUE. ("Syntax" is the set of rules that define correct grammar.) When you press RETURN, the Filer menu returns to the screen so you can start again. Also make sure to add .MW to the name you're changing to. If you don't, the file will be stored without it and will be inaccessible to ACEWriter II. If you forget to add .MW, you have to rename it again as shown below.

To correctly rename a ACEWriter II file:

**DOS COMMAND —>RENAME BEE1.MW,BEEKEEPING1.MW
(RETURN)**

To incorrectly rename a ACEWriter II file:

**DOS COMMAND —>RENAME BEE1.MW, BEEKEEPING1
(RETURN)**

The file will be renamed and show up in the DOS catalog, but cannot be accessed by ACEWriter II.

To correct the error so the file is accessible to ACEWriter II:

**DOS COMMAND —>RENAME BEEKEEPING1,
BEEKEEPING1.MW (RETURN)**

2.13.5   LOCK—Protecting Files

Type LOCK *FILE NAME* and press RETURN to "lock" a file against being saved over or deleted. This can prevent accidents that result in time-consuming retyping. Locked files are listed in the DOS catalog with an asterisk (*).

```
DOS COMMAND–>CATALOG (RETURN)
B 012 KENNEL.MW
B 016 BEE1.MW
B 024 BEE2.MW

DOS COMMAND–> LOCK BEE1.MW (RETURN)
DOS COMMAND–> CATALOG (RETURN)

 B 012 KENNEL.MW
*B 016 BEE1.MW
 B 008 BEE2.MW
```

2.13.6 UNLOCK — Unprotecting Files

Type UNLOCK *FILE NAME* and press RETURN to open a lock-ed file so you can save over it or delete it.

DOS COMMAND –> UNLOCK BEE1.MW (RETURN)

(For more information on DOS, see your DOS manual.)

2.14. Clear File in Memory

When you select and execute this command, the text stored in memory is erased. Loading a file from disk automatically erases the text in memory, so you don't have to clear the file first. However, if you want to type a completely new document, you must first clear the file in memory so that there is a blank page in the Editor.

2.15   Error Messages

Besides the WARNING... prompt to remind you to save text, there are error messages to tell you why the system won't perform a function you've selected. Each error message is followed by the prompt PRESS RETURN TO CONTINUE. Here are the messages, what they mean, and how to correct the situation.

2.15.1   Disk Full

This comes up when the disk you're trying to store a file on runs out of space. The system will store as much of a file as it can before the message appears. This in no way affects the text in memory. The simplest thing to do is replace the full disk with one that has free space and start the save operation again. If you have no other disks to save on, you can use the DOS COMMAND either to delete some of the files on the disk or to initialize another disk.

2.15.2   File Not Found

This comes up when the system can't find a file with the name of the file specified when using a DOS command. Make sure the appropriate disk is in the disk drive and check for spelling, spacing, and the .MW suffix. Then start the operation again.

2.15.3   I/O Error

This stands for Input/Output error and refers to the system not being able to write to (output) or read (input) a disk. The most common causes are leaving the disk drive door open, not having a disk in the disk drive, or using a bad disk. Check which and correct it.

2.15.4   File Locked

This occurs when you try to save over or delete a locked file. Either use a different disk to save the file on, or unlock it.

2.15.5 Write-Protected

This occurs if you try to write to (save on) a write-protected disk. Just replace it with an unprotected initialized diskette.

2.15.6 File Type Mismatch

This occurs when you try to give a formatted file a name already given to an unformatted file, and vice versa. If you're sure the message hasn't come up just because of a typo, you can use a different name or a different disk (the new disk won't have the other file stored on it), or use the DOS command function to rename or delete the existing file.

2.15.7 Syntax Error

This means you have entered a command sequence incorrectly. Start again and enter the correct sequence.

2.16 Exercises

Exercise 1

The files for these exercises are stored on the ACEWriter II diskette. To save wear and tear on it and since it's write-protected, let's store the files on another diskette and use it for the exercises. We'll start with initializing a blank diskette.

Insert a blank diskette in the disk drive. Enter the Filer and type 7 twice to select and execute the DOS command function. Type INIT and a file name (like HELLO), then press RETURN. The system will store the initialization data on the diskette and the DOS COMMAND prompt will come to the screen again. Type CATALOG after the prompt and press RETURN. There are, of course, no files listed.

Now, just press RETURN, and the Filer menu will come up again.

Exercise 2

Remove the initialized diskette and insert the ACEWriter II diskette. Type 5 twice to bring the files directory to the screen. Here you see a list of both formatted and unformatted document files stored on the disk. (Note that the FILES DIRECTORY shows only document files, not all the files as does CATALOG.) Press RETURN to reenter the Filer menu.

Exercise 3

To save a file, it must first be typed or loaded into memory, so let's load a formatted file. Type 4 twice to bring the directory of formatted files to the screen. There are two formatted document files for exercises: REDRIDE and STATES MINUS. Each name is preceded by a number. Enter the number of either one after the FILE NUMBER prompt, and press RETURN. The system will load the file you chose into memory.

Let's check it by going to the Editor and seeing what's on the screen. The indicator will be on 1. ACEWRITER II SYSTEM MENU. Just type 1 or press RETURN twice to enter the System Menu, and then the Editor. There will be text on the screen. (The REDRIDE file has typos in it purposely. You will be using this file to practice ACEWriter II's editing features in the exercise in Section 4 — Editor Subsystem.) Don't type anything, or you'll change what's in memory, and we want an exact duplicate of the original stored on the initialized diskette. (Remember, the system saves whatever's in memory, not what was on the disk. If it didn't, you'd never be able to save an edited version of a file.)

Now let's save this file. First, remove the ACEWriter II diskette and insert the initialized diskette into the disk drive.

Exit the Editor by pressing ESC, then type 2 twice to select and enter the Filer. Type 3 twice to select and execute SAVE FOR-MATTED FILE. The UPDATE AS "*FILE NAME*"? prompt will come to the screen. Type Y for YES and press RETURN. The file will be saved under the name it had on the ACEWriter II diskette.

Repeat this operation to save the other formatted file on the in-itialized diskette: Remove it and insert the ACEWriter II diskette in the disk drive. Load the other file. Remove the ACEWriter II diskette and insert the initialized diskette. Then save the file under the same name.

Exercise 4

When you loaded into memory the files to be saved, they were visible on the screen in the Editor. You know that from having checked.

Let's clear the file from memory. Position the indicator on 8. CLEAR FILE IN MEMORY. Then type 8 or press RETURN. The file will be cleared and the indicator will return to 1. ACEWRITER II SYSTEM MENU. You can check this by entering the Editor. If there's a blank page there, the function worked.

Exercise 5

Just for the fun of it (to say nothing of some extra information), see what other files are stored on the ACEWriter II diskette.

3. PRINT SUBSYSTEM

One of the most important functions of your system is printing your documents. The printer will print exactly what the system has stored in memory and as it appears on the screen. This means that if you change the format or edit a file you loaded from disk, the system will print the edited, reformatted version that is on the screen, not the original. This also means that you can enter text directly from the keyboard and print it. You don't have to save it on disk first.

```
PRINT SUBSYSTEM

        A. STARTING PAGE NUMBER ................1
        B. NUMBER OF COPIES.......................1
        C. SINGLE SHEET FEED......................NO
        D. MARK PERFORATION .....................NO
        E. PRINT ALL PAGES........................YES
        F. PRINT FROM FILE LIST ...................NO

        1. ACEWRITER II SYSTEM MENU
        2. CHANGE OPTIONS
        3. PRINT HARDCOPY
        4. PRINT SOFTCOPY
        5. CREATE FILE LIST

    SELECT NUMBER OR LETTER, PRESS RETURN
```
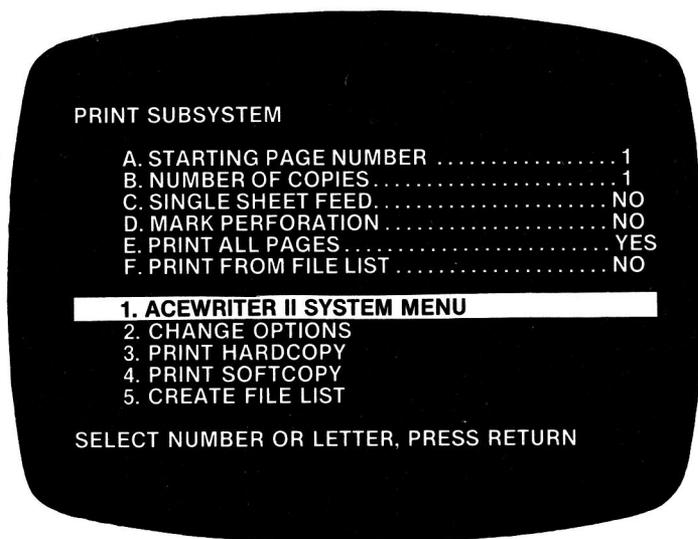
Figure 3.1 - Print Subsystem Menu

<u>Options Menu</u>

3.1   Starting Page Number

This option lets you tell the system what page number to print on the first page of hardcopy. This has nothing to do with asking for the number of the page you want the printer to start printing. It has to do with assigning a page number that will be printed on the page.

There is a function in the Editor that allows you to assign a ti-
tle line (a special line that can go in the top or bottom margin).
You can assign both a title and a page number, and the printer
will print page numbers consecutively, starting with the
number given this option. For example, if page 1 of a file were
really page 38 of a document, you would want it numbered 38,
not 1. So, you would change the answer to this option to 38.
(We'll get to how you assign a title line when we discuss the
Editor.)

NOTE: The value for this option does not automatically return
to 1 when a file is printed. If the last page of the file you
printed was 8, for example, and you forget to change
the value back to 1, the next file will start with page
number 9. This makes it possible to consecutively
number files that are all part of one document. If,
however, you start printing another document and
want the first page to be numbered 1 (or any number
other than what this option is set for), you must change
the value to the one you want.

3.2   Number of Copies

This option lets you tell the system how many copies of the
same file (the one that's in memory) you want printed. The
default is 1, but you can print as many as 255 copies.

3.3   Single Sheet Feed

This command tells the printer to stop at the end of each page.
This is so you can put in a new sheet of paper. This option is
used when printing letterhead paper, forms, invoices—any
single sheet. The prompt POSITION DOCUMENT, THEN
PRESS RETURN will appear before each page is printed.

3.4 Mark Perforation

This command tells the printer to mark the end of a page of roll paper. The default value is NO, because form-perforated paper is the most common. If you are using roll paper, however, toggle the answer to YES so a perforation line will be marked at the end of each page. If your system does use perforated paper, make sure this answer is NO, because this option adds an extra line to the form length and the mark won't match your actual paper length.

3.5 Print all Pages

The default value is YES. This means that the system will start on page 1 and print the entire file. If you want to print only part of a file, you must change this answer to NO. Then, when you select PRINT HARDCOPY, the system will ask START AT PAGE # and HOW MANY PAGES so you can define which pages you want. (This will be discussed in detail under 3. PRINT HARDCOPY.)

3.6 Print From File List

Using function 5 in this menu, you can create a list of files you want to have printed in any order you specify. This command tells the system to print from that list. The default is NO, since you will probably be printing individual files separately most often.

Functions Menu

3.7 ACEWriter II System Menu

If you type 1 or press RETURN with the indicator on this command, you will return to the System Menu.

3.8 Change Options

If you want to change any options in the top section of this menu, position the indicator on this command and type 2 or press RETURN. Another indicator will appear on option A. (You can also skip this and just type the letter of the option you want.)

3.9 Print Hardcopy

This command tells the system you want to print the file on paper.

3.9.1 Printing an Entire File

Make sure the answer to E. PRINT ALL PAGES is YES. Then, with the indicator on this command, type 3 or press RETURN. The prompt POSITION DOCUMENT, THEN PRESS RETURN will come to the screen. Position your paper correctly (see Positioning a Document, below). When you press RETURN, the printer starts.

NOTE: If the answer to E. PRINT ALL PAGES is NO and you forget to change it to YES, the START AT PAGE # and HOW MANY PAGES prompts will come to the screen. To print the entire file, answer the starting page prompt with 1, and the number of pages prompt with a number you're sure is high enough to include all the pages.

3.9.2 Printing a Part of a File

Make sure the answer to E. PRINT ALL PAGES is NO. Then, with the indicator on this command, type 3 or press RETURN. The prompt START AT PAGE # will come to the screen. Type the number of the page of the file as shown in the Editor (not a number you have assigned the page; the system can't read that number for this function). Then press RETURN. The prompt HOW MANY PAGES will come to the screen. Type the number of pages you want printed and press RETURN. The prompt POSITION DOCUMENT, THEN PRESS RETURN will come to the screen. Position the paper correctly (see Positioning Documents below). When you press RETURN, the printer starts.

3.9.3 Positioning Documents

The printer considers line 1, character position 1 to be at the top left corner of the page. Therefore, line up the paper with the very top of the metal paper guide. The printer takes into account all your formatting, including top margin. So, if you position the top of the form (beginning of the page) anywhere else, the top margin will be off. Don't position the paper where you want the first line of text to be (unless your top margin is 0 and the first line of text is on the first line of the page).

To center the text on the page (if that's not already been done in the Editor), just change the top and left margins in the Format Subsystem. Don't change paper placement.

3.9.4 Stopping the Printer

If you want to stop the printer, just press ESC. The printer will complete the line it was printing, then roll the paper to top of form. Everything past the last line (the one on which you pressed ESC) will be blank.

3.10 Print Softcopy

This command allows you to make an exact duplicate of the file on the disk. In content, it is exactly like the printout. Softcopy is stored differently, however, and can be transmitted by electronic mail (i.e., via a modem or telephone lines) to an appropriate receiver and printed there.

3.11 Create File List

This command tells the system to create an unformatted file that contains a list of the formatted files you want printed consecutively in the order you specify. (Unformatted files cannot be included in a print file list.) The files must all be on the same disk. This function is quite useful if you have one document saved in several files. It eliminates having to return to the Filer and load each one separately.

It works like this:

When you select and execute this command, the directory of unformatted files comes to the screen with the prompt FILE NAME, followed by a flashing cursor.

006 UMARS
013 UVENUS
019 UJUPITER

FILE NAME —>

Enter the name you want to give to the list (like PRINT LIST) and press RETURN.

006 UMARS
013 UVENUS
019 UJUPITER

FILE NAME —> PRINT LIST

Next, the directory of formatted files comes to the screen with the prompt ENTER LIST (1,2 ETC.) The flashing cursor will appear just below the prompt.

1. MARS
2. VENUS
3. JUPITER
4. BLANK

ENTER LIST (1,2 ETC.)

Type the numbers of the files you want in the order you want them printed, separating each number with a comma.

NOTE: You can repeat a file number in the file list as often as you like. This is useful for inserting blank pages between sections, for example. Create a blank page in the correct format and insert its file number as you choose.

1. MARS
2. VENUS
3. JUPITER
4. BLANK

ENTER LIST (1,2 ETC.)
3,4,1,4,2

Press RETURN. The system will then show you a list of the names of the files you selected, in the order you selected them, and ask if they're correct.

JUPITER
BLANK
MARS
BLANK
VENUS

CORRECT Y/N

Type Y for YES or any character other than Y for NO. Then press RETURN.

If NO, you'll end up back at the directory of unformatted files so you can start again. (The name you gave the file list will not appear, since it hasn't been saved.)

If YES, the directory of unformatted files will update to show the name of the file list, with the prompt PRESS RETURN below it.

006 UMARS
013 UVENUS
009 UJUPITER
003 PRINT LIST

PRESS RETURN

This completes the creation of a file list. Press RETURN to bring the menu back to the screen so you can print.

In order for the system to print from this list, the answer to F. PRINT FROM FILE LIST must be YES. If you forget to change this option to NO or decide you don't want to print from the list, just press RETURN after the prompt (do not enter a file number), and the Print menu will return to the screen.

3.12   Exercises

Exercise 1

First, load REDRIDE so it's in memory and can be printed. Enter the Filer, select LOAD FORMATTED FILE, and type 4 or press RETURN. Enter the number of the REDRIDE file after the prompt and press RETURN. If you want to make sure it's been loaded and is on the screen, type 1 or press RETURN twice to enter the Editor. When you're satisfied, exit the Editor using ESC. From the System Menu, type 3 twice to select and enter the Print Subsystem.

Just to practice with the options section, let's only print pages 4 through 7. Type E to position an indicator on PRINT ALL PAGES. Then type E or press RETURN to toggle to NO.

Now let's print it. Type 3 to position the indicator on PRINT HARDCOPY. Then type 3 again or press RETURN. When the prompt START AT PAGE # comes to the screen, type 4 and press RETURN. When the prompt HOW MANY PAGES comes to the screen, type 4 (for pages 4, 5, 6, and 7) and press RETURN. The prompt POSITION DOCUMENT, THEN PRESS RETURN will come to the screen. Make sure the top of the sheet is aligned with the paper guide, then press RETURN.

NOTE: If you are using perforated paper, don't roll the first sheet of paper down to align the top of the first sheet with the guide. If you do, it will just come loose from the sprockets. With perforated paper, you always lose a "lead" sheet.

Somewhere on page 7, press ESC just to see how the printer responds. The printout will exactly duplicate the form and content of the file.

Remember, if you print any of pages 1, 2, or 3 and take the time to read the printout, don't be concerned about the typos and other errors. They were put there purposely so you'd have something to practice editing commands on when we get to the Editor section.

Exercise 2

Now let's try printing from a file list. Select CREATE FILE LIST and type 5 or press RETURN to bring the unformatted files directory and the ENTER LIST... prompt to the screen. After the prompt, type a name for the file, like PRINT LIST. (You can use any name that's not already used for a file.) Press RETURN.

When the directory of formatted files comes to the screen, type the numbers of the files (in any order you like), separating the numbers with commas (for example, 3,1). Press RETURN.

You will see a list of the file names in the order in which they'll be printed. If it's correct, type Y after the prompt and press RETURN. The updated directory of unformatted files (with the name of the file list) will come to the screen. (If the list is not correct, type any other character, then press RETURN and start again.)

Now, type F to position an indicator on F. PRINT FROM FILE LIST in the options section. Then type F or press RETURN to toggle to YES.

Lastly, type 3 twice to select and execute the PRINT HARD-COPY command. The directory of unformatted files will come to the screen. Type the number of the file list after the prompt and press RETURN. When the prompt POSITION DOCUMENT, THEN PRESS RETURN comes to the screen, make sure your paper is properly aligned with the metal paper guide. Then press RETURN, and the files should be printed in the order you specified in the file list.

4. EDITOR SUBSYSTEM

The Editor is the space in which the document appears. You can type it into memory (called "entering" text) or load it into memory from a disk. You've seen how the size and shape of the page change when you change options in the Format Subsystem. You've also seen that whatever is in memory is at least partly visible on the screen. (We say "partly" because you can only see 22 lines at a time.)

Memory is where all action occurs. Whether you type text or load a document in from disk, it is stored in memory. Only from there can it be edited, saved, or printed.

(We will be using REDRIDE for the exercises in this section. At the end of this section is a printout of the first three pages of REDRIDE. There are a number of errors on these pages, and on the printout are editing instructions to correct them. You may want to load REDRIDE now to practice as you read. If you do, and you still want to do the exercises, reload the original so you're not looking for errors through changes you may have made yourself.)

4.1 Video Display

The editor video display has three sections. The top line contains status information about the file being edited and your current position within it. The bottom line of the screen is used for prompts, given by various editor functions. The remaining 22 lines display the portion of your document where the cursor is currently located.

4.1.1 Cursor Character

The cursor character is a flashing, inverted (white on black) box. It marks the position in the file where the next character entered will be placed or the next editing function will occur. As it flashes on and off, the character at that position is alternately displayed with the cursor.

NOTE: The cursor can change appearance slightly. Normally it is a plain white box. It also can appear as a white box with a colon character in it. When it is all white, the editor is is "line" mode. The colon cursor indicates "paragraph" mode. These modes affect the way certain editing functions operate. Line and paragraph mode will be discussed in detail later on, with the editing commands they affect.

4.1.2 Display Widths

The screen is a "window" through which you can see a particular amount of text, even if there is more in memory. The number of characters across that are visible on the screen depends on your hardware or video driver. The standard display is 40 columns wide. If you have selected the 70-column video driver, you will see 70 characters across; if you have an 80-column board, you will see 80 characters across. This does not affect the text width you specify in the Format Subsystem. You can still have a text width of as much as 160 characters. The display numbers only refer to the number of characters across that can be seen on the screen at one time.

4.1.3 Screen Updates

Horizontal

The left edge of the screen is the inside of the left margin. That is, if you have a left margin of 8, the first character at the left edge of the screen is in character position 9. As you type, the cursor moves from left to right, and the window stays stationary until you need to type past the right edge of the screen.

If your text width is narrower than your video display, the window will not move (that is, 40 columns or less on a standard display; 70 columns or less with the 70-column video driver; or 80 columns or less with an 80-column board).

If your text width is greater than your video display, the screen must "update," that is, stay current with where you are typing so it can be seen on the screen. It does this by moving the window to the left or right. The number of times it does this depends on display and text widths.

For example, if you are using a 40-column display with a text width of 64, when you approach the 40th column, the window moves to the right approximately half a screen. A good portion of the line you are typing is visible at the left side of the screen, and the cursor is in position for you to continue typing. You can continue typing when an update is in progress.

Similarly, when you reach the right margin and force a new line, the window will move to the left to show the cursor positioned on the next line at the left margin.

Vertical

The screen will also update vertically. When you approach the top or bottom of the screen, the window will move up or down and more lines will be visible. There will be a half-screen overlap vertically and you can see 11 lines preceding the one you were typing.

A dashed line across the screen marks the end of one page and the beginning of the next.

4.1.4   Messages and Prompts

There are a number of messages displayed at the top of the screen to help you keep track of which file you're using, where you are in the file, and where you are on the page. The status line is displayed in inverse video (black on white).

70 or 80 column display:

   PAGE 1   LINE 7   COLUMN 11 FREE 25   FILE (NO NAME)

40 column display:

   <PAGE 1   LINE 7   COLUMN 44   FREE 25>

〈 — The left brace indicates that there is space between the actual left margin and the left side of the window (that is, the screen will have to update at least once to reach the left margin).

〉 — The right brace indicates that there is space between the right side of the window and the actual right margin (that is, that the screen will have to update at least once to reach the right margin).

NOTE: When using a 70 or 80 column display, normally the margins will fall within the window so you will not see left or right braces and the screen will not update horizontally. If you were to set the text width to 132 characters, they would appear and the screen would slide sideways just as the 40 column display does.

PAGE — The number that follows tells you which page of the file the cursor is on. If, after a screen update, more than one page is on the screen simultaneously, the number reflects the page the cursor is actually on.

LINE — The number that follows tells you which line of the page the cursor is on.

COLUMN — The number that follows tells you which column, or character position, the cursor is on.

FREE — The number that follows is the amount of free memory left available for use in your document. It is given in kilobytes ("K" in computerese), which are units of 1024 bytes. A page of text is typically about 3 K bytes of memory.

FILE NAME — This is the name of the file you have in memory. **The file name is not shown in the 40 column display.** The name shown is the name that the file was saved under; it is also the name that comes up in the UPDATE AS *"FILE NAME"?* prompt when you save a file loaded from disk. This only comes up if you have loaded a file from disk, since text you have entered and not yet saved has never been given a file name. If you have entered completely new text on a blank screen, the prompt says (NO NAME).

4.2   Entering Text

Text is entered just as you would type on a typewriter. As you press a key, that character is placed at the cursor location and the cursor moves right for the next character. You use the SHIFT and SHIFT LOCK keys to control case just as you would with a typewriter. There are a few differences, however.

4.2.1   Space Bar

On a typewriter, the space bar moves the carriage and does not cause anything to be printed. If you are a typist, you probably have a habit of using the space bar to move the carriage. **You must not use the space bar to move the cursor in ACEWriter II!** Always use the arrow keys to move the cursor left and right.

In ACEWriter II, and computers in general, the space bar generates a "space" character that is just as printable (if not as seeable) as any other character.

4.2.2. Word Wrap

ACEWriter II automatically brings to the beginning of the next line, any word (that is, a sequence of characters with no spaces in it) that would go past the right margin. Therefore, you can continue to type without concern for overflowing the right margin.

For example, let's say there were three spaces at the end of a line (before the right margin), and you wanted to type **cat that**. **C-a-t** would go on the current line, and **t-h-a-t** would automatically be moved to the beginning of the next line. If, however, you typed **c-a-t-.** (with the period), that would be a four-character sequence. The system would bring the whole thing down to the beginning of the next line. This word wrap feature eliminates having to press RETURN at the end of a line.

4.3 Editing Text

Perhaps the simplest (though not necessarily fastest) method of editing text is to just type over it. When you overtype, the characters that were there are replaced with the new ones. Because of this replacement action, you can delete characters using the Space Bar. When you press the Space Bar, you get a space as the replacement for the character you had.

4.3.1 Control Key

There are, of course, more sophisticated (and, depending on your needs, more efficient) methods of editing text. This is what the CTRL key is used for. It give the normal keyboard characters their extra editing functions.

A complete description of each function can be found in this section. There is also a quick-reference, color-coded diagram of the keyboard that shows which combination of keys perform specific functions.

4.4   Cursor Motion

We've said that a function begins or occurs at the point of the cursor: if you type a character, it appears wherever the cursor is. So, the most basic operations to learn are how to position the cursor where you want it.

ACEWriter II has a number of ways to move the cursor. Which you use depends on how far and how fast you want to move through the text. It's also set up very logically, so it's easy to remember which characters to use.

The cursor motion commands listed below are self-explanatory. The command sequence will move the cursor exactly as stated, one character, one line, or a specified block at a time. If you use the repeat function (by holding the keys depressed), the system will quickly perform the exact same action over and over again, one character, one line, or one block of text at a time.

Cursor Left One Character	**LEFT ARROW**
Cursor Right One Character	**RIGHT ARROW**
Cursor Up One Line	**CTRL + Q**
Cursor Down One Line	**CTRL + Z**
Cursor Up Ten Lines	**CTRL + W**
Cursor Down Ten Lines	**CTRL + X**
Cursor to Top of File	**CTRL + E**
Cursor to End of File	**CTRL + C**
Cursor to Left Margin of Next Line	**RETURN**

Figure 4.1 · Common Cursor Motion Commands

As stated, the keys used in cursor motions have been selected logically. The Q and the Z are the first two letters in their rows on the left side of the keyboard. The Q is in the top row and moves the cursor up; the Z is in the bottom row and moves the cursor down.

The W and the X move the cursor 10 lines at a time. They are the letters right next to the Q and Z. The W is in the top row and moves the cursor up; the X is in the bottom row and moves the cursor down.

The E and the C move the cursor to the very beginning and very end of the document. They are right next to the W and the X. The E is in the top row and moves the cursor up; the C is in the bottom row and moves the cursor down.

As you can see, the position of the keys on the keyboard matches the direction of cursor motion. Also, they are the first three keys in their row, and the number of lines the cursor moves increases with each key from left to right.

4.4.1 Tabs

Using tab stops is another method of moving the cursor. They are covered separately here because you first have to know how to set (and clear) tabs before you can use them to move the cursor.

Tab stops are useful for indentation and for columnar typing. They are also useful to quickly scroll horizontally for editing and proofreading.

Set Tab — CTRL + SHIFT + N
Clear Tab — CTRL + SHIFT + M

NOTE: On some older versions of the Franklin ACE 1000 the keyboard does not generate these control keys. To set and clear tabs on these machines use the alternate and redundant functions in the CTRL + Y menu.

You can move to tab stops from either direction. That is, if you're at the left side of the page, you can tab from left to right to the tab stops. If you're at the right side of the page, you can tab from right to left to the tab stops.

Cursor Right to Tab Stop — TAB
Cursor Left to Tab Stop — CTRL + A

At the beginning of this section, we said that setting tab stops would make horizontal scrolling through a document faster and easier. Placement of the tab stops will depend on the width of your video display and the text width. A good rule of thumb, however, is to set a tab at the position that causes the screen to update.

4.4.2   Page Selection

We've already shown you some very easy ways of moving through the text, from one line up or down, to the beginning or the end of the file. CTRL + P is the basic command sequence that moves the cursor to what's called the "home" position on any page. "Home" is the very first character position on a page. (With default values, this is line 7, column 11.) This function is very useful when you're dealing with long files and know the exact page you need to get to.

When you press CTRL + P, the prompt PAGE appears in the bottom prompt line on the screen. Type the appropriate character or number (if any), then press RETURN. The system will wait for the RETURN as its signal to execute. The following is a list of the commands and their functions:

Cursor Home on Current Page — CTRL + P (RETURN)

If you don't enter a value after the prompt, the system assumes you mean the page that's on the screen.

Cursor Home on Page no. — CTRL + P no. (RETURN)

To home the cursor on any page, press CTRL + P, the number of the page, then press RETURN. When you type the number, it appears after the prompt.

To home the cursor on page 6, type:

CTRL + P 6 (RETURN)

Cursor Home on Next Page — CTRL + P —> (RETURN)

When you press the right arrow, the word DOWN appears after the prompt. The right arrow is used because we read to the right, and consider that going forward. As you know from scrolling, moving downward is considered going forward in a file.

Cursor Home on Previous Page — CTRL + P<— (RETURN)

When you press the left arrow, the word UP appears after the prompt, since backwards (to previous page) is "up" in the file.

Cursor Forward no. Pages — CTRL + P —> n (RETURN)

This command moves the cursor to the home position on the page **a specified number of pages** past the one on the screen. When you press the right arrow, the word DOWN appears after the prompt (just as before). Type the number of pages, then press RETURN.

If you were on page 3 and wanted page 5 on the screen, the sequence would be:

CTRL + P —> 2 (RETURN)

This would update the screen 2 pages, from 3 to 5.

Cursor Backwards no. Pages — CTRL + P <— n (RETURN)

This functions just as does the command above, but the left arrow causes the system to move up in the file instead.

NOTE: Remember, the number you use for these last two commands is the *distance* in pages you want the system to move, not the number of the page you want to end up on. To arrive at a particular page, all you have to do is press CTRL + P, the page number, and RETURN.

4.5   Character Editing Commands

4.5.1   Overtyping

One of the most basic character editing needs is to correct simple typos, like t-e-h for t-h-e. With an error like t-e-h, just backspace and overtype the e-h with h-e.

4.5.2   Delete Character — CTRL + D

This command allows you to delete a character or space. When you press CTRL + D (for "delete"), the character or space at the cursor position is removed, and text to the right of the cursor moves to the left to close up the space.

When in the course of huuman events...

Press CTRL + D

When in the course of human events...

4.5.3   Insert Space — CTRL + F

This command allows you to "fill" in spaces anywhere on a line. You can only fill in as many spaces as will fit to the right margin.

When in the curse of human events...

Press CTRL + F

When in the c urse of human events...

Press o

When in the course of human events...

4.6   Line Editing Commands

These functions operate on an entire line at a time. For editing purposes, a line is a row across the page and may be blank.

4.6.1   Delete Line End — CTRL + L

This command allows you to delete all text on a line, from the cursor position to the right margin.

> **When in the course of human events...**

> **Press CTRL + L**

> **When in the course**

4.6.2   Insert Blank Line — CTRL + V

This command allows you to insert a blank line *before* the line the cursor is on. When you use this command sequence, the line of text the cursor is on moves down, leaving a blank line in its place.

> **Under the spreading chestnut tree**
> **The village smithy stands.**

> **Press CTRL + I**

> **Under the spreading chestnut tree**

> **The village smithy stands.**

4.6.3 Delete Line — CTRL + K

CTRL + K "kills" the line the cursor is on and the text below that line moves up to close the space.

Now is the time
To be or not to be
The quick brown fox

Press CTRL + K

Now is the time
The quick brown fox

When you use this command, the system stores the line(s) you've deleted (whether blank or text) in what's called a "buffer." This buffer is a separate memory area that's reserved for just this function. The buffer can hold up to 16 lines at a time. Lines stored in the buffer can be retrieved (see Recover Line).

4.6.4 Copy Line — CTRL + O

When you use CTRL + O, a copy of the line the cursor is on is stored in the buffer and can be retrieved (see Recover Line), but the original line remains where it was. The cursor moves down to the next line so you can continue to copy lines.

Now is the time
To be or not to be
The quick brown fox

Press CTRL + O

Now is the time
To be or not to be
The quick brown fox

A copy of "To be or not to be" is stored in the buffer.

4.6.5   Recover Line — CTRL + R

This command allows you to retrieve the lines stored in the buffer when using CTRL + K or CTRL + O, and place them anywhere in the file. This means that you can move whole paragraphs or sections of text up to 16 lines at a time. Just position the cursor on the line you want the text to appear, and press CTRL + R (for "recover").

The last line deleted will appear on the screen and push the text below it down to make room. The last line deleted is the first line recovered because of the way the lines are stacked in the buffer. When a line enters the buffer, it pushes all the previously deleted lines down on the stack. Therefore, the last deleted is at the top of the stack.

We have said that the buffer holds 16 lines, whether blank or text. If you have longer sections to move, remember to keep track of the number of lines deleted or copied. Each extra line (beyond 16) you store in the buffer pushes out the one at the bottom of the stack and erases it from memory — and once a line is erased, it is irretrievable.

For example, when the buffer is full (16 lines) and you use CTRL + K or CTRL + O to delete or copy another line, this 17th line moves to the top of the stack in the buffer, and the first line is pushed out (erased) to make room for it.

If you have double-spaced text and have more than eight text lines to move, it would be a waste of buffer space to store the blank lines. One way to conserve buffer space is to alternate CTRL + K with CTRL + Z. Use CTRL + K to store the text line, then use CTRL + Z to move down past the blank to the next text line. Then use CTRL + K again.

When you recover this text, it will be single spaced. If you want it double spaced, you can either recover all text lines at once, then use CTRL + V to insert the blank lines; or alternate CTRL + R with CTRL + Q. CTRL + R will recover the text line and CTRL + Q will move the cursor up one line, in position for the next line of text. When you press CTRL + R again, the next text line will appear above the blank line.

4.6.6   Splitting a Line — CTRL + T

This command allows you to split text anywhere on a line, and have the text to the right of the cursor move to the left margin of the next line. You must position the cursor exactly where you want the split to occur.

Row, row, row your boat gently down the...

Press CTRL + T

Row, row, row your boat _
gently down the...

The T stands for "turnover." This is a typesetting term that means "bring around to the beginning of the next line," which is what this command does. It also pushes the text below it down to make room.

This function is quite useful for adding more text to a line than the line has room for. Move the cursor to where you want to insert the phrase or sentence, then split the line. Now you can type as much as you want. When you reach the right margin the word-wrap feature will pick up the last word and place in on the next line, pushing down the following text to make room. You can continue to insert in this fashion indefinately. You couldn't use CTRL + F in such a case, because the text on the line can only move as far as the right margin. It is also useful for separating text into paragraphs.

4.6.7 Glueing a Line — CTRL + G

This command allows you to bring text from the line below, up to the line the cursor is on. The amount of text that moves up is as much as can fill the space to the right margin. The text that moves up is automatically positioned one space after the last letter of the original line. You can position the cursor anywhere on a line to have text "glued" to it. After the procedure, the cursor will be positioned at the left margin on the next line (or on the same line, if it still has more space that can be filled in).

**Home, home on
t̲h̲e
range**

Press CTRL + G

**H̲ome, home on the
range**

Press CTRL + G

**Home, home on the range
—**

4.6.8 Justification — CTRL + J

To justify text actually means to evenly distribute the characters and spaces on a line between the margins (with the last character exactly at the right margin). Here it's used as a kind of umbrella term for the various ways you can position a line of text on the page.

When you press CTRL + J, a prompt comes up across the bottom of the screen, showing you which letter to type for a particular function. It looks like this:

L/EFT R/IGHT C/ENT E/XPAND P/ACK S/KIP

Also, a dashed line across the screen flashes alternately with the text (or the blank) line the cursor is on. This line is the Justify "mode" cursor.

The following is a description of each function:

L/EFT — If you press L, the line will be moved so the first character is "flush left" (against the left margin).

R/IGHT — If you press R, the line will be moved so the last character is flush right.

C/ENT — If you press C, the line will be centered on the page. (No counting page width, counting characters in the line, dividing by 2, and backspacing!)

E/XPAND — If you press E, the text will spread out evenly so it fills the whole line. The first word will remain in place and the last word will be flush right. The system does this by distributing extra spaces between words.

P/ACK — If you press P, the system packs the line into the smallest number of spaces possible. It does this by removing extra spaces between words, such as those inserted when you expand a line.

S/KIP — If you press S, the system skips the line the cursor is on and moves the cursor to the next line. This is the only way the system has of staying in justify, yet not reformatting a line.

If you press any character other than L, R, C, E, P or S, the justify "mode" (a particular method or orientation of an operation), will turn off and the normal cursor will appear.

4.7 Paragraph Editing Commands

Acewriter II has a few commands that deal with entire paragraphs at one time. They're not new commands, just a different way to use old ones. The key to using the paragraph commands is setting "paragraph mode". When you first enter the editor (after booting) the system is in "line mode."

4.7.1 Paragraph Mode — CTRL + SHIFT + 2 (CTRL + @)

This commands changes the way the GLUE (CTRL + G) and JUSTIFY (CTRL + J) commands work. Normally they work one line at a time. Sometimes is is desirable for them to work on an entire paragraph at a time.

This command switches between line-at-a-time (line mode) and paragraph-at-a-time (paragraph mode) operation, and then back again to line mode. The appearance of the cursor tells which mode the system is in. If it is a plain white box, line mode is selected. When the cursor shows a colon inside the white box, paragraph mode is in effect.

4.7.2 Glue Paragraph—CTRL + G

After setting paragraph mode (press CTRL + SHIFT + 2 until the cursor appears as a black colon on a white box), the glue operation will continue down to, but not including, the last line of the paragraph.

> **Home, home on**
> **the**
> **range**

> **Set paragraph mode, press CTRL + G**

> **Home, home on the range**

4.7.3 Justify Paragraph — CTRL + J

After setting paragraph mode (press CTRL + SHIFT + 2 until the cursor appears as a black colon in a white box), the justify operation will continue down to, but not including, the last line of the paragraph.

Paragraph mode only affects the Expand and Pack operations. All the other justify commands change the left margin indentation (which determines where a paragraph starts or ends) and therefore cannot be performed by the paragraph. Left, Right, and Center always work one line at a time, even when the system is in paragraph mode.

4.8 Additional Editor Functions Menu — CTRL + Y

When you press CTRL + Y, a new menu comes to the screen with a kind of potpourri of extra functions. Here's the menu:

```
EDITOR FUNCTIONS

   1. EXIT TO EDITOR SUBSYSTEM
   2. SEARCH AND REPLACE
   3. TITLE LINE
   4. CLEAR ALL TABS
   5. SET TAB
   6. CLEAR TAB

SELECT NUMBER OR LETTER, PRESS RETURN
```
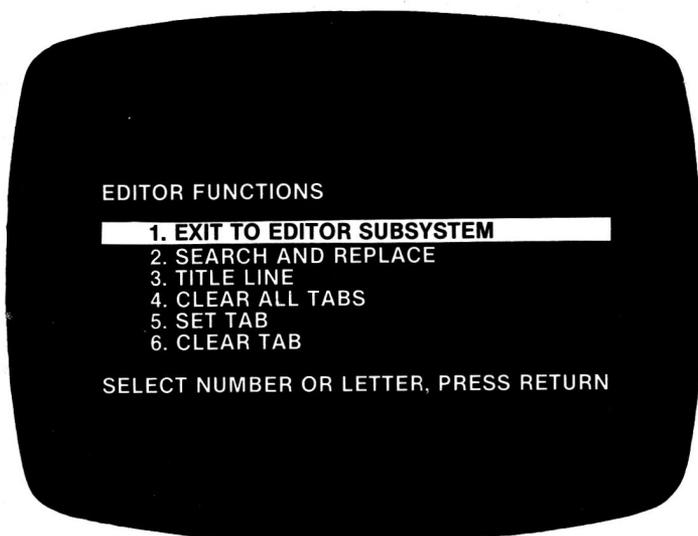
4.2 - Additional Editor Functions Menu

4.8.1 Exit to Editor Subsystem

If you type 1 or press RETURN with the indicator on this command, you will reenter the Editor. The cursor will be on the same character position as when you pressed CTRL + Y, but the line the cursor is on will be in the center of the screen.

NOTE: This is a handy way to readjust the editor display. Just move the cursor to the line you want displayed in the center of the screen then press CTRL + Y (RETURN)

4.8.2. Search and Replace

This command allows you to tell the system to look for a particular character sequence (a single character, a word, a phrase, and so on). The system will also automatically replace the string with another you specify, depending on how you answer the prompts.

When you select this function, the prompt SEARCH FOR : comes to the screen, followed by a flashing cursor.

Determining the Search String

There are three factors about the way the system works that are important in determining the correct string to assign.

1. The system looks for the *entire* string, and if it doesn't find it all, it by-passes any part of it.

2. The system reads each line as a separate unit. It does not read from one line to the next.

Here's how this works in application. Let's say we wanted to find each occurrence of the phrase "FRANKLIN ACE." This is a fairly long string and might be split at the end of a line. That is, the word "FRANKLIN" might be the last word on one line, and the word "ACE" might be the first word on the next line. If the assigned search string were the complete phrase "FRANKLIN ACE," the system would by-pass it because the entire string couldn't be found on the same line.

The way to handle this is to use the *shortest* possible section of a phrase (without it being too short to be clear, of course). In this instance, the word "FRANKLIN" would work very well.

3. Unless a search string has a space before and after it, the system will find it within other words.

For example, let's say the search string was the word **"the."** The letters **the** are central to many words: o**the**r, ra**the**r, **the**ology, ma**the**matics, and so on. If you do not type the search string with a space before and after **the**, the system will consider the letters in each of those words as an occurrence of the string.

4-20

As you can see, it is important to assign the *shortest* string possible, and type the *exact* string you want the system to find. All spelling, spacing, and punctuation must be correct for the system to find the string and differentiate it from other occurrences of the same characters.

As with other functions in which you answer a prompt with text, the system does not differentiate between upper and lower case. This eliminates the possibility of the system missing a search string because it starts a sentence and begins with an upper-case letter, for example. It will, however, replace a string in its original case.

Replacing the Search String

When you have answered the SEARCH FOR prompt, press RETURN, and the prompt REPLACE Y/N comes to the screen, followed by a flashing cursor. This asks if, in fact, you want to replace the search string. (You might just want to check occurrences of the string, rather than replace them.)

If you do *not* want to replace the string, type any character other than Y for YES, and press RETURN. you will immediately be returned to the Editor so you can execute the search function.

If you do want to replace the string, type Y for YES and press RETURN.

When you press RETURN, the prompt REPLACE WITH comes to the screen, followed by a flashing cursor.

If you only want to delete the search string and replace it with nothing, just press RETURN.

If you want to replace it with another string, type the replace string after the prompt and press RETURN.

When you press RETURN, the prompt REPLACE ALL Y/N comes to the screen, followed by a flashing cursor.

If you want all occurrences of the string to be replaced automatically, type Y for YES. When the function is executed, the system will automatically find all occurrences of the search string after the cursor position in the file and replace each with the replace string (even if you've indicated "nothing" by answering the REPLACE WITH prompt with only a RETURN).

If you want to decide on each occurrence separately, type any character other than Y. When the function is executed, the system will find the first occurrence of the search string after the cursor position in the file, and the prompt REPLACE Y/N will come to the bottom of the screen in the Editor. If you want to replace that string with the specified replacement string, type Y for YES. If you don't, type any character other than Y. You can either leave the string as is or replace it with anything you wish.

Cursor to Next Occurrance of Search String — CTRL + N

To actually execute the function once you've answered the prompts, press CTRL + N. This moves the cursor to the first occurrence of the string after the current cursor position. If you answered YES to REPLACE ALL, the system automatically continues through to the end of the file. If you answered NO to REPLACE ALL, you must press CTRL + N each time you want to move the cursor to the next occurrence of the search string.

NOTE: Notice that the CTRL + N function takes place from the cursor position on. Therefore, remember to place the cursor in the home position on the first page of your document, so no occurrences of the string are missed.

This function is very useful for updating names and dates in long documents and correcting repeated spelling errors.

4.8.3 Assigning a Title Line

This command allows you to place a title in the top or bottom margin of each page. (This is the only way you can get text into a margin, and the same text will appear in the same position on each page of the file.) It can also automatically number the pages sequentially when the document is printed.

The way it works is this: The system will use for a title whatever text is on the line the cursor is on. When you execute the function, the system removes the line from the text area, positions it in the margin (top or bottom), and leaves a blank line in the file.

To create a title line:

Position the cursor on a blank line and type the title line exactly as you want it to appear. (You can use a heading or any other text that already exists in the file. However, since the text is removed from the body of the document, you'll have to retype it if you want it there also.) Leave the cursor on the line with the text you're using as a title.

To indicate pages to be numbered in printout:

Place a # on the same line as the assigned title in whatever position you wish. If you want the numbers in the center of the page, position the # in the center; if you want it at the right margin, position the # there. The system holds each # as a place for a digit. Therefore, if your document had more than 9 pages but less than 100, you would put ##; if it had 100 to 999, you would put ###, and so on.

If you had a section number and a page number separated by a hyphen (-), like the numbering in this manual, you would put 1-# (or 1-##), if you were numbering the pages in section 1; 2-# (or 2-##), for section 2, and so on.

You can have the system start with any number; it doesn't have to be 1. Just enter the number you want to start with in the STARTING PAGE # option in the Print Subsystem.

To position the title line:

Enter the CTRL + Y menu. Type 3 or press RETURN with the indicator on this command. The prompt PLACE TITLE AT LINE # will appear, followed by a flashing cursor. Type the number of the line within the top or bottom margin on which you want the title (and page number) to appear, then press RETURN. If you enter a line number that is not in the margin, you will hear a beep and the number you entered will be erased. Just type in the correct number and press RETURN.

The Editor will return to the screen with the title removed from the text area and positioned on the assigned line in the margin. If you want to remove a title line, the simplest method is just to replace the assigned title line with a blank line, since the system will only accept one title line per file. To do this, enter the Editor and place the cursor on a blank line. Press CTRL + Y to enter the Editor Functions menu. Type 3 or press RETURN twice to select and execute TITLE LINE. Answer the prompt PLACE TITLE AT LINE # by typing any line number that's in the top or bottom margin of your file. Press RETURN and the title line you had will be replaced by a blank.

4.8.4   Clear All Tabs

If you type 4 or press RETURN with the indicator on this command, you will clear all tab stops in the file at once.

4.8.5   Set Tab

This command will set a tab stop at the cursor position you where at before you entered the menu.

4.8.6   Clear Tab

This command will clear the tab stop at the cursor position you where at before you entered the menu.

NOTE: These set and clear tab commands are redundant and provided for users with old ACE 1000 keyboards. The simpler (non-menu) commands shown below should be used by users with newer keyboards.

Set Tab — CTRL + SHIFT + N
Clear Tab — CTRL + SHIFT + M

4.9 Enter Control Character — CTRL + B

This command sequence tells the system to give special treatment to the next character entered. It is used to enter control characters to create special typefaces as well as to generate special characters that are not directly available on the keyboard. When you press CTRL + B, the prompt ENTER CHARACTER appears at the bottom of the screen. Type the appropriate character and it will appear at the position of the cursor.

4.9.1 Printer Control Characters

As you can see form the chart that follows, when you use CTRL + B with ^, you get underlining; with A you get superscript, and so on.

Underlining	**CTRL + B ^ (SHIFT + 6)**
Boldface	**CTRL + B]**
Superscript	**CTRL + B A(Above)**
Subscript	**CTRL + B B(Below)**
Double Width	**CTRL + B X(eXpand)**
Italic	**CTRL + B F(Font)**
10 Char./inch	**CTRL + B N(Normal)**
12 Char./inch	**CTRL + B S(Small)**
17 Char./inch	**CTRL + B T(Tiny)**

Figure 4.3 - Standard Printer Driver Control Characters

All the printer drivers on your driver diskette use these same control character to produce the same function. Check your printer manual to see which capabilities your printer has (it may not have them all).

NOTE: These special print features are only available if a you have installed one of our printer driver programs. The Driver Configuration Program exists for this very purpose. If you do not have a driver for your particular printer, you may still be able to get some of these features by entering the codes shown in your printers manual.

To use a specific printer function, you must "bracket" the text you want it used on; that is, the control character must precede the first character affected, and follow the last character to be affected. The first occurence of the control character turns the feature on, the second turns it off.

$\wedge$UNDERLINE$\wedge$ **UNDERLINE**

H$\underline{B}$2$\underline{B}$O H_2O

Printer control characters do not print on hardcopy, nor do they take up space. Remember this when aligning text.

4.9.2   Keyboard Substitutions

The generation of special characters, not available directly from the keyboard, is accomplished by using CTRL + B and a number or other character in the top row of the keyboard:

	CTRL + B	1
~	CTRL + B	4
\	CTRL + B	5
`	CTRL + B	7
(DELETE)	CTRL + B	3

Figure 4.4 - Keyboard Substitutions

There are some characters that shouldn't be used with CTRL + B. These commands are not generally used for the printer routines, so don't worry about needing them. Just be careful when you're typing.

CTRL + B J can confuse the printer and cause format problems.

CTRL + B D as the first character of a line will cause problems for the Disk Operating System, resulting in system errors.

CTRL + B C is used by the system to mark the end of an unformatted file, so don't put one in the middle of a file — formatted or unformatted.

4.10 Exercises

There is basically one exercise in this section — editing the first three pages of the REDRIDE file. (The rest of the file is included just so you know how the story turns out.) So, if you haven't already done it, load REDRIDE: Enter the Filer and type 4 twice to select and execute LOAD FORMATTED FILE. Type the number of the file after the prompt and press RETURN. Reenter the Editor by typing 1 three times. The file will be on the screen.

The editing instructions on the first three pages of the printout at the end of this section include functions mentioned in the reference material in this section. Only two cursor motion functions are not specifically addressed: setting tabs and page selection.

We suggest you determine the point at which the screen will update for your display (if it will) by holding down the right arrow key and noticing the character position of the cursor when the screen updates. Then use CTRL + SHIFT + N to set tabs at those places. This will make proofreading and finding sections of text much faster. You can also practice using the various page selection commands.

You have two options for getting through the editing. You can just go it on your own and see how you make out, or you can follow the directions for each instruction as given below. (There is also a Search and Replace exercise at the end of these directions that is not mentioned in the printout.)

Exercises on Page 1

1. To center the title, position the cursor on the line with the title and press CTRL + J to turn justify on. Then type C.

2. To correct the **n** in **grandna**, position the cursor on the **n**and overtype it with an **m**.

3. To delete the **o** in **tooolazy**, position the cursor on the extra **o** and press the Space Bar.

4. To add a space between **Onthe**, position the cursor on the **t** in the and press CTRL + F.

5. To replace **are the words** with **it is.**, position the cursor on the **a** in **are** and overtype. Then position the cursor on the space after the period and press CTRL + L to delete the end of the line. You can also just space over the last few letters to delete them.

6. To insert the song title, position the cursor on the line you want it to be on and type it. If you put it on the wrong line, use either CTRL + K to delete an extra blank line, or CTRL + V to insert one.

7. To align the text in the song, position the cursor at the left margin and use CTRL + D to delete extra spaces and move text to the left; and CTRL + F to add extra spaces and move the text to the right.

8. To insert the space and **r** in **chickeally**, position the cursor on the **e**, hold down the CTRL key, and press F twice to insert two spaces. Move the cursor one space to the right using either the right arrow or the Space Bar and insert the **r**.

9. To transpose the **gn** in **hugnry**, position the cursor on the **g** and overtype.

10. To delete an extra **o** in **Hoood** and close the space, position the cursor on one of the **o**'s and press CTRL + D.

Exercises on Page 2

1. To align **Needless** at the left margin, position the cursor at the left margin, hold down the CTRL key and press D until the word is in the right place.

2. To align **he** at the left margin, position the cursor at the left margin and press CTRL + D.

3. To insert a space and **t** in **thathe**, position the cursor on the middle **t**, hold down the CTRL key while you press F twice, then type t.

4. To glue the paragraph, position the cursor on the first line. Hold down the CTRL key and press G at each new line.

5. To delete the end of the line, position the cursor after **ef-fective**. and before **Yes**, then press CTRL + L.

6. To insert the **p** in **skiping**, position the cursor on either the **p** or the **i** and press CTRL + F, then type the **p**.

7. To delete the end of the line, position the cursor on the **f** and press CTRL + L or use the Space Bar.

8. To double space the paragraph, position the cursor anywhere on the second line and press CTRL + V to insert a blank line. Use CTRL + Z to bring the cursor down to the next text line, and press CTRL + V to insert a blank line. Continue this until the paragraph is double spaced.

9. To delete the **)**, position the cursor and press the Space Bar.

10. To create an upper-case **P**, press SHIFT + P.

Exercises on Page 3

1. To start a new paragraph, position the cursor on the "
preceding **Oh**, then press CTRL + T.

2. To add the extra blank lines between the paragraphs, posi-
tion the cursor on the first line of the new paragraph, hold
down the CTRL key and press V twice.

3. To glue the paragraph so it is properly formatted, position
the cursor on the first line of the paragraph, hold down the
CTRL key, then press G as many times as necessary. You
can also use CTRL + SHIFT + 2 to set paragraph mode
(the cursor appears as a colon in a white box). If you do, the
system will automatically glue the entire paragraph after
you press CTRL + G once.

4. To add **it).**, position the cursor at the left margin and type.

5. To move the paragraph, position the cursor on the first line.
Hold down the CTRL key and press K seven times to "kill"
the paragraph and store the lines in the buffer. To recover it
in the correct position, place the cursor on a blank line be-
tween **may return the basket."** and **The wolf, of course....**
Hold down the CTRL key and press R seven times to recover
all the lines.

Another method would be to use CTRL + K to delete the
text line, then use CTRL + Z to move the cursor past the
blank to the next text line. Then use CTRL + K again, and
alternate it with CTRL + Z until the paragraph is deleted. To
recover, start with CTRL + R, and alternate it with CTRL +
Q to move the cursor up a line and create blanks between
text lines.

6. To insert **gravy**, after chicken, position the cursor on the **b** in
biscuits and press CTRL + T to split the line. Type **gravy**,
and glue the rest of the paragraph.

7. To insert the title **WOLVES I HAVE KNOWN AND LOVED** and the page numbering command on line 4 in the top margin:

   a. Return to page 1 of the file.
   b. Position the cursor on a blank line (or create one).
   c. Type **WOLVES I HAVE KNOWN AND LOVED**, starting at the left margin.
   d. Position the cursor at character position 72 and type #. (REDRIDE has only 8 pages, so only one # is needed.)
   e. Leave the cursor positioned on the line the title and # are on.
   f. Press CTRL + Y to enter the Editor Functions menu.
   g. Type 3 twice to select and execute TITLE LINE.
   h. Type 4 after the PLACE TITLE AT LINE # prompt.
   i. Press RETURN.

   The title will be placed on line 4 in the top margin, with the # at the right margin. If you print using what you have in memory, the pages will be numbered in sequence.

Search and Replace Exercise

Use the Search and Replace function to replace the string **Red** with **Green**.

1. Press CTRL + E to position the cursor at the beginning of the file.

2. Press CTRL + Y to enter the Editor Functions menu.

3. Type 2 twice to select and execute SEARCH AND REPLACE.

4. Type (space)RED(space) after the SEARCH FOR prompt and press RETURN.

5. Type Y after the REPLACE Y/N prompt and press RETURN.

6. Type (space)GREEN(space) after the REPLACE WITH prompt and press RETURN.

7. Type any character other then Y after the REPLACE ALL Y/N prompt and press RETURN. (This prevents the system from automatically moving through to the end of the file and replacing each occurrence of the string when the function is executed.)

8. Press CTRL + N to move the cursor to the first occurrence of the string after the cursor position.

9. Type Y after the REPLACE Y/N prompt and press RETURN to automatically replace the string.

10. Press CTRL + N to move the cursor to the next occurrence of the string.

11. Type any character other than Y after the REPLACE Y/N prompt and press RETURN.

12. Either leave the string or replace it with anything you like.

Continue these operations until you feel comfortable with the function. You can also experiment with answering NO to the REPLACE Y/N prompt and answering YES to the REPLACE ALL Y/N prompt and see what happens.

If you don't save your edited version, when you reload the REDRIDE file, you will get the original, with all the mistakes. If you do save it, give it a different name so the original is left intact on your data diskette.

center title on page

(BIG RED RIDING CAPE)

Once upon a time there was a little girl who had a red cape and

a red hood. She was on her way to grandma's house with a basket

correct letter

of food because grandma was hungry and too lazy to feed herself. *delete o*

The girl had to go through the woods to get to grandma's house

because thats the kind of story this is. On the way she sang a *insert space*

change wording

song she wrote. Here are the words. *it is.*

A TISKET, A TASKET —————————————— *insert song title - all caps*

A tisket, a tasket,

A green and yellow basket.

I put a letter in the top

And on the way I dropped it.

align text

I dropped it, I dropped it

And on the way I dropped it.

A little boy picked it up

And put it in his pocket.

insert space and r

Yeah, the chick really cooked. But it was this very song that

got her into trouble. The wolf heard her from a long way off and

transpose gn

decided that he was hungry. He figured he had three options:

he could steal the basket and eat the food; he could steal —— *delete o*

Little Red Riding Hood and eat her; or he could steal the song *and close space*

and make a bundle and never be hungry again.

align

align

Needless to say, being pretty slick as wolves go, he
decided stealing the song was infinitely better. After all
the food would be gone in ten minutes, if that; and "Red," as
he affectionately began thinking of her, would probably only
last through the evening. But he was sure that the song would
become a classic (with the right promotion, of course). So he
set off in the direction of Red's mellifluous voice.

glue #

*insert
t and
space*

Now, at this point, the wolf knew what his goal was, but he
didn't have a plan. He just had the basics down: he'd make
friends with her, get her to invite him home, slip her a mickey,
ransack her house for the sheet music, and split. Simple, yet
effective. ~~Yes indeed. Very effective.~~ Very effective.

*delete end
of line*

*insert
p*

He lit out in the direction of her voice, and pretty soon came
upon her skipping merrily along. Red was actually not one to
skip, but she'd gotten a blister from the long walk and it
helped keep pressure off the bad foot. The wolf followed her a
ways, slinking behind trees and such wolf nonsense, until she'd
finally had it and sat down for a rest. ~~for a rest.~~

*double
space
#*

delete end of line.

He decided the best approach was to ask about her health and if
he could be of service (a little gallantry couldn't hurt). He
started "ahem-ing" and clearing his throat as he moved in, so
she wouldn't get too freaked out. When he finally reached her
he said, "Pardon me lovely lady, but if you are in some kind
of distress, I do hope you will allow me to be of assistance. *delete)*

*upper
case P*

(pretty smooth, huh?)

Well, Red had only heard that kind of talk on television, so she
looked up at him like he was crazy. But, she thought, if he was
so anxious to "be of assistance," maybe she could get him to
take the basket to grandma's for her. "Oh, sir," she said,
trying to remember what they had sounded like in The Count of
Monte Cristo. "Perhaps you would be so kind as to deliver this
basket of food to my grandmama (with the emphasis on the last
"ma"). She is ill and has no one to care for her." (And,
she wanted to add, she eats like a horse, but decided against

insert it.)

start a new
¶ —
insert
blank lines
and glue
to reformat

Woops, thought Red. She hadn't bargained on this. But she
thought, why not; he looks harmless enough. So she gave him
grandma's address and her own and started making her way back
home.

move
¶ down

Now, this was just the opening the wolf was looking for. "I
would be delighted, my dear," said he. "Just tell me where I
may return the basket."

The wolf, of course, being hungry, waited until she was out of
sight and sat down to eat. There was fried chicken, biscuits,
potato salad, and some rhubarb pie for dessert. No doubt about
it -- Red was a terrible cook, but at least he was full. All he
had to do now was wait until dark and show up at Red's house.

insert
gravy,

Meanwhile, Red skipped on home to soak her foot. She'd been
home about an hour when the phone rang. It was grandma asking

assign title WOLVES I HAVE KNOWN AND LOVED with page
numbering command on line 4 in top margin

5. FORMAT SUBSYSTEM

```
FORMAT SUBSYSTEM

    A. PAGE LENGTH.............................66
    B. TOP MARGIN .............................6
    C. TEXT MARGIN ............................54
    D. PAGE WIDTH .............................85
    E. LEFT MARGIN ............................10
    F. TEXT WIDTH..............................65
    G. DOUBLE SPACE ..........................NO
    1. ACEWRITER II SYSTEM MENU
    2. CHANGE OPTIONS

SELECT NUMBER OR LETTER, PRESS RETURN
```
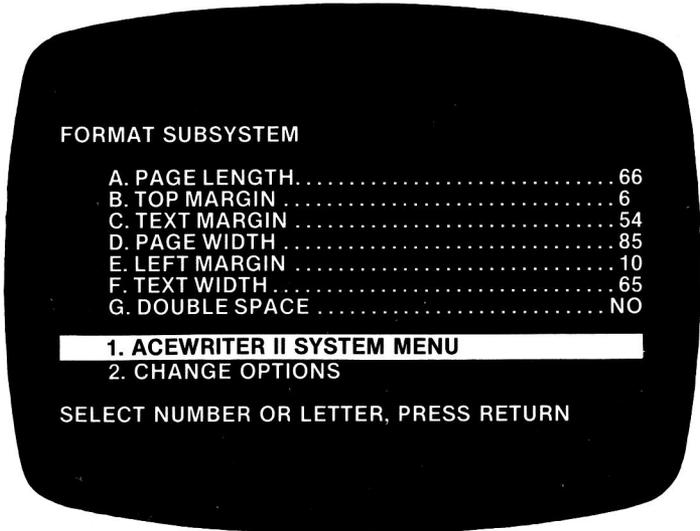
Figure 5.1 - Format Subsystem Menu

The purpose of this subsystem is to define for the system the text and form size you will be using. You cannot enter text outside the boundaries you set for it (that is, in the margins).

If you recall from Section 1, when you changed the options in this subsystem, the size of the video page in the Editor also changed. This means that when you type text, it will automatically be entered in the format you defined. These format options are transferred along with the document text in a formatted file. This eliminates having to figure out settings each time you want to edit a different document.

5.1 Calculations for Formatting

To set the options correctly for your paper, you need to know that the system operates on the following measurements:

Vertical — 6 lines per inch (LPI)
Horizontal — 10 characters per inch (CPI)

NOTE: These measurements (6 LPI and 10 CPI) are standard. Some printers, however, have other capabilities: 12 and 16.5 CPI, and 8 LPI. Check your printer manual to see if yours has these features and calculate according to the measurements you intend to use.

Options Menu

5.2 Page Length

This is the total number of lines that a page will hold, from top edge to bottom edge. The default value of 66 lines accommodates a standard 11″ sheet of paper (6 LPI × 11″ = 66). The system's range is 1 to 112 lines. This accomodates 14″ paper at 8 LPI: 14″ × 8 LPI = 112 lines. To determine the correct value for your paper, multiply its length in inches by 6.

5.3 Top Margin

This is the blank space between the top edge of the paper and the first line of text. The default value of 6 gives you a 1″ top margin (6 LPI / 6 lines = 1″). The system's range for this is 0 to 111, so the top margin can conceivably extend down to the last line of a page, leaving room for only one line of text. To determine the correct value, multiply the desired size in inches by 6.

5.4 Text Length

This is the number of lines of text the system will allow you to type on a page. The default value of 54 gives you 9″ of text (54 lines / 6 LPI = 9″). With 9″ of text and a 1″ top margin, the bottom margin will be 1″ (9″ text + 1″ top margin = 10″; 11″ paper − 10″ = 1″ bottom margin). Text length has the same range as page length — 1 to 112 lines. You could, therefore, fill the page from top edge to bottom edge. To determine the correct value, multiply the desired length in inches by 6.

The sum of the top margin and the text length cannot exceed the page length. For example, if your page was 8" long, the value for page length would be 48 (6 LPI × 8" = 48). You couldn't, therefore, give a value of 40 for text and 10 for top margin — that would equal 50 (40 + 10 = 50). Your paper would have to be 8 1/3" long to handle that, and you've already told the system it's only 8" long. If you do enter values that add up to more than the page length, when you try to exit the Format menu, the system will tell you with an error message: FORMAT ERROR: TOP + TEXT > LENGTH. If this occurs, just check your math and correct it.

5.5   Page Width

This is the total number of characters that will fit across the page from edge to edge, at 10 characters per inch (CPI). The default value of 85 is set for 8 1/2"-wide paper (8.5" × 10 CPI = 85). The range is from 20 to 160. To determine the correct value for your paper, multiply its width in inches by 10.

5.6   Left Margin

This is the blank space from the left edge of the paper to the first character, measured in characters at 10 CPI. The default value of 10 gives you a left margin of 1". The range is 0 to 140. You could, therefore, start text at the very edge of the page. To determine the correct value, multiply the desired size in inches by 10.

5.7   Text Width

This is the number of characters and spaces that the system will allow to be typed across the page, at 10 CPI. The default value of 65 gives you 6 1/2" of text (6.5" × 10 CPI = 65). With a default left margin of 10 and 65 characters of text, this leave a right margin of 10 also (65 text + 10 left margin = 75; 85 page width − 75 = 10 right margin). The range is 20 to 160, the same as for PAGE WIDTH. Text could, therefore fill the page from edge to edge. To determine the correct value, multiply the desired width in inches by 10.

Left margin plus text width must not exceed page width. This works just the way top margin plus text length does. If the sum of these values is greater than the page width, when you try to exit the Format menu, the system responds with the message FORMAT ERROR: LEFT + TEXT > PAGE. Again, just check your math and correct it.

5.8   Double Space

If you leave the default answer NO, text will be single spaced as you type. If you change the answer to YES, text will be double spaced as you type. The answer to this option also determines how many lines down the cursor will move when the RETURN key is pressed: one line for single space; two lines for double space. This applies only in the Editor, however, and has no effect when using RETURN to execute a command or answer a prompt.

Functions Menu

5.9   ACEWriter II System Menu

If you type 1 or press RETURN with the indicator on this command, you will enter the System Menu.

5.10   Change Options

If you want to change any options in the top section of this menu, position the indicator on this command and type 2 or press RETURN. Another indicator will appear on option A. (You can also skip this and just type the letter of the option you want.)

5.11   Exercises

Exercise 1

Let's see what effect changing options has on text already typed and saved. Load the STATES MINUS file so you can see it on the screen. (Enter the Filer from the System Menu and select and execute LOAD FORMATTED FILE. Then enter the number of the STATES MINUS file after the prompt and press RETURN.)

The cursor is in the upper left-hand corner of the page, under the **A** in **Alabama**. Look at the message across the top. This tells you that the cursor is on page 1, line 7, character position 9. We said that you couldn't move the cursor outside the boundaries set in the format subsystem. Let's try it.

Use CTRL + Q to try and move the cursor up to line 6. You can see that the cursor moved to the lower left-hand corner of the preceding page. Use CTRL + Z to return the cursor to line 7 (the first line) of the first page of the file. Notice also that the list is double spaced. Use the RETURN key to move to the bottom of the first page. You can see that the page break is between **Tennessee** and **Texas**.

Now, exit the Editor with ESC, and press 4 twice to reenter the Format Subsystem. Then type B twice to select TOP MARGIN and bring the ENTER VALUE prompt to the screen. Enter a value of 2 and press RETURN. Then, change TEXT LENGTH to 62, and page width to 20. (You can probably do these without instructions now.)

Since the page width is so narrow now, change the LEFT MARGIN to 3. Change text width to 20 (yes, 20), and change DOUBLE SPACE to NO. (Remember, although the default value for DOUBLE SPACE is NO, the settings for the file in memory appear in the menu, and this file is double spaced.)

Now that you've changed all the options, type 1 twice to exit the Format Subsystem. The message FORMAT ERROR: LEFT + TEXT > PAGE has come to the screen. As you can see, the system wouldn't accept a combined total of 23 for the left margin and text width, since the page is only 20 characters wide.

For our purposes, the easiest thing is just to change the page width. Select PAGE WIDTH, enter 25 after the prompt, and press RETURN. Exit the options section and return to the System Menu.

Type 1 or press RETURN to enter the Editor so you can see what happened to the text. Take a look at the cursor position. It's at line 3, character position 4. This is correct for a top margin of 2 lines and a left margin of 3 spaces.

Now, use the RETURN key to scroll down to the page break. If you recall, in the original the break was between **Tennessee** and **Texas**. Now it is between **Virginia** and **Washington**. Since you shortened the top margin and increased the text length, the system allowed for more text lines on the page.

Now, exit the Editor (ESC) and return to the Format menu. The settings are just as you left them.

Exercise 2

Now see what happens when you load STATES MINUS again. Return to the System Menu, then type 2 twice to select and enter the Filer. Then reload the STATES MINUS file (press 4 twice to select LOAD FORMATTED FILE and execute the function; then enter the file number after the prompt). Finally, return to the Editor (type 1 twice).

The STATES MINUS file is in its original form, since that was how it was saved on disk. Unless you save text in a new format, it can't be recalled in the new format.

5.12 Applications

The Format options allow you to enter text more efficiently because there's no fussing with text and form size once they're set. Even this can be simplified and streamlined. If you use the same variety of formats and documents over and over again — for example, special sizes of invoices, memos, mailing labels, letterhead stationery, and so on — you can save even more time by saving a blank formatted page as a file. Then you can just load the appropriate blank page and start entering text in the correct format. This eliminates the need for calling up the Format menu and setting options each time.

To create a blank page in the correct format:

1. Determine the size of the paper and the text in terms of:

    a. 6 lines per vertical inch (length)
    b. 10 characters per horizontal inch (width)

2. Make sure the system's memory is cleared and there is a blank page in the Editor.

3. Enter the Format Subsystem.

4. Set the options to accommodate your paper size.

    a. For numerical options:

        1) Type the letter of the option to select.
        2) Type the letter of the option or press RETURN to bring the prompt to the screen.
        3) Enter the correct value.
        4) Press RETURN.

    b. For DOUBLE SPACE:

        1) Type G to select the option.
        2) Type G or press RETURN to toggle to the correct answer.

5. Type 1 twice to select and enter the System Menu.

6. Type 2 twice to select and enter the Filer.

7. Type 3 twice to select SAVE FORMATTED FILE and bring the FILE NAME prompt to the screen.

8. Enter file name after the prompt and press RETURN.

9. The formatted blank page will be saved on disk for future use.

10. To use the formatted blank, reload the file into memory and type text.

6. CONFIGURATION SUBSYSTEM

```
CONFIGURATION SUBSYSTEM

    A. KEY-PRESSED SOUND .................... YES
    B. PRINTER SLOT .......................... 1
    C. PRINTER DRIVER PROGRAM.............. NO
    D. VIDEO SLOT............................. 0
    E. VIDEO DRIVER PROGRAM................. NO

    1. ACEWRITER II SYSTEM MENU
    2. CHANGE OPTIONS
    3. SAVE CONFIGURATION
    4. LOAD CONFIGURATION

SELECT NUMBER OR LETTER, PRESS RETURN
```
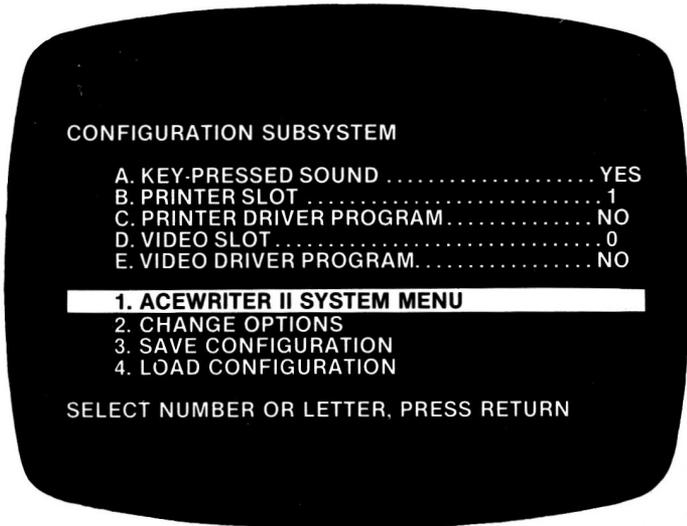
Figure 6.1 · Configuration Subsystem Menu

The Configuration Subsystem reflects the information about your configuration and selected drivers as loaded from the driver diskette at boot time (SYS.OPTIONS, PRINTER, and VIDEO files). It also provides a way to change configuration options manually and turn off and on drivers that have been loaded, without having to exit the program. You cannot, however, use this subsystem to turn on a driver (either video or printer) that has not been loaded at boot time, since it's not in memory. However, you can use this subsystem to load the files from a driver diskette (4. LOAD CONFIGURATION) without having to reboot.

Options Menu

6.1 Key-pressed Sound

When editing text, a click is generated every time you press a key. The purpose is to give your ears some feedback so your eyes can stay fixed on your subject material. If you prefer quiet set this option to NO.

6.2 Printer Slot

This option tells the system which slot the printer interface card is in. Since it is usually in slot 1, the default answer is 1. If yours is in a different slot, change the value to the correct one. If you have more than one printer and the interface cards for each are in different slots, you must be sure that the value for this option corresponds to the slot for the printer you are using.

6.3 Printer Driver Program

If you boot with a driver diskette that has a printer driver on it, the system loads the PRINTER file and the answer to this option automatically changes to YES. You can use this option to turn off and on the printer driver if it's been loaded.

6.4 Video Slot

This command allows you to tell the system which slot the interface card for an 80-column board is in. If you don't have an 80-column board, leave the default answer of 0.

6.5 Video Driver Program

If you are using the 70 column display or an 80 column card which requires a video driver, the system loads the VIDEO file (video driver program) and the answer to this option automatically changes to YES. You can use this option to turn off and on the video driver if it's been loaded.

This option has also been included as a way of increasing the expandability and flexibility of ACEWriter II so it can accommodate other drivers or new concepts in video hardware.

Functions Menu

6.6   ACEWriter II System Menu

If you type 1 or press RETURN with the indicator on this command, you will reenter the System Menu.

6.7   Change Options

If you want to change any options in the top section of this menu, position the indicator on this command and type 2 or press RETURN. Another indicator will appear on option A. (You can also skip this and just type the letter of the option you want.)

6.8   Save Configuration

If you type 3 or press RETURN with the indicator on this command, you will save a file that contains the configuration data for your system (SYS.OPTIONS) as defined by the answers to the options. **This command will *not* to save the PRINTER or VIDEO files.** It should only be used to "update" driver diskettes that were create using the Driver Configuration Program (DCP). You might wish the system to boot with key-pressed sound off, for example.

6.9   Load Configuration

This command allows you to load the SYS.OPTIONS, PRINTER, and VIDEO files into memory. When you select and execute this command, the same instructions as appeared on the copyright page come to the screen.

Insert slave driver then press RETURN.

(Opt. enter ,Ss,Dd,Vv before RETURN)

Remove your text disk and insert the diskette containing your configuration files, your slave driver diskette, then press RETURN. The configuration files will be loaded into memory.

7. UNFORMATTED FILER SUBSYSTEM

```
UNFORMATTED FILER

     A. TRANSFER ENTIRE FILE ................... YES
     B. INCLUDE MARKERS ...................... YES

     1. FILER SUBSYSTEM
     2. CHANGE OPTIONS
     3. SAVE UNFORMATTED FILE
     4. LOAD UNFORMATTED FILE
     5. INSERT UNFORMATTED FILE

SELECT NUMBER OR LETTER, PRESS RETURN
```
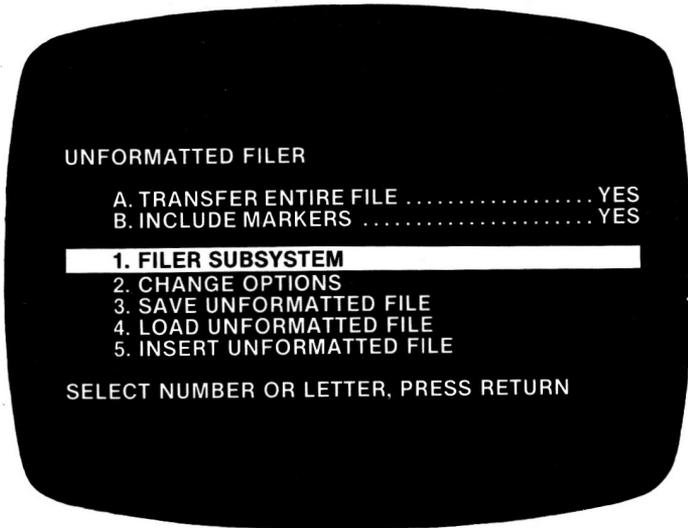
Figure 7.1 - Unformatted Filer Subsystem

The Unformatted Filer Subsystem is accessed from within the Filer Subsystem. We discussed the Filer Subsystem in section 2. From the Filer menu, execute 6. UNFORMATTED FILER SUBSYSTEM by pressing 6 twice.

The difference between a formatted file and an unformatted file is this:

A formatted file is considered a complete unit; whereas in an unformatted file, each line is considered a separate unit.

This allows you to manipulate the text in an unformatted file. You can save, load, or transfer to a formatted file any amount of text — from one line to an entire file. This means that you can construct entire documents from boilerplate (standard paragraphs such as clauses used in contracts and wills).

You can also use ACEWriter II to edit unformatted (DOS T type) files you've created using other software programs. You can even create a BASIC program in ACEWriter II and take advantage of its editing features. (These will be discussed in the applications section.)

Options Menu

These options allow you to tell the system how much of a file you want to save, load, or merge with a formatted file.

7.1   Transfer Entire File

This option allows you to tell the system whether you want to save or load (transfer) an entire file, or only part of it. The default answer is YES. This command takes precedence over the other, so if you want to transfer an entire file, you need not change the answer to option B, even though it may appear to conflict.

7.2   Include Markers

In order to save, load, or transfer part of a file, you must define the portion of text with markers — either special characters inserted at the left margin or actual text (as explained below). This option allows you to tell the system whether you want the markers included in the file or not. The default answer is YES, which means that they will be included. (Remember, however, that option A takes precedence. You must change option A to NO if you want only part of a file, whether you want markers included or not.)

7.2.1   Defining Text with Markers

There are two types of markers: special characters (such as $$ or any you choose) and actual text. Just make sure that whatever you use is not found at the left margin elsewhere in the text. Since the system only looks for markers at the left margin, if the markers you chose were also at the margin on some other line(s), the system would be confused as to which ones you meant. It would take the first match it found.

It is important to note that, for this function, ACEWriter II recognizes text by line. That is, it saves, loads, or transfers only full lines starting at the left margin, and it looks for markers at the left margin. If you place a marker somewhere other than at the left margin, the system can't find it and the prompt MARKER NOT FOUND, PRESS RETURN TO CONTINUE comes to the screen. If this happens, just press RETURN and you'll reenter the Unformatted Filer menu so you can start again.

In application, this means that you can't define only the last few words of a line. For example, if the text were:

One of the most outstanding political speeches ever delivered was Lincoln's Gettysburg Address: "Four score and seven years ago, our Fathers brought forth on this continent a new nation...."

and you wanted only the Gettysburg Address, you'd have to take the entire line the Address begins on, then delete what you didn't want.

7.2.2   Using Characters as Markers

If you were using special characters, you'd have to put them at the left margin, perhaps on a blank line above and below the lines with the text you wanted. You couldn't just put them in the middle of the line between **Address:** and **"Four.** The system wouldn't be able to find them.

**$$
Gettysburg Address: "Four score and seven years ago, our Fathers brought forth on this continent a new nation...."
$$**

7.2.3 Using Text as Markers

If you were using the text as a marker, you'd have to use **Gettysburg Address** (or at least the first few letters of the line). You couldn't just use **"Four score**, because it's not at the left margin. The system would not be able to find that either.

In both cases, the text would start with the word **Gettysburg**, rather than the Address itself.

7.2.4 Using Both Text and Characters as Markers

There is no law that says that starting and ending markers have to be the same. This is obvious when you consider that text markers would probably never be the same. Therefore, you can use a combination of the two (characters and text).

This would be an efficient way to store, say, a list of customer names and their numbers. If they were stored in an unformatted file, you could load each separately and merge them with a blank formatted file the size of your envelopes. ·

One item in the list might look like this:

> **/001/**
> **Ralph Henderson**
> **1642 Riverview**
> **St. Louis, MO 11111**
> **/ /**

Since each customer number is different, this would be an easy way of using text as a marker. The brackets around the number ensure that the system can find it as a marker and will not confuse a customer number with a street address. The ending marker for each can be the same.

In an application like this, either preface a single-digit number with zeros (as above), or be sure to follow the digit with a character (though using both is best). Remember, the system reads an entire line at a time. Therefore, if you just used /2, it wouldn't know if you meant /2 or /27 or /2658430. It takes the first /2 it sees, so if your numbers are not listed sequentially in the file, you will get the first one that begins with /2 (which may not be the one you want at all).

In this application (an address on an envelope), you would answer NO to INCLUDE MARKERS, since you wouldn't want them printed on the envelope.

In general, as to whether or not to include markers... If you've used part of the text as a marker, you will probably want to include it. If you've used special characters, you might want to include them if you're transferring text into longer files just to make locating the point of the merge easier. In any case, you can delete characters easily on the screen using editing functions, and they will not be stored with the file unless you save them on the disk.

Functions Menu

7.3 Filer Subsystem

If you type 1 or press RETURN with the indicator on this command, you will reenter the Filer.

7.4 Change Options

If you want to change any options in the top section of this menu, position the indicator on this command and type 2 or press RETURN. An indicator will appear on option A. (You can also skip this and just type the letter of the option you want.)

7.5 Save Unformatted File

This command allows you to save as an unformatted file whatever is in memory. The basic operation is the same as saving a formatted file.

When you type 3 or press RETURN with the indicator on this command, a directory of unformatted files only comes to the screen. [If there are no files on the disk, the prompt (NO FILES) will come up.] This directory contains each file name, preceded by the number of sectors the file has used. This allows you to keep track of disk space. Below the directory is the prompt FILE NAME and a flashing cursor.

007 UTIGER1
013 UTIGER2
042 ULION

FILE NAME →

Type the name you are giving to the file and press RETURN. The directory will update to show the number of sectors and the name of the new file. When you press RETURN again, you will reenter the Unformatted Filer Subsystem, and the indicator will be on 1. FILER SUBSYSTEM.

NOTE: The name of an unformatted file is not given in the top prompt line in the Editor. Therefore, there is no UP-DATE AS *"FILE NAME"* prompt when you resave a file that was loaded from disk.

7.5.1 Saving Part of a File

Unformatted save has an additional feature as well. You can save as much or as little of the text as you want using range markers. This eliminates having to clear huge sections of text from memory so you can keep only those sections you want.

You can use characters or text as markers. If you intend to use characters, make sure you have included them in the text. Then enter the Unformatted Filer.

First, change TRANSFER ENTIRE FILE to NO. (As to option B, you can include markers or not, as you like.) Then type 3 twice to select and execute the save function, enter the file name, and press RETURN. This time, the prompt STARTING MARKER will come up. Enter the starting marker and press RETURN. This brings up the ENDING MARKER prompt. Answer the prompt and press RETURN. This will save the defined part of the file.

7.6 Load Unformatted File

This command allows you to retrieve unformatted files you've stored on disk and load them back into memory. The basic operation is the same as loading a formatted file.

To load an unformatted file, position the indicator on this command and type 4 or press RETURN. The directory of unformatted files will come to the screen, followed by the prompt FILE NUMBER and a flashing cursor.

1. UTIGER1
2. UTIGER2
3. ULION

FILE NUMBER —>

Type the number of the file you want to load and press RETURN. The system will load the file into memory.

If there are no files on the disk, the prompt (NO FILES) will come up.

If you type a number or other character(s) not in the directory, the Unformatted Filer menu comes up again automatically so you can start again.

NOTE: The prompt WARNING: FILE NOT SAVED! CONTINUE Y/N ? does not come up when you try to load an unformatted file over a file in memory. So, be sure you've remembered to save the text in memory if you want it.

7.6.1   Loading Part of a File

You can also use this command to load only a portion of an unformatted file. Set the option TRANSFER ENTIRE FILE to NO. The process of defining the text and answering the starting and ending marker prompts is exactly the same as for the save function.

NOTE: With the load function, unless you've stored the file with character markers in it, using text markers is more efficient. That's because you would first have to load the entire file to put character markers in it, which is self-defeating.

7.7   Insert Unformatted File

This command tells the system to insert the unformatted file (or portions thereof) at the location of the cursor in the formatted file. Text will begin to merge at the cursor position.

7.7.1   Insert an Entire File

Load the formatted file and position the cursor at the desired point of merge. Exit the Editor and return through the Filer to the Unformatted Filer.

Make sure the answer to A. TRANSFER ENTIRE FILE is YES. Type 5 twice to select and execute INSERT UNFORMATTED FILE. When the files directory and prompt come to the screen, enter the file number and press RETURN. The entire file will merge at the cursor position in the formatted file.

7.7.2   Insert a Part of a File

Define the part of the file you want to transfer. (If using character markers, place them in text and save the file with the markers.) Load the formatted file you want to merge text with, position the cursor at the desired point of merge, and (as above) return to the Unformatted Filer.

Make sure the answer to option A. TRANSFER ENTIRE FILE is NO. Decide whether you want to include markers, and answer option B accordingly.

Type 5 twice to select and execute INSERT UNFORMATTED FILE. When the files directory and prompt come to the screen, enter the number of the unformatted file the text you want is in. Press RETURN. Answer the STARTING MARKER prompt and press RETURN, then the ENDING MARKER prompt and press RETURN. The transfer will take place.

7.8   Exercises

Exercise 1

The sample files for doing these exercises are stored on the ACEWriter II diskette. So, first, let's transfer the files to your initialized diskette.

Insert the ACEWriter II diskette. Enter the Filer and select and execute 6. UNFORMATTED FILER SUBSYSTEM. Type 4 twice to bring the directory of unformatted files to the screen. There are three unformatted exercise files: UREDRIDE, USTATES-C, and USTATES. Each name is preceded by a number, just as in the Filer. Enter the number of one of the files after the FILE NUMBER prompt, and press RETURN. (Load the USTATES-C file last, since you'll need it in memory to do the next exercise. This will avoid having to load it twice.) The system will load into memory the file you choose.

Now let's save this file on the initialized diskette. First, remove the ACEWriter II diskette and insert the initialized diskette into the disk drive.

The Unformatted Filer menu should be on the screen, so just type 3 twice to select and execute SAVE UNFORMATTED FILE. This will bring the directory and FILE NAME prompt to the screen. Type the name of the file, just as it was on the ACEWriter II diskette, and press RETURN. The directory will update to show you that the file has been saved. Press RETURN again to reenter the Unformatted Filer.

Repeat this operation to save the other unformatted files on the initialized diskette. For each file: Remove the initialized diskette and insert the ACEWriter II diskette in the disk drive. Load the file using the LOAD UNFORMATTED FILE command in the Unformatted Filer. Remove the ACEWriter II diskette and insert the initialized diskette. Then save the file under the same name using the SAVE UNFORMATTED FILE command in the Unformatted Filer.

Exercise 2

If you loaded and saved the USTATES-C file last, it will be in memory and available to be seen in the Editor. Enter the Editor to see what's in it. Since the indicator is already on 1. FILER SUBSYSTEM, just type 1 or press RETURN. Now the indicator should be on 1. ACEWRITER II SYSTEM MENU, so just type 1 or press RETURN, and it will be on 1. EDITOR SUBSYSTEM in the System Menu. So again, just type 1 or press RETURN. As you can see, it took just three quick presses of either the 1 or the RETURN key to cycle back to the Editor.

The file contains the names of the three states beginning with the letter C: **California, Colorado,** and **Connecticut**. Let's save **Colorado** only in a separate file.

First, return to the Unformatted Filer. To do this, exit the Editor by pressing ESC. Type 2 twice to select and enter the Filer; then type 6 twice to select and enter the Unformatted Filer.

Make sure the answer to option A. TRANSFER ENTIRE FILE is NO, and the answer to option B. INCLUDE MARKERS is YES, since we will be using text as a marker. Then press 3 twice to select and execute the save function. When the files directory and prompt come to the screen, type a name for the file. (You can use any name not already listed in the directory.) Press RETURN.

Type COL after the STARTING MARKER prompt and press RETURN. This will be enough for the system to distinguish it from **Connecticut**. Just press RETURN after the ENDING MARKER prompt. The system will use the first blank line it finds after the starting marker, as the ending marker. The directory will update to show the file has been saved.

To check this, change option A to YES and load the file you just saved (type 4 twice, enter the file number after the prompt, and press RETURN). Then go to the Editor (type 1 or press RETURN three times). Only the word **Colorado** will be on the screen.

Exercise 3

The merge operation has more steps than anything else in ACEWRITER II because it involves changing menus. This can seem complex at first, but it's actually more complicated to describe than it is to do (just like returning to the Editor in the last exercise; it only took three quick presses of either the 1 or RETURN key, but several lines to explain). So, just stick with it. Once you become familiar with it, you'll find that merging files is a lot faster than retyping.

Let's transfer the entire unformatted file with the C states to the STATES MINUS formatted file.

First, exit the Editor using ESC, then type 2 twice to enter the Filer. Load the formatted file named STATES MINUS. (Move indicator to LOAD FORMATTED FILE; type 4 or press RETURN; type Y after the WARNING... prompt and press RETURN; enter file number after the FILE NUMBER prompt; press RETURN.) When the file is loaded, return to the Editor by typing 1 or pressing RETURN twice.

Since we are merging C states, position the cursor at the left margin on the blank line between **Arkansas** and **Delaware**. When you have the cursor in the correct position, just leave it there and exit the Editor (ESC). Then select and enter the Filer, and from there enter the Unformatted Filer.

Since we're merging an entire file, leave the YES default answer to option A.

Move the indicator to 5. INSERT UNFORMATTED FILE and type 5 or press RETURN. The files directory will come to the screen with the prompt FILE NUMBER. Enter the number of the USTATES-C file and press RETURN. When the merge is completed, the Unformatted Filer menu will reappear, with the indicator on 1. FILER SUBSYSTEM.

To see how the merge worked, type 1 or press RETURN three times to cycle through to the Editor. If all went as planned, the three **C** states should be right there between **Arkansas** and **Delaware**. (You would have to use CTRL + V to insert a blank line to double space between **Arkansas** and **Delaware** if you wanted a perfectly formatted document.)

Now, return to the Unformatted Filer menu. (Exit the Editor using ESC, select and enter the Filer, then select and enter the Unformatted Filer.)

Exercise 4

Let's merge the missing **N** states into the formatted file using the text as markers. First, load the unformatted file named USTATES. To do this, type 4 twice to select and execute the LOAD UNFORMATTED FILE command; then enter the number of the USTATES file after the FILE NUMBER prompt and press RETURN. The file will load.

To see what's in the file, reenter the Editor. (As before, all it takes to accomplish this is either typing 1 or pressing RETURN three times.) If you scroll through, you will see that there is a complete list of states in this unformatted file.

Find the list of states beginning with **N** so you know what text to use. The section we want begins with **Nebraska** and ends with **North Dakota** (that is, **Nebraska** will be the starting marker, and **North Dakota** will be the ending marker).

Next, load the formatted file STATES MINUS so you can position the cursor at the point of merge. To do this, exit the Editor with ESC, and enter the Filer from the System Menu. Then select and execute the LOAD FORMATTED FILE command; type Y after the WARNING... prompt and press RETURN; enter the number of the STATES MINUS file after the FILE NUMBER prompt; and press RETURN.

Return to the Editor (type 1 or press RETURN twice) and move the cursor to the blank line between **Montana** and **Ohio**.

Now, exit the Editor, (ESC) and return through the Filer to the Unformatted Filer to execute the merge.

For the last merge, you transferred an entire file. This time, only a portion of a file will be transferred, so the answer to option A has to be changed. Type A to position an indicator on A. TRANSFER ENTIRE FILE. Then type A again or press RETURN to toggle and change this option from YES to NO.

Since you will be using the text as markers, leave the answer to INCLUDE MARKERS as YES.

We're now going to execute the merge. Type 5 to move the indicator to INSERT UNFORMATTED FILE. Then type 5 again or press RETURN to bring the files directory to screen. After the prompt, enter the number of the USTATES file and press RETURN. When the prompt STARTING MARKER comes to the screen, type **Nebraska** and press RETURN. When the prompt ENDING MARKER comes to the screen, type **North Dakota** and press RETURN. The merge will then take place.

With the transfer completed and the Unformatted Filer menu back on the screen, type 1 or press RETURN three times to enter the Editor and see the results. The N states should now be merged between **Montana** and **Ohio**. (Again, you would have to double space manually where the merge begins.)

Exercise 5

Now let's merge the same states using characters as markers. First, we need the unformatted file on the screen so we can insert the markers. Exit the Editor (ESC), select and enter the Filer, and select and enter the Unformatted Filer. Change the answer to option A back to YES, then load the USTATES file. When the file is loaded, type 1 or press RETURN three times to get back to the Editor.

You can use any characters you like to mark the range, just as long as the system won't confuse them for text. For our purposes, let's use $$ as our starting and ending markers.

Move the cursor to the left margin on the line between **Montana** and **Nebraska** and type the marker $$. Next, move the cursor to the left margin on the line between **North Dakota** and **Ohio** and type the marker $$.

Now save the unformatted file with the markers in it under the name USTATES-2, to leave the original USTATES file intact without markers. (If you don't save it, when you load the formatted file to mark the point of merge, you will erase the marked file and have no way of reloading it into memory.)

To do this, return to the Unformatted Filer menu. (Use ESC to exit the Editor, then reenter the Filer, then the Unformatted Filer.) Select and execute the save function, type USTATES-2 after the prompt, and press RETURN.

Next, load the formatted STATES MINUS file and position the cursor so the system knows where the merge should occur (between **Montana** and **Ohio**). To do this, type 1 or press RETURN to reenter the Filer, then type 4 twice to select and execute LOAD FORMATTED FILE. Then, type the STATES MINUS file number after the FILE NUMBER prompt and press RETURN.

When the STATES MINUS file is loaded, type 1 or press RETURN twice to go to the Editor so you can see it on the screen. Position the cursor at the left margin on the blank line between **Montana** and **Ohio**.

NOTE: Always leave positioning the cursor in the formatted file as your last action in the Editor. You can move from menu to menu without disturbing the text in memory and the cursor position. However, if you clear the system's memory or load a new file after positioning the cursor, the file will be erased and the cursor position will no longer be marked.

Now exit the Editor (ESC) and return through the System Menu and the Filer to the Unformatted Filer.

First, change the answer to option A to NO to transfer part of the file. This time, let's not include the markers, so change the answer to option B to NO also.

Now let's execute the merge. Type 5 twice to select 5. INSERT UNFORMATTED FILE and bring the files directory to the screen. After the prompt, type the number of the USTATES-2 file. Answer STARTING MARKER with $$ and press RETURN. Answer ENDING MARKER with $$ and press RETURN. The merge will take place.

With that completed and the Unformatted Filer menu back on the screen, type 1 or press RETURN three times to enter the Editor and see the results. The **N** states should be merged between **Montana** and **Ohio**, without the range markers in the file.

7.9 Applications

7.9.1 Editing Text Files

This merge capability is useful when editing long and/or multifile documents created using ACEWriter II. It makes it possible to transfer whole sections of text — from a single line to an entire file — from file to file and disk to disk without retyping.

This subsystem can also be used to edit files created with other programs, since they are stored as unformatted files. All you have to do is rename the file with the .MW suffix so ACEWriter II can read it. To do this, once you have booted ACEWriter II, insert the data diskette created in the other program, enter the Filer, and select the DOS Command. Type CATALOG to see the names of the files on the diskette. After the next DOS Command prompt, type RENAME (FILE NAME), (FILE NAME).MW and press RETURN.

DOS COMMAND –> RENAME MATH, MATH.MW (Don't forget the comma.)

The directory will update to reflect the change. Then go to the Editor where you can use all the ACEWriter II editing features. When you're done, save it as an unformatted file. This feature can make your spreadsheet files more attractive and easier to read.

7.9.2 Creating Boilerplate Documents

As previously mentioned, it is also useful for creating documents composed of boilerplate. Simply use the blank page in the Editor as the formatted file and transfer each paragraph in the order you want.

You will most efficiently conserve disk space if you save a number of paragraphs in each file. You might even keep all the paragraphs pertaining to one subject area in one file. Then, make a hardcopy printout of all the files and create a subject index.

With a printout, you will have easy access to the text, should you want to use it for markers.

However, another method is to save the files with markers already placed in the text. Just remember that the *starting* marker for each paragraph has to be different so the system can tell which you want.

Since a line generally doesn't start with a period (.), you might use .1/ or .1 as the starting marker for the first paragraph, .2/ or .2 for the second paragraph, and so on. You might also use /1/, /2/, and so on—just as long as the markers are totally distinctive from the text. You can use the same ending marker for all the paragraphs. These markers are faster to type than text and can be included in your files printout for easy reference. When merging, just answer NO to INCLUDE MARKERS.

7.9.3   Creating BASIC Programs

You can also write a program in BASIC using ACEWriter II editing features. Type the text for your program and save it as an unformatted file. Remember that each BASIC line must be contained on one line of the page. Exit to BASIC. Type EXEC (FILE NAME).MW and press RETURN, and the system will read the file. Type LIST and press RETURN so you can see what's in it. Then type SAVE (FILE NAME) and press RETURN to store it on disk.

7.10   Summary of Merging Files

For easy reference, here is an outline of the procedures for merging unformatted files with formatted files.

To transfer an entire file:

1. Enter the Filer.

2. Load the file you want text to be merged with.

    a. Select and execute LOAD FORMATTED FILE.
    b. Enter the file number after the prompt and press RETURN.

3. Enter the Editor.

4. Position cursor at desired point of merge.

5. Exit the Editor (ESC).

6. Select and enter the Filer.

7. Select and enter the Unformatted Filer.

8. Make sure the answer to TRANSFER ENTIRE FILE is YES.

NOTE: To change an option answer, position indicator on the option to be changed and toggle to the correct answer.

9. Select and execute INSERT UNFORMATTED FILE.

10. Enter file number when prompt appears and press RETURN.

11. Text will merge and Unformatted Filer menu will appear.

To use text range markers:

1. Enter the Filer.

2. Select and enter the Unformatted Filer.

3. Load the unformatted file you want to transfer text from.

   a. Select and execute LOAD UNFORMATTED FILE.
   b. Enter the file number after the prompt and press RETURN.

4. Enter the Editor.

5. Note the beginning of the first and last line of this text.

6. Exit the Editor (ESC).

7. Select and enter the Filer.

8. Load the file you want text to be merged with.

   a. Select and execute LOAD FORMATTED FILE.
   b. Enter the file number after the prompt and press RETURN.

9. Enter the Editor.

10. Position cursor at desired point of merge.

11. Exit the Editor (ESC).

12. Select and enter the Filer.

13. Select and enter the Unformatted Filer.

14. Set the following menu options:

   a. TRANSFER ENTIRE FILE — NO
   b. INCLUDE MARKERS --

      1) YES, if you want them to appear in the formatted file.
      2) NO, if you do not want them to appear in the formatted file.

NOTE: To change an option answer, position indicator on the option to be changed and toggle to the correct answer.

15. Select and execute INSERT UNFORMATTED FILE.

16. Enter file number when prompt appears and press RETURN.

17. Answer STARTING MARKER prompt and press RETURN.

18. Answer ENDING MARKER prompt and press RETURN.

19. Text will merge and Unformatted Filer menu will appear.

To use character range markers:

1. Enter the Filer.

2. Select and enter the Unformatted Filer.

3. Load the unformatted file you want to transfer text from.

   a. Select and execute LOAD UNFORMATTED FILE.
   b. Enter the file number after the prompt and press RETURN.

4. Enter the Editor.

5. Enter the markers (characters) at the left margin above and below the section of text you want to transfer.

6. Exit the Editor (ESC).

7. Select and enter the Filer.

8. Select and enter the Unformatted Filer.

9. Save the unformatted file with the markers in it.

   a. Select and execute SAVE UNFORMATTED FILE.
   b. Enter the file name after the prompt and press RETURN.

10. Reenter the Filer.

11. Load the file you want text to be merged with.

   a. Select and execute LOAD FORMATTED FILE.
   b. Enter the file number after the prompt and press RETURN.

12. Enter the Editor.

13. Position cursor at desired point of merge.

14. Exit the Editor (ESC).

15. Select and enter the Filer.

16. Select and enter the Unformatted Filer.

17. Set the following menu options.

    a. TRANSFER ENTIRE FILE — NO
    b. INCLUDE MARKERS

      1) YES, if you want them to appear in the formatted file
      2) NO, if you do not want them to appear in the format-
         ted file

NOTE: To change an option answer, position indicator on the
       option to be changed and toggle.

18. Select and execute INSERT UNFORMATTED FILE.

19. Enter file number when prompt appears and press
RETURN.

20. Answer STARTING MARKER prompt and press RETURN.

21. Answer ENDING MARKER prompt and press RETURN.

22. Text will merge and Unformatted Filer menu will appear.

8. EXIT TO BASIC

This command terminates ACEWriter II and enters BASIC so you can load other software. Just type 6 twice to select and execute this command.

If you try to exit to BASIC and have not saved the file in memory, the prompt WARNING: FILE NOT SAVED! CONTINUE Y/N ? will come to the screen.

If you don't want to save the file, type Y for YES, and you will exit to BASIC.

If you do want to save the file, type any character other than Y, and the indicator will return to 1. EDITOR SUBSYSTEM. Enter the Filer and save the file.

To return to ACEWriter II from BASIC, insert the ACEWriter II system master and type:

P R # n (n is the slot the disk card is in) (RETURN)

ACEWriter II will boot and the boot menu page will come to the screen.

APPENDIX A—ACEWriter II
ASCII Character Table

Control characters

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

Special characters

HEX	CHR$	CHAR	KEYSTROKE
20	32	SP	SPACE BAR
21	33	!	!
22	34	”	”
23	35	#	#
24	36	$	$
25	37	%	%
26	38	&	&
27	39	’	’
28	40	(	(
29	41	)	)
2A	42	*	*
2B	43	+	+
2C	44	,	,
2D	45	−	−
2E	46	.	.
2F	47	/	/
30	48	0	0
31	49	1	1
32	50	2	2
33	51	3	3
34	52	4	4
35	53	5	5
36	54	6	6
37	55	7	7
38	56	8	8
39	57	9	9
3A	58	:	:
3B	59	;	;
3C	60	<	<
3D	61	=	=
3E	62	>	>
3F	63	?	?

APPENDIX A—ACEWriter II ASCII Character Table

Upper-case characters

HEX	CHR$	CHAR	KEYSTROKE
40	64	@	@
41	65	A	A
42	66	B	B
43	67	C	C
44	68	D	D
45	69	E	E
46	70	F	F
47	71	G	G
48	72	H	H
49	73	I	I
4A	74	J	J
4B	75	K	K
4C	76	L	L
4D	77	M	M
4E	78	N	N
4F	79	O	O
50	80	P	P
51	81	Q	Q
52	82	R	R
53	83	S	S
54	84	T	T
55	85	U	U
56	86	V	V
57	87	W	W
58	88	X	X
59	89	Y	Y
5A	90	Z	Z
5B	91	[	[
5C	92	\	CTRL-B 5
5D	93	]	]
5E	94	∧	∧
5F	95	—	—

Lower-case characters

HEX	CHR$	CHAR	KEYSTROKE
60	96	'	CTRL-B 7
61	97	a	a
62	98	b	b
63	99	c	c
64	100	d	d
65	101	e	e
66	102	f	f
67	103	g	g
68	104	h	h
69	105	i	i
6A	106	j	j
6B	107	k	k
6C	108	l	l
6D	109	m	m
6E	110	n	n
6F	111	o	o
70	112	p	p
71	113	q	q
72	114	r	r
73	115	s	s
74	116	t	t
75	117	u	u
76	118	v	v
77	119	w	w
78	120	x	x
79	121	y	y
7A	122	z	z
7B	123	{	{
7C	124	l	CTRL-B 1
7D	125	}	}
7E	126	~	CTRL-B 4
7F	127	DEL	CTRL-B 3