SAGE
COMPUTER TECHNOLOGY

WORD/7 Text Processing System

Version 2.1 User Guide

Micro Research & Development, Inc.

July 1, 1983

To __Bob__

Date __1-18__   Time __10²⁷__

WHILE YOU WERE OUT

M __Marv Donaldson__

of __Micro Research__

Phone __719 / 598-8223__
Area Code / Number / Extension

TELEPHONED	✓ PLEASE CALL	✓
CALLED TO SEE YOU	WILL CALL AGAIN	
WANTS TO SEE YOU	URGENT	
	RETURNED YOUR CALL		

Message _____

_____

_____

_____

_____
Operator

MOTOROLA/GED E1184 1/72 CTL 276

719 633-2344 X272

Dennis Graham (~~305~~) ~~~~~~~~

Fax: 719-260-6701

Table of Contents

I. INTRODUCTION TO WORD/7

The WORD/7 Text Processor is a complete system for producing high quality letters and documentation on SAGE computers. This system offers the SAGE user capabilities formerly available only on dedicated word processors.

The system is easy to use and makes full use of any available terminal capabilities including special function keys. It allows operators to become productive immediately, yet offers advanced editing and formatting features for the more demanding document requirements.

System components include a full-screen CRT editor with on-the-screen formatting for document creation, a filing system to store documents for later retrieval, and sophisticated print formatting features for producing quality printed documents.

WORD/7 follows conventions of the UCSD p-System Operating System and stores documents as normal text files to facilitate interfacing with other programs. The system also provides functions to configure for any model of CRT terminal and computer printer hardware.

A. Communicating with The Computer

The computer user and the computer communicate via a keyboard (like a typewriter) and a CRT display screen (like a TV screen). To request an action by the computer, a command is typed on the keyboard and the RETURN key pressed to send the command to the computer. The computer responds by displaying selections and messages on the CRT display screen.

WORD/7 is a MENU-DRIVEN system which displays an entire screen describing available options, somewhat like a menu in a restaurant. (see figure 1). An option is identified by a one line description and is selected by positioning the cursor in front of the description and pressing the RETURN key. For example, positioning to the second line in figure 1 and pressing RETURN selects the option of editing (or changing) a previously created document.

B. The Computer Keyboard

The computer KEYBOARD is like a typewriter keyboard with many additional keys specific to the use of the computer. Most of the keys are used by WORD/7 and are described in the appropriate sections of this guide. However, at this point, let's introduce some important keys used throughout the system.

1. CURSOR Keys

The keyboard is related to the CRT screen by the CURSOR, a
small square of light which indicates the current position on
the CRT. When a letter is typed on the keyboard, it is
printed at the current cursor position, and the cursor moves
one space to the right.

The keyboard contains four keys, each marked with an arrow on
the key face, that are used to move the cursor in each of the
four directions. These keys are especially important for
making selections from menus and in making changes to
documents.

2. BACK SPACE Key

Anytime an incorrect character is typed, the BACK SPACE key
(which is usually marked with a left pointing arrow) may be
used to move the cursor back and retype the character
correctly.

3. RETURN Key

The RETURN KEY is always used to send a selected option or
response to a question into the computer for processing.

4. ESC (Escape) Key

Anytime the computer asks a question or is waiting for an
option to be entered, the ESC key may be pressed to say "GET
OUT", or ESCAPE from the question. Specific examples will be
noted throughout this guide.

C. Using Disks

Most microcomputers use either diskettes or hard disks for storage
of programs and data. Diskettes are generally used to store
documents since they are inexpensive, removable and convenient to
transport. In usage, WORD/7 makes no distinction between the two
devices and throughout this document the word "disk" is used to
refer to either.

WORD/7 is distributed as a program file stored on diskette and can
be executed from there or moved to a hard disk with the operating
system filing functions if desired. It is highly recommended that
the original diskette be copied to a working disk and the original

stored in a secure place for making further copies if the working copy is ever damaged.

The disk containing the WORD/7 program should be mounted at all times while executing the system. If removed, the system will request it to be mounted as needed to bring in required program functions. This may necessitate some handling of disks, but don't worry about harming WORD/7 or confusing the program - that won't happen.

Other disks may be inserted or removed as necessary to read documents for editing or printing, or for storing documents.

D. Starting the WORD/7 System

The system is started by inserting (mounting) the WORD/7 disk and executing the program file named WORD7 (Refer to the User's Manual of your specific computer for more information). Once started, WORD/7 displays the Main Menu shown in figure 1 and waits for an option to be selected. An option is selected by positioning the cursor in front of the desired option and pressing the RETURN key.

E. Creating a Simple Letter

Let's create a simple letter to illustrate how WORD/7 works. Throughout this illustration, it is helpful to view your computer as the equivalent of a typewriter and relate its different components and functions to those of a typewriter.

Beginning at the Main Menu (shown in figure 1), with the cursor in front of the "CREATE" function, press the RETURN key. Your computer display should now resemble the top line of figure 2, the EDIT DISPLAY SCREEN. The line along the top of the screen displays the columns from 1 to 80, the left and right margin settings (shown with the characters "[" and "]" respectively), and any TABS you have set. Since you are just beginning, no tabs are set or displayed yet.

Notice now the MESSAGE LINE at the bottom line (or on some terminals the top line) of the screen which displays two types of information. The small block on the right tells that you are now in CHARACTER OVERTYPE mode (more on modes later), and the large block on the left displays the functions assigned to the terminal FUNCTION KEYS. Occasionally, you will also see additional information and error messages displayed in the left block.

Most of the screen is now blank (corresponding to a blank sheet of paper in a typewriter) and ready for the letter to be typed. The cursor should now be at the left margin of the first line and you

are ready to type. For this letter, let's leave some blank lines
by using the RETURN key and then space over near the middle and
type the date as shown in figure 2. Just type every letter as you
would on a typewriter and use RETURN to end the line.

1. Correcting Errors

Suppose you make an error in typing, and need to correct a
letter or two.   Use the key with the left-pointing arrow to
back up, type the correct letter and continue typing. In
fact, the keyboard contains a complete set of CURSOR KEYS
(with arrows on them) for moving up, down, left, and right
that can be used to position to <u>any</u> line and make a cor-
rection by overtyping.

2. Word Wrap

Another feature of WORD/7 is WORDWRAP.   There is no need to
type RETURN at the end of each line, just keep typing. Any
word that would extend past the right margin will auto-
matically be moved to the next line and you can continue
typing. Prove it to yourself now by typing the body of the
sample letter in figure 2 without using the RETURN key.

3. Setting and Using Tabs

Tabs may be set and used like on a typewriter to move quickly
to specific columns of the letter.   Tabs are set by moving the
cursor to the top line of the CRT (the TAB LINE) and typing
the letter "t" wherever a tab is desired. A capital "T"
remains to show you at a glance where tabs are set: tabs can
be cleared by typing a space over the "T".

The TAB key on the keyboard will move the cursor to the next
set tab position and the BACK TAB key will move to the
previous tab position. You might experiment with tabs now on
the sample letter in figure 2. Notice that the TAB keys will
automatically move to the left and right margins as tab
positions and will move up or down a line if necessary to go
to the next tab position.

4. Printing the Letter

Creating a letter is not too useful unless it can be printed.
To start the print function, press the HOME key to position to
the top line, type the letter "p", and press RETURN.

Several options are then displayed on the Print Function Menu
(figure 4) for controlling different aspects of how the letter
will be printed.   For now we aren't concerned with the
options, but they are described in detail later.   To begin

printing, enter the RETURN key and then answer "n" to the following question:

        Print on Printer? (y/n) _

The document will be "printed" on the CRT so we can see how it will look. Later it could be printed on the printer to pro- duce a real letter. Notice that the document rolls up just like typewriter paper and, in addition, the display stops after a full screen is displayed for review. Type any key to continue printing.

When the printing is complete and the Print Function Menu reappears, press RETURN to return to the Edit Screen.

5. Saving the Letter

One of the great advantages of using a text processor is the ability to save (or file) copies of documents for later retrieval and modification. The letter you have just typed can be saved to disk by leaving Edit (just press the ESC key twice), answering the following question with the letter "y".

        Save Changes? (y/n or return) _

and then typing a name for the letter in response to the fol- lowing question:

        Document Name? _

For this example, just reply with a name like "LETTER1" followed by RETURN. The document will be written onto disk and the display returned to the Main Menu.

```
|                                                                            |
|              WORD/7 Text Processing System - V2.1                          |
|          _____               |
|                                                                            |
|                                                                            |
|                     _   CREATE new document                                |
|                                                                            |
|                         EDIT existing document                             |
|                                                                            |
|                         Document FILING functions                          |
|                                                                            |
|                         DEFINE system configuration                        |
|                                                                            |
|                         QUIT the system                                    |
|                                                                            |
|                                                                            |
|                                                                            |
|                                                                            |
|                                                                            |
```

Figure 1 - The Main Menu

```
____1____[____2____.____3____.____4____.____5____.____6____.____7____]
```

                                    January 7, 1983

Mr. Henry Gillis
1234 Walnut Street
Anytown, USA   90322

Dear Mr. Gillis:

     I am writing to inform you of our purchase of WORD/7 a
text processing system for micro-computers.   The system
incorporates features for creating, editing, storing and
printing documents of all kinds.

     Research has shown the value of text processing systems
in reducing the cost of producing printed documents by
eliminating the need for costly and time-consuming manual
retyping.

Sincerely,

Ward Seven

Figure 2 - Sample Letter

II. CREATING AND EDITING DOCUMENTS

A new document is created by selecting the first option of the Main Menu. WORD/7 will enter Edit Mode which offers a full set of functions for typing and changing documents.

An existing document is changed (or edited) by selecting the second option of the Main Menu, which also enters Edit Mode. The following question is displayed at the bottom of the screen,

        Document name? _

and should be answered with the name of a document which exists on disk followed by a RETURN. The document will be read from disk and the first 22 lines displayed on the Edit Display Screen shown in figure 2.

Edit Mode may also be entered from the filing system as described later in this manual. This method of entering edit is particularly useful if you know which disk contains a document but don't remember the document name.

Document editing is a very powerful feature of WORD/7, allowing words, lines, paragraphs and large sections of a document to be inserted, changed, copied, moved, or deleted as desired. Documents can be stored on a diskette for later recall and each new version can be printed by the computer without the need for manual retyping. It is here that the power of a computer offers a tremendous advantage over use of a typewriter.

The following sections describe in detail all features and commands of the WORD/7 Editor. Methods of positioning to different parts of the document are presented first, followed by commands operating on CHARACTERS, WORDS, LINES, PARAGRAPHS, and BLOCKS of lines. The final section describes PRIMARY COMMANDS which perform functions related to an entire document such as printing, saving to disk, searching for words, etc. Appendix A provides a convenient summary of all WORD/7 editing commands.

A. POSITIONING within a Document

1. LEFT, RIGHT, UP, and DOWN ARROWS

The four keys with left, right, up, and down arrows allow the cursor to be positioned to any character currently displayed on the screen. In addition, special actions occur when the cursor reaches the left or right margins, or the top or bottom of the screen.

Bumping the right margin while pressing the right arrow positions the cursor at the left margin of the next line down. In addition, if the cursor is on the bottom line, the entire display will move up one line so the new position is shown.

If the down arrow is used to bump the bottom of the display. the display will similarly move up one line.

Bumping the left margin positions the cursor to the right margin of the previous line, and if done on the top line results in moving the entire display up several lines (scrolling).

Using the up arrow to bump the top of the display scrolls up to display the new cursor position.

2. Carriage Return (RETURN)

The RETURN key causes the cursor to move to the beginning of the next line. For a blank line, this means the cursor will be positioned at the left margin and for non-blank lines the cursor will be placed at the first non-blank character of the line.

3. TABS (TAB and BACKTAB)

The TAB and BACKTAB keys move the cursor to the next or previous tab column, respectively. The left and right margins are always defined as tab positions and tabs may be set at any other column by typing the letter "T" on the top line of the EDIT DISPLAY SCREEN. The current tab settings are continuously represented on the top line by the letter "T".

Tabs are kept with the document and not lost when it is saved on disk. The tabs will still be set in the same columns when the document is edited again at a later time.

4. SCROLL DOWN (F9)

Function Key 9 moves down in the view of the document by several lines (scrolls down). The cursor stays on the same line as before the scroll unless that line is moved off the screen. In that case it is placed on the top line. On terminals without special function keys, this function is usually assigned to the two key sequence ESC 9.

5. SCROLL UP (F10)

Function Key 10 scrolls up in the view of the document by several lines. On terminals without special function keys, this function is usually assigned to the two key sequence ESC 0.

B. CHARACTER Commands

There are two different character modes in editing documents·
OVERTYPE mode and INSERT mode. The initial mode upon entering
edit is OVERTYPE mode as indicated by the right portion of the
message line at the bottom of the screen. Any character you
type is overlayed on the position at which you type it,
replacing whatever character was in that position. This is
just right for replacing characters, but not for inserting new
characters into a line.

Pressing the CHAR INSERT key switches into INSERT mode. Any
character typed now is inserted at the cursor and moves the
remaining characters of the line to the right. In fact, if
enough characters are inserted so the line bumps the right
margin, the word at the end of the line will be moved to the
next line. This process will be repeated indefinitely and
allows entire lines to be entered by continuously typing,
without ever pressing the RETURN key.

The rules for moving a word to the next line are as follows.
The word will be moved onto the next line of text if it will
fit by shifting the words of that line to the right.
Otherwise a new line is added and the word moved to start at
the column where the next line of text starts. A new line
will always be added if the following line is blank or
contains a DOT command (refer to the section on printing
documents for a discussion of DOT commands).

This insertion strategy tends to maintain the existing para-
graph structure as closely as possible. Generally, after in-
serting text, the paragraph formatting command is entered to
fix up the paragraph by moving words back together (refer to
later section on formatting paragraphs).

Notice that the character mode only affects what happens when
you type printable characters from the keyboard. Use of the
other keys (eg. arrow keys, RETURN, HOME, TAB, scrolling,
etc) is not affected by the mode. This means the mode could
be set to INSERT and left that way while moving around to
several locations on the screen and inserting text. Deletion
of text is also not affected and may be done while in either
mode as described below.

1. CHAR DELETE Key

This key deletes the character under the cursor position re-
gardless of which character mode you are in. The characters
to the right on the line are all moved left one position for

each time the key is pressed.   Since the key automatically
repeats on most terminals, it is easy to delete large portions
of a line by holding it down.

2. CHAR INSERT Key

This key is pressed to begin CHARACTER INSERT Mode.   WORD/7
remains in this mode until the DEL key is pressed to return to
OVERTYPE Mode.   The message in the lower right of the display
constantly indicates the current mode.

3. DEL Key

This key ends INSERT Mode and returns to OVERTYPE Mode.
Pressing the key while in OVERTYPE Mode has no effect.

C. WORD Commands

WORD/7 defines a WORD as any sequence of non-spaces, and two com-
mands are provided to position the cursor relative to the words in
the document. These commands are useful for rapidly moving the
cursor across a line of text to a word where changes are to be
made.

1. NEXT WORD (CTRL/n)

Entering the NEXT WORD command positions the cursor to the
first letter of the next word from its current location. This
may result in moving to the next line and scrolling down in
the document if necessary to display the new cursor position.
Notice that this function is very similar to that provided by
the RIGHT ARROW key except that the cursor moves several col-
umns at a time instead of just one.

2. PREVIOUS WORD (CTRL/p)

The PREVIOUS WORD command positions the cursor to the last
letter of the previous word in the document. The display is
scrolled up if necessary to show the new cursor location.

D. MARGIN Commands

The CURRENT MARGINS in WORD/7 influence how paragraphs are formatted and what happens when typing or inserting text beyond the end of a line. The left and right margins are always shown on the top line of edit with the left and right square brackets respectively ("[" and "]").

The current set of margins is displayed on the top line, but WORD/7 constantly maintains 5 separate margin sets and provides functions for setting and switching between them. When a new document is created, all margins are set to default settings contained in the current configuration file. Those defaults can be changed as described in the section "Defining Document Style".

All 5 sets of margins may also be reset from the Edit Options Menu which is invoked by the "Option" Edit Primary Command. All margins are stored with a document and are automatically in place when the document is edited at a later time.

1. NEXT Margin

This command switches to the next NARROWER (or deeper) set of margins. The new margins are shown on the tabline and affect all subsequent formatting until margins are changed again. A switch of this type would typically be required when a document switches to a subsidiary section which is to be more indented. The two-key sequence ESC-right arrow is usually set to this command.

2. PREVIOUS Margin

Switching to the next WIDER set of margins is done with this command in the same manner as the NEXT Margin command above.

E. LINE Commands

A full set of commands allow for manipulating entire lines of text in a document. Several of these commands make use of special FUNCTION KEYS on the terminal keyboard. For terminals without special function keys, the two key sequence ESC "number" is used. For example, function 1 (F1) would be ESC 1, function 2 (F2) would be ESC 2, and function 10 (F10) would be ESC 0.

1. LINE DELETE key

The line containing the cursor is deleted by the LINE DELETE key. The UNDELETE command (CTRL/u) may be used to bring back a line which is accidentally deleted.

2. LINE INSERT

The LINE INSERT key adds a new blank line above the line con- taining the cursor. The cursor is placed directly above the first non-blank letter in the current line.

3. LEFT-JUSTIFY LINE (F1)

Function Key 1 left-justifies the line containing the cursor so that the line will start at the current left margin. The cursor remains in its original position.

4. CENTER LINE (F2)

Function key 2 causes the current line to be centered between the currently defined margins.

5. RIGHT JUSTIFY LINE (F3)

Function Key 3 right-justifies the current line so that the last non-blank of the line is placed at the right margin. The cursor remains in its original position.

6. SPLIT LINE (F4)

Function Key 4 splits the line containing the cursor at the position of the cursor. The portion of the line from the cursor to the right is moved down to begin at the left margin of a new line.

7. UNDELETE LINE (CTRL/u)

This function is particularly useful when a line is accidentally deleted. Pressing the control key (labelled CTRL) simultaneously with the letter "u" will re-insert the deleted line above the current line. This means that an UNDELETE immediately after a DELETE will result in no change.

F. PARAGRAPH Commands

The commands in this section deal with a paragraph at a time. A paragraph is defined as a group of adjacent lines separated from other lines by blank lines or DOT commands (see the "Printing Documents" section for a discussion of DOT commands). Paragraph commands are assigned to the FUNCTION KEYS of the keyboard (keys with F1, F2, etc on them) and require use of the SHIFT key along with the function key. A message describing the keys is generally displayed at the bottom of the edit display so the keys needn't be memorized.

You will notice that each paragraph command has a corresponding line command described in the section above which uses the same function key. However, paragraph commands always use the function key in conjunction with the SHIFT key while line commands never use the SHIFT key.

Terminals without special function keys can be set up to use any other keys or sequence of keys for these functions. (refer to the "Defining Terminal Configuration" section)

1. LEFT JUSTIFY PARAGRAPH (F1 shifted)

Every line in the paragraph containing the cursor is aligned to start at the left margin with this function. The cursor may be on any column of any line of the paragraph when the key is pressed.

2. CENTER PARAGRAPH (F2 shifted)

Each line in the paragraph containing the cursor is centered between the current margins with this command.

3. RIGHT JUSTIFY PARAGRAPH (F3 shifted)

The last letter of each line in the paragraph containing the cursor is aligned with the right margin using this command.

4. SPLIT PARAGRAPH (F4 shifted)

The line containing the cursor is split at the cursor and a blank line inserted between the two parts. The right portion of the line is left-justified on its new line and begins a new paragraph separated from the previous by a blank line.

5. FORMAT PARAGRAPH (F8 shifted)

Inserting or deleting words may change the structure of a paragraph by leaving blank spaces. This command formats the paragraph containing the cursor by re-aligning the words to fit within the margins. Each word is followed by one space, while periods, commas, semi-colons, colons, question marks, and exclamation points are followed by two spaces.

The first line of a paragraph is indented by the current value of the INDENT amount (see "PRIMARY Commands" below) and remaining lines are justified at the left margin. An INDENT amount of 5 will indent the first line by 5 letters and a zero indent amount signifies block paragraphs.

An indent amount of "R" signals that another type of indenting (called RELATIVE INDENTING) is to be used. RELATIVE INDENTING uses the first two lines of the paragraph as a model of how lines should be indented. These lines will maintain the same indent amount and succeeding lines will be aligned with the second line. This type of formatting is very flexible and allows you to produce blocked, indented and hanging-indent paragraphs.

As an example, the following display on the screen,

          1.   This example of automatic formatting illustrates
               the use of a "hanging indent",
      particularly
      useful in generating numbered lists.

will be formatted as:

          1.   This example of automatic formatting illustrates
               the use of a "hanging indent", particularly
               useful in generating numbered lists.

Formatting may leave the right margin uneven, so many people prefer to set the JUSTIFY option ON (refer to the later section on "Primary Commands"). In this case, blanks are distributed throughout the line to force an even right margin, as illustrated by the paragraphs in this user guide.

6. NEXT PARAGRAPH (F9 shifted)

Function Key 9 moves the cursor down to the next paragraph in the document. The display will scroll downward if necessary to display the new position.

7. PREVIOUS PARAGRAPH (F10 shifted)

Function Key 10 moves the cursor upward to the previous para-
graph in the document.

G. BLOCK Commands

BLOCK Commands allow a block of lines to be deleted, copied or moved elsewhere in the document, or saved to a different disk file. All of the block commands are initiated by placing the cursor on the first line of the desired block and pressing the F7 key. A prompt is displayed on the top line requesting the type of command to perform (COPY, DELETE, MOVE, or SAVE) and is answered by typing the first letter of the command followed by RETURN. WORD/7 then prompts for additional lines to be marked to complete the block operation.

1. BLOCK Copy (C)

The line containing the cursor is marked by pressing the F7 key and a block copy indicated by answering "C" to the prompt on the top line. The cursor should be positioned to the last line to copy and F7 pressed again. Note that any edit commands may be used to position to the desired line including FIND, REPLACE, and SCROLL commands. The line should next be positioned to the line after which the marked block of lines is to be copied and F7 pressed again to complete the copy.

2. BLOCK Delete (D)

The cursor is positioned to the first line to be deleted and F7 pressed to mark the line. The prompt is answered with the character "D", and the cursor moved to the last line to be deleted. Pressing F7 removes the lines from the document.

3. BLOCK Move (M)

The line containing the cursor is marked by pressing the F7 key and a block move indicated by answering "M" to the prompt. The cursor should be positioned to the last line to be moved and F7 pressed again. The cursor should then be placed on the line after which the marked block of lines is to be moved and F7 pressed again to complete the move.

4. BLOCK Save (S)

This feature allows the "cutting" of part of one document to be "pasted" into another. The cursor is positioned to the first line to be cut and the F7 key pressed. After answering with an "s" to the displayed prompt, the cursor is positioned

to   the   the <u>last</u> line   to   be   saved   and   F7   pressed again.
Another prompt will ask for the name of a file (either new   or
existing) where the lines will be saved.   ESC may be   used to
terminate the save operation.

H. <u>PRIMARY Commands</u> (Entered on the top display line)

PRIMARY commands are entered on the top line (or TAB LINE) of the Edit Display Screen by typing the first letter of the command and RETURN. Each command displays an appropriate prompting message on the top line asking for other information.

1. EXIT From Block Command

The EXIT command is used to exit from a pending BLOCK COMMAND. (refer to the section on "BLOCK commands"). This command allows a block command to be terminated before completion.

2. FIND Character String

This command is useful for locating a word or string of characters that occur in the document. In combination with the REPLACE command below, words or strings of characters may be found and automatically replaced with another words or strings.

The FIND command is initiated by typing the letter "F" followed by RETURN. WORD/7 responds with "Find string?", after which any group of characters (a string), partial word. word. or phrase up to 30 characters in length may be entered. WORD/7 then responds with "Search options? (Asis.Word)". Just pressing RETURN means neither option is to be used.

WORD/7 searches downward in the document from the line containing the cursor to find the characters entered. When a match is found, the cursor is moved to the beginning of the string and the screen display scrolled downward if needed to display the line where the string is found. The REPEAT FIND (F5) key can be used to find the next occurence, and so on until the end of the document is reached.

Now back to the prompt for options mentioned above. The standard condition is to search for the characters entered regardless of whether they are upper or lower case letters and regardless of the characters found around them. The letters "Down" may be found in the text "downward", for example.

It may be desired to be more specific in what letters will match the string entered by using the following options·

Asis - Specifying the letter "a" as an option means the search must match the string entered exactly as to upper and lower case letters. (for example, the word "dog" would not match "Dog" because the first letter is different)

Word - Entering the letter "w" specifies that the characters entered form an entire word and to be found must not be part of a larger word. (the above example of the word "down" would not match "downward" for this option)

The two options may be used separately or in conjunction with each other. Both options could be entered as follows:

Search options? (Asis,Word)   a w

A message is always displayed indicating whether or not the string was found.

3. LINE COUNT Display

The LINE COUNT command displays the current line and page number, the total number of lines in the document and the number of edit lines still available for new text. The current line and page are only approximate, and may be different at print time if DOT commands are used.

4. Edit Options Menu

The Edit Options Menu shown in Figure 3 is shown by entering the "Options" primary command and displays values of certain edit options. An option can be changed by positioning the cursor in front of an option and pressing RETURN. An appropriate message is displayed at the bottom of the screen asking for the new value.

a. Edit Scroll Amount

This value is the number of lines the Edit display will move up or down when the scrolling keys are pressed. Typically used values are 12 for half a screen, 23 for a whole screen, or 18 for three-quarters of a screen. Pressing RETURN or ESC to the resulting prompt retains the current value.

b. Paragraph Indent Amount

There are two valid responses for this option· a numerical value representing the number of columns for the first line of a paragraph to be indented, or the letter "R" to indicate "RELATIVE INDENTING". Pressing RETURN or ESC retains the current value. (see FORMAT PARAGRAPH command above for a discussion of how this value is used)

c. Right Justification

This option determines whether subsequent paragraph formatting will right justify each line by adding spaces as necessary between words. This value alternates between "YES" and "NO" when changed.

d. Define Margins

The five sets of left and right margins may be changed by positioning in front of the desired settings and pressing RETURN. The new columns for the left and right margins should be entered separated by either a space or a comma. Note that Margin 1 corresponds to the OUTERMOST margin and Margin 5 to the INNERMOST margin setting to be used.

Any of the five margins may be deleted by typing the characters "DEL" instead of column numbers. The NEXT MARGIN and PREVIOUS MARGIN edit commands will sequence through the remaining settings.

5. REPLACE Character String

Words or strings of characters may be located and changed by use of this command. The command prompts for the string to be changed and what string it is to be changed to. Each string is entered followed by the RETURN key. Searching begins at the line containing the cursor and proceeds to the end of the document. The first time the string is found, it is replaced and the display positioned to the line where the replace occurred with the display being scrolled if necessary.

The two character strings of this command are retained after a string is found and replaced. Pressing the F6 key will find and replace the next occurrence of the string from the cursor position and may be used to step through the remainder of the document, changing all occurrences.

However, it may not be desired to change the string every time
it appears in the document. In this case, the F5 key may be
used to FIND the next occurrence, displaying if for
inspection, and F6 pressed only if the string is to be
replaced. F5 could be used repeatedly to find all places
where the string occurs without changing any of them.

Terminating the "TO" string with the ESC key instead of RETURN
will not replace and string but store the FIND and REPLACE
strings for later use with the F5 and F6 keys.

6. SAVE to disk

The SAVE command writes the document onto a disk for permanent
storage. The system prompts for a name under which to store
the document. If the document named LETTER2 is being edited.
the following question will be asked:

   Save document name LETTER2? (y/n) _

The responses to this question are "y" for yes, and "n" for
no. A response of "y" causes the new version of the document
to be stored on the disk replacing the old copy of the
document named LETTER2. A response of "n" will ask that
another name be entered:

   Document name? _

A valid document name should be typed followed by RETURN. If
a document already exists with the name typed, you will be
asked whether or not to replace that document. Be aware that
if an existing document is replaced, the old version is gone
and cannot be retrieved.

Saved with each document are margin and tab settings,
paragraph indent amount, and whether or not paragraphs are to
be right-justified when formatted. The SAVE command may be
exited at any time by entering the ESC (for ESCAPE) key to
return to the top line of the Edit Display Screen.

7. VIEWING Another Document

It is many times helpful while editing a document to see what
is contained in another document without ending edit and
saving the document being changed.' The VIEW command is just
for that purpose. Typing the letter "v" and RETURN displays
the following message:

VIEW what document? _

Any valid document name may be entered to see that document
displayed. The display is cleared and the specified document
shown line by line. The display pauses after each screenful
with the message "Continued" and continues when any character
is typed. Pressing ESC will end the display and return to the
Edit Display Screen for the document being edited.

The document to be viewed may be stored on any disk currently
mounted on the computer. However to view a document stored on
any disk other than the "current" disk, the name should
include the disk name (ie. DISK1·LETTER.A or *A.B.C). It is
also possible to view programs or files other than WORD/7
documents by entering the complete filename followed by a
period:

        TMP:PROG.A.TEXT.

I. Ending EDIT

The ESC key should be pressed <u>twice</u> to exit from editing a
document. If any changes have been made, the system will ask
for a name under which to save the document in a dialogue
similar to that described above for the SAVE command·

        Save changes? (y/n or return) _

Any response other than "y" or "n" will return to edit.

```
 _____
|                                                                  |
|                                                                  |
|                      EDIT Options Menu                           |
|  _____  |
|                                                                  |
|                                                                  |
|                                                                  |
|           _    QUIT this menu                                    |
|                                                                  |
|                Edit scroll amount          = 16                  |
|                                                                  |
|  FORMATTING:    Paragraph indent amount     = 4                  |
|                                                                  |
|                Right justification?         = NO                 |
|                                                                  |
|  MARGINS:       MARGIN Set 1                =  6,75              |
|                MARGIN Set 2                = 10,75              |
|                MARGIN Set 3                = 14,75              |
|                MARGIN Set 4                = 18.75              |
|                MARGIN Set 5                = 22,75              |
|                                                                  |
|                                                                  |
|                                                                  |
|                                                                  |
|                                                                  |
|_____|
```
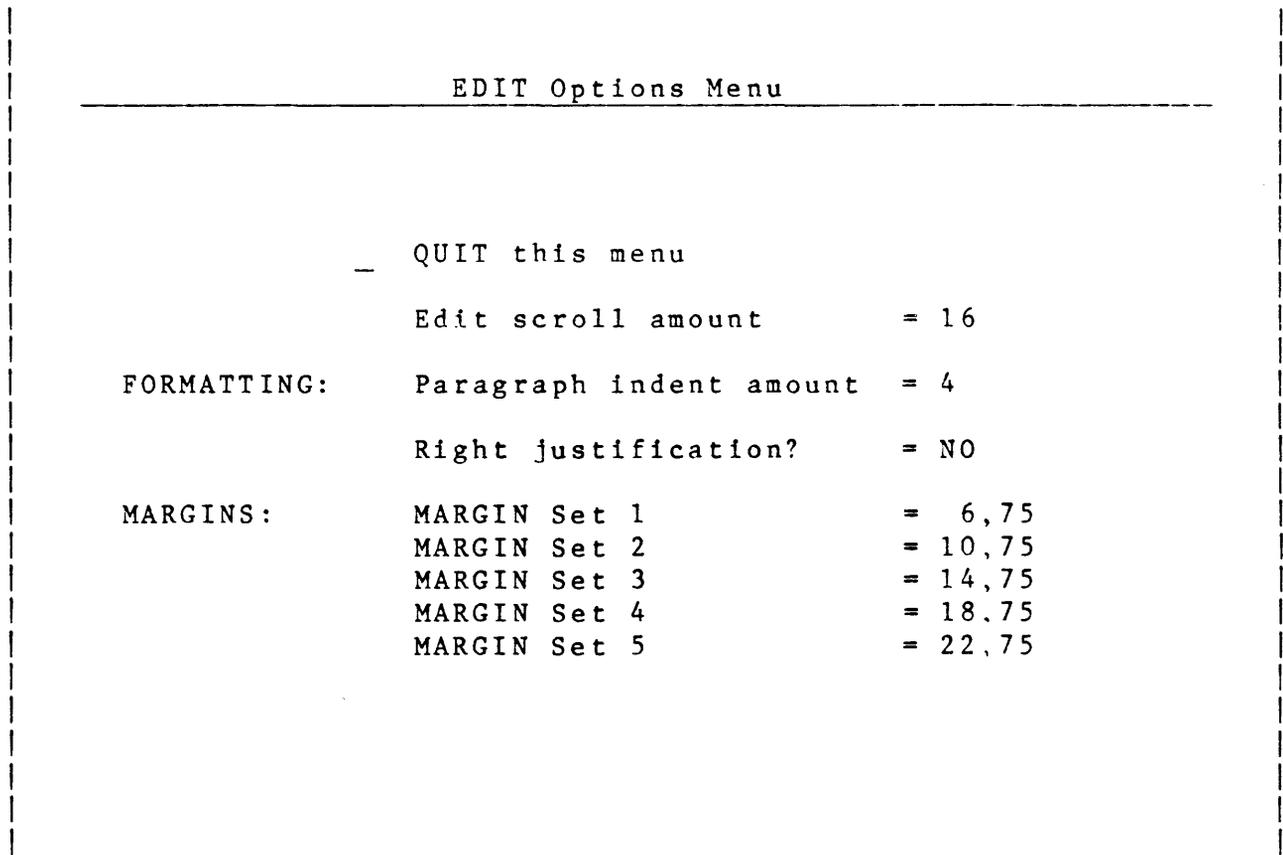
FIGURE 3 - Edit Options Menu

III. THE DOCUMENT FILING SYSTEM

WORD/7 supplies a complete set of functions for storing, viewing,
deleting, and renaming documents. The collection of these functions
is known as the FILING SYSTEM. This system is similar to a filing
cabinet containing documents, except that in this case documents are
stored on magnetic "records" known as disks (or diskettes). Each disk
can contain up to 77 individual documents.

A. Document names

Each document stored on a disk is given a name comprised of up to
13 characters. The name is typed in when the document is stored
and should in some way imply the contents of the document. The
name may contain the alphabetic characters, the numeric digits (0
- 9), and the special characters "/", "_" and ".". The name must
not contain the following special characters: "$", ":", "=",
"?", "," or "-".

For example: LETTER1, MEMO.TO.DAVE, CHAPTER5, USER_MANUAL, and
                DESIGN.REPORT are all valid document names.

WORD/7 looks for a document with the entered name on the "CURRENT"
disk, which may be set from the Filing System Display. Throughout
the system, documents may be stored and retrieved from other disks
by preceeding the document name with its disk name. Disk names
are similar to document names but are limited to 7 characters in
length. A complete document name might be "DISK1:LETTER.A".

B. The Document Selection Screen

Entering the FILING system from the Main Menu displays the Docu-
ment Selection Screen shown in figure 4, so called because
documents are selected from this screen for filing system func-
tions. The top line of the screen displays the name of the cur-
rent disk (similar to a document name except for a maximum of 7
characters) and there is one line per document displaying the
document name, size and date of last change.

The four cursor keys are used to move up and down on this screen
as well as the TAB, BACK TAB, SCROLL UP, and SCROLL DOWN keys.

Note that 77 documents can be stored on one disk, but there are
only 20 names displayed on the screen. If the disk contains more
than 20 documents, the additional names are down below the screen
and will be displayed if the cursor is moved down past the bottom.

The RETURN key or the up and down arrows can be used to move up and down the screen as desired.

An operation on a document is specified by typing the <u>letter</u> for one of the filing functions <u>in front</u> of the document name followed by RETURN.

C. HELP (?)

Entering a question mark "?" or any invalid command character displays a help message at the bottom of the screen listing all valid filing commands.

D. COPYING a document (C)

A document may be copied (or duplicated) by typing the character "C" in front of its name. A prompt will appear to the right of the name asking for the name of where the document is to be copied. If the named destination document already exists, another prompt will verify that the document is to be replaced. Entering ESC or RETURN in reply to any prompt ends the copy operation.

Note that the destination document name may be preceeded by a volume name and the copy operation will be from one disk to another (both disks must be currently mounted).

   <u>EXAMPLE</u>:   disk4:invoice.21

E. DELETING a document (D)

Typing the character "D" in front of a document name selects the document for deletion from the disk. The following message will be displayed to the right of the name.

   Confirm Delete? (y/n) _

A response of "y" and RETURN deletes the document or "n" exits the delete function. This confirmation ensures against accidental deleting of documents.

Notice that once a document is deleted, it is <u>gone from the disk</u> and can no longer be retrieved in any way.

F. Selecting a document for editing (E)

Typing the character "E" in front of a document name selects that document for editing. The document is read from the disk into

memory and the program placed into EDIT MODE for modifying the
document. When EDIT MODE is ended, the display is returned to the
same place on the DOCUMENT SELECTION SCREEN.

G. RENAMING a document (R)

The name of a document can be changed by typing the character "R"
before its name. The following message prompts for the desired
new name which should be typed in followed by RETURN. The ESC or
RETURN key may be used to end without renaming the document.

        New Document Name? _

H. VIEWING a document (V)

A document can be retrieved from storage on disk for viewing on
the screen by typing the character "V". The first 24 lines of the
document will be displayed and the message "Continued". Pressing
any key displays the next 24 lines, and so on, through the entire
document. The ESC key can be entered at any time to stop viewing.

I. PRINTING a document (P)

Entering the letter "P" in front of a document name selects that
document for printing and displays the PRINT OPTIONS MENU shown in
figure 6. Refer to the section on PRINTING DOCUMENTS for details
on how to proceed from there.

J. CHANGING the CURRENT Disk (HOME key)

WORD/7 always keeps the name of one disk as its CURRENT DISK. The
filing system always displays the names of documents on that disk
and documents are normally stored to and retrieved from that disk.

The current disk can be changed to another disk by entering the
HOME key (placing the cursor at the top of the screen) and then
typing the name of a different disk. The new disk should be
inserted before using the RETURN key to enter the new name. The
display will change to the document names on the new disk. If the
new disk doesn't contain any documents or is not properly
inserted, the following messages are displayed at the bottom of
the screen.

```
No Documents on Disk xxxx
Available disks:   SYS, DOC1
Which Disk?    _
```

In this example, the disks "SYS" and "DOC1" are currently inserted and either of the names may be typed to select the respective disk. Pressing ESC or RETURN will exit from the FILING SYSTEM and return to the Main Menu.

Another option is to type a question mark after going to the top of the screen with the HOME key. In this case, the names of all currently mounted disks are displayed for selection as shown above.

```
|                                                                          |
|          DOCUMENT Selection Screen for disk DISK1                        |
|                                                                          |
|          Document            Size        Date Changed                    |
|                                                                          |
|       _  A.MAIN.DOC            4           4/14/82                        |
|       _  ANOTHER.DOC           4          10/24/82                        |
|       _  BILL_S_MEMO           8           1/19/82                        |
|       _  LETTER1               6           6/12/82                        |
|       _  LETTER2               6           7/ 1/82                        |
|       _  LETTER3               8           7/ 8/82                        |
|       _  LETTER4               8           8/ 1/82                        |
|       _  OPENING.BID          10          11/16/82                        |
|       _  RECEIPT               4           3/31/82                        |
|       _  REPORT_AB            14          12/22/82                        |
|       _  REPORT_AC            12          12/22/82                        |
|       _  SECOND.BID           14           1/15/83                        |
|       _  XYZ.DOCUMENT          8           6/ 4/82                        |
|                                                                          |
|                                                                          |
|                                                                          |
|                                                                          |
```

FIGURE 4 - Document Selection Screen

IV. <u>PRINTING DOCUMENTS</u>

The WORD/7 system supplies a full complement of functions for printing documents. In most cases, what you see displayed on the screen is almost exactly what will be printed. However, there are special printing features which require instructions to be typed in a document which are seen while editing but disappear while printing. These features include text underlining, bold print, and other capabilities depending on the printer being used.

WORD/7 allows great flexibility in defining the format of a printed page as shown in figure 5. DOT commands may be used to set top, bottom, and left margins, define standard page header and footer lines, and determine placement of page numbers.

A. DOT Commands

Many different printing features cannot be displayed on the screen while editing a document, but are desired when a document is printed. DOT commands (so called because they all begin with a period, or dot) are the mechanism in WORD/7 to accomodate those features. A convenient summary of DOT commands is given in APPENDIX B.

A DOT command is entered on a line by itself while editing a document, and specifies an action to happen when that line is encountered in printing. The command can appear in any column, but the period must be the first non-space on the line. The rest of the command may be in upper or lower case letters. For example, the printer will skip to the top of the next page before the third line below is printed:

        This line will be printed on one page
        .pg
        and this line will be printed on the next.

The DOT command itself is not printed, but merely signals a print action to be taken by the computer.

Some DOT commands are followed by spaces as in the above example. while others require a number or string of characters to complete the line. An example of using a number is the SKIP command.

        .sk   5

which causes five blank lines to be skipped. The number may be placed anywhere after the "k" in this example as long as it is preceeded by at least one space. Any letters on the rest of the

line are ignored.

1. Comment Lines (.*)

It is sometimes convenient to make notes within a document for future reference but not print the notes as part of the finished document. A line beginning with the characters ".*" is used to denote a comment.

EXAMPLE

```
.*      NOTES THAT WILL NOT BE PRINTED:
.* This memo was written on 08/17/82 in response
.* to Mr. Donner's request for further details
.* on our new computerized System
```

2. Skipping Lines (.SK)

The ".SK" command leaves the specified number of blank lines in the printed copy. This command is especially useful for leaving blank space if drawings or figures are to be inserted in the document after printing.

EXAMPLE

```
.sk 10
```

Will skip 10 blank lines.

3. Page Titles (.Tn)

Up to 3 TITLE lines may be defined to appear at the top of the printed page just below the page number line. These lines may be re-defined as desired throughout a document or deleted when no longer needed.

The following example illustrates how page titles are generated for this User Guide. Note the use of the under-score character, defined with the ".CU" command, to obtain an underlined heading. (refer to later section on SPECIAL PRINT CHARACTERS). Note also that the heading consists of three lines: a blank line to separate from the page number, a title line, and another blank line to separate from the text on the page.

EXAMPLE

        .cu _
        .t1 ‾

        .t2
        WORD/7 User´s Manual   Printing Documents
         .t3

PRINTS AS

        WORD/7 User´s Manual   Printing Documents

Page titles may be deleted from appearing on following pages
by following the ".T" command with the characters "DEL".   The
example below deletes all three page titles.

EXAMPLE

        .t1 del
        .t2 del
        .t3 del

Documents that are to be printed on both sides of the page
require that page titles on even and odd pages be different
(usually mirror images).   The page title commands accomodate
this type of page title as follows:

        .t1 odd
        WORD/7 User Guide   Printing
        .t1 even
        Printing   WORD/7 User Guide

The word "ODD" or "EVEN" after the dot command specify that
the title is to appear only on odd or even numbered pages
respectively. The alternating page titles need not be mirror
images, and can complement each other in any manner desired.

When even and odd titles are produced, both are deleted by the
following delete command which is specified without the word
"EVEN" or "ODD".

        .T1 del

4. Page Footers (.Fn)

Page Footers are very similar to Page Titles except that they appear as the bottom three lines of a printed page.

The following example illustrates how a single Copyright line is defined as a Page Footer. The copyright notice shown will be printed at the bottom of each subsequent page of the document.

EXAMPLE

```
.f1
Copyright 1982 by Micro Research & Development, Inc.
```

PRINTS AS

```
Copyright 1982 by Micro Research & Development, Inc.
```

Page footers may be deleted from appearing on following pages by following the ".Fn" command with the characters "DEL". The example below deletes all three page footers.

EXAMPLE

```
.f1 del
.f2 del
.f3 del
```

Page Footers for two sided copying can be produced by including the word "ODD" or "EVEN" after the dot command. (see page titles described above).

5. Margin from Top (.MP)

A margin of blank lines may be specified from the top of the page, before the page titles are printed. The following example leaves 8 lines.

EXAMPLE

```
.mp 8
```

6. Margin at Top (.MT)

A margin of blank lines may be left after the page titles and before the document body using this command. The following example leaves four lines after the page titles.

EXAMPLE

      .mt 4

7. Margin at Bottom (.MB)

A margin of blank lines may also be left after the document body and before the page footer lines. The following example specifies a margin of one line.

EXAMPLE

      .mb 1

8. Margin at Left (.ML)

The entire text of a document or section of a document may be shifted to the right on the printer with this command.

EXAMPLE

      .ml 10

9. Paragraph Breaks (.P)

Paragraphs are assumed by WORD/7 to be separated by blank lines which is important in formatting paragraphs on the edit screen. However, these blank lines will be printed on the final document which may not be desired. A PARAGRAPH BREAK command can be used to indicate a new paragraph that will be printed without forcing a blank line for separation.

EXAMPLE

          Computers are extremely powerful, versatile machines and in many ways are indispensable in the modern work environment.
      .p
          Human beings, on the other hand, are much more powerful and will continue to be indispensible forever.

PRINTS AS

       Computers are extremely powerful, versatile machines
and in many ways are indispensible in the modern work
environment.
       Human beings, on the other hand, are much more
powerful and will continue to be indispensible.

10. Page Number Mask (.PN)

The PAGE NUMBER MASK gives full flexibility in placing page
numbers anywhere on a line. WORD/7 will automatically gen-
erate and increment numbers, but allows the placing of the
number and any descriptive text via this mask.

The ".PN" command is followed by a line containing any text
desired plus a pound sign "#" somewhere on the line. The page
number mask will be printed at each new page with the current
line number substituted for the "#".

Note that this function only places the number on a line: at
print time you specify whether page numbers are to be
generated and if they are to appear at the top or bottom line
of the document. (refer to the section "PRINT OPTIONS")

EXAMPLE

   .pn

                              page no. #

PRINTS AS

                              page no. 10

The line number mask may also specify line numbers that al-
ternate from the right half of the page to the left half for
documents that will be printed double-sided on the page by use
of the special words "ODD" and "EVEN".

EXAMPLE

   .pn even
   - # -
   .pn odd

                                        - # -

PRINTS AS

- 123 -

AND

- 124 -

11. Page Eject (.PG)

When a .PG command is encountered, the current page is ended
by printing any defined Page Footers, and a new page begun for
subsequent text.

EXAMPLE

    This line will be printed on one page
    .pg
    and this line will be printed on the next page.

12. Page Eject Conditionally (.PC)

It is often undesirable for a figure, table, or other small
section of the document to be split across two pages. This
command informs WORD/7 to start a new page if a specified num-
ber of lines is not available on the current page. A number
following the command specifies the number of required lines.

The following example contains Table 1 which should not be
split across pages. The ".PC" command ensures that if less
than 7 lines are available on the current page, a page eject
will be done before printing the table.

EXAMPLE

    Work effort should be reported using the codes shown
    in Table 1.

    .pc 7
            99 - non-billable hours
           100 - Sales and Marketing
           200 - Program Development
           300 - Documentation
           400 - Maintenance

              Table 1 - Work Codes

13. Turning Dot Commands Off (.OFF)

WORD/7 assumes that any line beginning with a period con-
tains one of the DOT commands described here. DOT command
processing can be turned off with the ".OFF" command which
allows subsequent lines to begin with a period.

14. Turning Dot Commands On (.ON)

The ".ON" command is used to turn DOT command processing on
after use of the ".OFF" command described above.

15. INSERTing Another Document (.IN)

A very powerful feature of the WORD/7 system is the ability to
print one document as part of another. This is useful when
inserting a common paragraph in a form letter, or when several
reports contain identical sections. It is also necessary to
break large reports into smaller pieces since the WORD/7
editing function limits the number of lines in a document
based on the main memory of your computer system.

When a document is inserted via the ".IN" command, it is
printed immediately in place of the line containing the com-
mand. There is no indication on the printed version where one
document ends and another begins. Printing resumes with the
line after the insert command.

An inserted document need not exist on the same disk as the
main document; the computer will prompt for the proper disk
to be mounted as printing occurs. Any valid document name may
be placed on the command (refer to the section on DOCUMENT
NAMES).

Note that an "inserted" document may also insert documents.
The only limitation is the main memory of the computer.
However, printing while in EDIT can generally only support one
level of insertion. If more levels are tried, a message will
be printed that memory is not available and printing will pro-
ceed with the next line.

EXAMPLE

Assume that a document named "rejection" has been written to
contain a standard job applicant rejection letter. The fol-
lowing could be used to print a specific rejection letter to
Mr. Figg.

        Dear Mr. Figg:

        .in rejection

                                        Sincerely,

                                        Daniel Personnel

PRINTS AS

        Dear Mr. Figg:

            Your qualifications and job experience do not match
        any of our currently open positions. However, we will
        file your recent application for a period of 1 year and
        continue to review it as new positions become available.
        Thank you very much for interest in our company.

                                        Sincerely,

                                        Daniel Personnel

16. Keyword Substitution (Printing a Mailing List) (.KW)

A frequently used business function is sending a standard
letter to many different people at different addresses.
WORD/7 supports such mass mailings with "Keyword Substitution"
features. A single document can be printed a number of times
with names, addresses, and other "keyword" information sub-
stituted throughout the document before printing.

Let's look at an example of this feature:

    .KW   clients   title/name1/name2/addr1/addr2/zipcode

    &title &name1 &name2
    &addr1
    &addr2   &zipcode   ,

    &title &name2:

    This letter announces the new offices recently occupied by
    Keyword, Inc. We trust that our new facilities will help
    in better serving you, our valued client, and be convinc-
    ing evidence that there is no substitute for service.

Sincerely,

I.M.A. Komputer

Printing of the letter is different depending on whether it is
printed from within the Edit Function, or from the Filing
Functions. Printing from Edit will look like the above with
no changes and is useful for previewing the letter.

Printing from the Filing Functions is much different. The .KW
command specifies that the document "CLIENTS" contains names
and addresses of all recipients of the letter. The first line
of document "CLIENTS" contains a first name, the second line a
last name, the third line a line of the address, and so on for
a total of six lines. The information on each line will be
substituted throughout the letter wherever the corresponding
name occurs preceded by an ampersand (ie. &name1 will be
replaced by the person's first name).
replaced by the person's first name).

The printed letter might look like this:

        Ms. Emma Satisfied
        1234 Circle Dr.
        Colingua, Ca. 95035

        Ms. Satisfied:

        This letter announces the new offices recently occupied by
        Keyword, Inc. We trust that our new facilities will help
        in better serving you, our valued client, and be convinc-
        ing evidence that there is no substitute for service.

        Sincerely,

        I.M.A. Komputer

The letter will be printed once for each person represented in
the client document. The client document could be used in a
similar manner to envelope print mailing labels to the same
set of people.

a. Rules for Keyword Substitution

The word "&NAME1" in the document above is known as a "keyword" and is only intended as a placeholder until the document is printed. At print time, the "value" of the keyword from the keyword document file is substituted for the keyword according to the following rules:

1. A value·that contains fewer characters than the keyword is placed into the same space with spaces to the right of it.

2. A value that contains more characters than the keyword is inserted directly without disturbing text to the right on the line if there are enough spaces after the keyword. Otherwise, remaining text on the line is moved right to make room.

EXAMPLE

&street   &city

MAY BECOME

1234 Anystreet   Denver, Colorado

ANOTHER EXAMPLE

&street, &city

BECOMES

1234 Anystreet, Denver, Colorado

Keywords may be placed within formatted paragraphs, but this type of substitution will generally not be acceptable because it will change the right margin. This situation is best handled by specifying keywords in combination with "PRINT TIME" formatting as discussed below for the .FS and .FE commands.

b. The Keyword Document File

Values of keywords are contained in the "Keyword Document
File" as described above. This file can be an ordinary
document created and edited by WORD/7, or may be a system
"TEXT" file created by another program. Anything other
than a WORD/7 file should be specified by entering its
full name followed by a period and optionally preceded by
the disk name and a colon.

EXAMPLES

```
SYS:CLIENT1.TEXT.    (System TEXT file with disk name)
NAMES.TEXT.          (System TEXT file without disk name)
NAME_ADDR2           (WORD/7 Document file)
```

17. Formatting at Print Time (.FS)

WORD/7 documents are usually formatted at the time of creation
or editing. However, it is possible to reformat a document at
the time of printing. This feature is intended for use when
performing keyword substitution as described for the .KW
command. The command is:

```
.FS  left  indent  right  JUST
```

where the column of the left margin is substituted for the
word "left", the number of columns of indenting for paragraphs
is substituted for "indent" and the right margin is
substituted for "right". The word "JUST", if present, says to
right-justify all lines that are formatted. Otherwise lines
are left with a jagged right margin.

EXAMPLE,

```
.FS  10  4  70  JUST
```

This command says to format text between columns 10 and 70
with the first line of each paragraph indented by 4 columns.
Blanks will be added between words to achieve a straight
right margin (right-justified). Formatting continues until a
format end (.FE) command is encountered.
.on

18. End Print Formatting (.FE)

The .FE command is used after a .FS command to stop formatting at print time:

        .FE

19. Generating Section Headings (.Hn)

Section headings can be generated automatically in either Outline Format (Roman numerals, letters, and numbers as shown in the following example) or in Dewey-Decimal Format. Refer to the next section for details on specifying the type. The standard type if you don't say differently is Outline Format.

Headings start at level 1 (the highest level) and can be generated at indented levels 1, 2, 3, and 4. The level number is specified as a digit following the .h in the heading command. The remaining letters on the line are used as the body of the section heading.

The advantage of having section headings generated by the system is that sections may be freely moved around during editing without concern for section numbers.

EXAMPLE

    .h1 INTRODUCTION

        Let me introduce you to a new product that we feel will revolutionize the gold-making industry.

    .h2 TECHNICAL DESCRIPTION

        Technically, there is not much to say.

    .h3 REQUIRED NEW TECHNOLOGY

        There are many required discoveries before the new system will become practical.

    .h3 PROPOSED RESEARCH

        Research through the year 2050 will be required to verify the initial hypothesis.

    .h2 MARKETING CONSIDERATIONS

        Let's wait and see for this one.

.h1 CONCLUSIONS

    Our effort would be better spent in another area!

PRINTS AS

  I. INTRODUCTION

    Let me introduce you to a new product that we feel
    will revolutionize the gold-making industry.

    A. TECHNICAL DESCRIPTION

      Technically, there is not much to say.

      1. REQUIRED NEW TECHNOLOGY

        There are many required discoveries before the
        new system will become practical.

      2. PROPOSED RESEARCH

        Research through the year 2050 will be required
        to verify the initial hypothesis.

    B. MARKETING CONSIDERATIONS

      Let's wait and see for this one.

  II. CONCLUSIONS

    Our effort would be better spent in another area!

20. Specify Section Heading Type (.HT)

This command specifies the type of Generated Section Headings
as described above and takes one of the following forms:

  .ht 1   - Specifies that Outline Format headings are to
          be generated. This is the default type when you
          initially create a document. Headings will
          appear as follows:

            Level 1 -   Roman Numerals
            Level 2 -   Capital letters A thru Z
            Level 3 -   Numbers 1 thru 99
            Level 4 -   Lower-case letters a thru z

  .ht 2   - Specifies that Dewey-Decimal headings are to
          generated as follows:

```
                    Level 1 - 1.0, 2.0, etc.
                    Level 2 - 1.1, 1.2, 1.3, 1.4, etc.
                    Level 3 - 1.1.1, 1.1.2, 1.1,3, etc.
                    Level 4 - 1.1.1.1, 1.1.1.2, 1.1.1.3, etc.
```

21. Generating a Table of Contents (.TC)

The system will automatically build a Table of Contents from
the section headings generated by the .Hn command above,
inserting the correct page number for each heading. The Table
of Contents is built when the document is printed, and is
directed to an ordinary document file with a name specified in
the .TC command:


```
        .TC doc.contents
        . . . . . . . . . . . . . . . . . . . . . . . . . . .  #
```


The above command specifies that a Table of Contents is to be
built and placed into the document named "DOC.CONTENTS". If
the document already exists, it will be replaced. Otherwise a
new document will be created with that name. The Table of
Contents is not printed; just built and placed in a document
from which it can be edited and then printed.

The line after the .TC command is a "mask", or sample of what
lines of the Table of Contents lines will look like. Each
generated heading will be superimposed on top of the mask and
the current page number substituted for the number sign (#).
The generated Table of Contents for the above example might
look like this:

                    Table of Contents

                                                          Page

        I. Introduction. 1
        II. Discussion. 3

Notice the two title lines that are also created. The WORD/7
Edit function may be used to modify the Table of Contents
document to change any spacing or formatting.

22. **Additions to Table of Contents (.TE)**

This command is inserted above a line that is to be added
to the Table of Contents.

B. Defining Special Print Characters

1. Bold Printed Text (.CB)

An entire section of text may be printed in bold print by surrounding it with the character defined in the ".cb" command.

EXAMPLE

        .cb \
        This example will print\boldly\by surrounding a word with
        the currently defined\bold\character.

PRINTS AS

        This example will print **boldly** by surrounding a word with
        the currently defined **bold** character.

2. Capitalized Text (.CC)

To capitalize an entire section of text, it should be surrounded with the character defined in the ".cc" command.

EXAMPLE

        .cc |
        |This sentence will be printed entirely in capitals.|

.pc 4
PRINTS AS

        THIS SENTENCE WILL BE PRINTED ENTIRELY IN CAPITALS.

3. Text Pitch (.CP)

A character may be defined which changes the horizontal pitch (the number of characters per inch) of your printed copy. The character is defined with the ".cp" command, but the printer must also be capable of different horizontal spacing and the WORD/7 configuration file must contain the appropriate printer character sequence.   (Refer to the section on System Con-figuration)

EXAMPLE

        .cp ^
    ^This line will be expanded.^

PRINTS AS

    T h i s   l i n e   w i l l   b e   e x p a n d e d .

4. Stop Printing (.CS)

The character defined in the .CS command may be placed anywhere in the document so that the printer will stop. A different print wheel can then be mounted to get special characters or italics for a word or phrase, and any character typed to resume printing. Another character should be placed after the word or phrase so that the original wheel can be mounted again.

5. Text Underlining (.CU)

This command allows underlining to be turned on and off as desired. If a letter other than a space follows the command, that letter becomes the underline flag and will start underlining when it appears later in the document. The next time the character appears, underlining will end, and so on for the rest of the document.

The ".CU" command followed by only spaces turns the underlining character<u>OFF</u>.

EXAMPLE

        .cu _
    Let me make this_perfectly_clear!

.pc 5
PRINTS AS

    Let me make this <u>perfectly</u> clear!

The underline character is replaced by a space when the above example is printed. Sometimes, though, it is not appropriate for a space to be printed as in this heading:

EXAMPLE

        The last word of a sentence can be a_problem_!
        Either placement of the underline character is_wrong._

PRINTS AS

        The last word of a sentence can be a <u>problem</u> !
        Either placement of the underline character is <u>wrong.</u>

The "NOSPACE" option can be included on the .CU command to
handle this situation and not print a space for the underline
character.

EXAMPLE

        .cu ~ nospace
        The last word is no longer a ~problem~!
        A single let~t~er of a word may also be underlined.

PRINTS AS

        The last word is no longer a <u>problem</u>!
        A single let<u>te</u>r of a word may also be underlined.

It may seem that this option should always be used.   However,
it is generally only used for the line or lines where
necessary because it creates an inconsistency between how text
is printed and how it looks on the screen. Formatting of
paragraphs on the screen always count the underline character
as taking a space, so using the nospace options makes the text
print differently than seen on the screen.

6. Other Special Characters (.Cn)

WORD/7 also allows up to ten other special print characters to
support other features of the printer begin used.   These are
specified in the document using the .C1, .C2, etc. up to
.C10, and function in a similar manner to the print commands
described above.

These special characters must be set up with the "Define
Printer Configuration" function of WORD/7 to the desired
printer character sequence. Typical uses are to start and
stop superscripts and subscripts, italics or other print
fonts, and to switch horizontal or vertical pitch settings.

EXAMPLE

Assume that special characters 1 and 2 have been defined to the printer as starting and stopping superscript mode. The following example prints the mathematical equation X equals Y squared plus Z squared.

```
.c1  ^
.c2  |
              X = Y^2|  + Z^2|
```

Note that the special characters will not take a space when printed and the equation will appear correctly.

C. Print Options

The PRINT OPTIONS SCREEN in Figure 6 is displayed if a document is printed either from the EDIT MODE or FILING SYSTEM functions of WORD/7. Options may be selected to specify the type of PRINT FORMS, generation of PAGE NUMBERS, and HOW TO PRINT the document on the printer. These options provide flexibility in printing documents on different printer forms and influence the appearance of the final document.

The previous value for any print option is kept by WORD/7 and will be remembered from day to day. A value may be changed by typing in the letter corresponding to the option (see figure 6) and then responding to questions that are printed on the screen.

1. Printer Forms

a. CONTINUOUS FORMS or INDIVIDUAL SHEETS

Option A specifies whether the printer contains continuous computer paper (value of "Y") or individual sheets of paper (value of "N"). For individual sheets of paper, the computer will pause after each page and display a message to "INSERT PAPER". Printing will resume after inserting another sheet of paper and pressing the RETURN key.

b. SIZE OF FORM

Option B specifies how many printed lines will fit on a page of paper. A full 8 1/2" by 11" sheet of paper will generally hold 66 printed lines, while mailing labels may contain only 3 or 4 lines.

Note that this number represents the full size of the page including top and bottom margins, not the actual number of lines that will be printed. That number is specified in the LINES/PAGE option described below.

2. Page Numbering

Page numbers will be automatically generated, if desired, and printed at either the top or bottom of each page depending on the option below. Page numbers may also be eliminated completely.

a. NUMBERING OPTION

This option has the following three values:

0 = No page numbers will be printed
1 = Page numbers will be printed at the top of each page.
2 = Page numbers will be printed at the bottom of each page.

Note that the column of the page number for options 1 and 2 depends on any page number mask defined in the document with the PAGE NUMBER MASK DOT command described above. If a page number mask is not provided, numbers will be printed starting in column 70.

b. INITIAL PAGE NUMBER

Page numbers usually begin with 1 but may be started at any other number with this option. This is particularly useful when a document is printed separately but will be physically appended to a previously printed document.

3. Other Print Options

a. LINES/PAGE

This option specifies how many lines are to be printed on a page. The number should be less than the number of lines on a page as specified above.

b. LINE SPACING

This value specifies SINGLE, DOUBLE or TRIPLE spacing. (1, 2 or 3)

c. NUMBER OF COPIES

Multiple identical copies may be printed by entering a number other than 1 for this option. Every page of the first copy will be printed, followed by the second copy, etc.

d. USE OF FORM FEEDS

The normal action (value of "Y") is to send a form feed command to the printer at the end of each printed page. If your printer does not support form feeds, or if you want to print continuously without regard for pages, specify a value of "N" for this option.

e. FIRST/LAST PAGE TO PRINT

It may be desired to print only a portion of a large document. These two options specify which page numbers will be printed. Notice that if the printing starts at any page other than the first, there will be a delay as the computer checks formatting of prior pages.

f. PRINTER DEVICE NAME

This option specifies the operating system name for the printer. It usually contains one of these names:

```
PRINTER:   - if your printer is connected to the
             PARALLEL printer port of your computer.
REMOUT:    - if your printer is connected to the
             SERIAL printer port of your computer.
```

```
----------------- PAGE NUMBER LINE --------------------------
                  TITLE LINE 1
                  TITLE LINE 2
                  TITLE LINE 3

                              |  TOP MARGIN (.mt command)
                              |
           -------------------|----------------------------------
           |                  |                                 |
           |                  |                                 |
<--------> |                                                    |
           |                                                    |
   LEFT    |                    BODY OF PAGE                    |
  MARGIN   |                                                    |
(.ml command)                                                   |
  shows only                                                    |
  on print- |                                                  |
  er, not  |                                                    |
  on screen.          |  BOTTOM MARGIN (.mb command)
                      |
                      |
                  FOOTER LINE 1
                  FOOTER LINE 2
                  FOOTER LINE 3
----------------- PAGE NUMBER LINE --------------------------
```
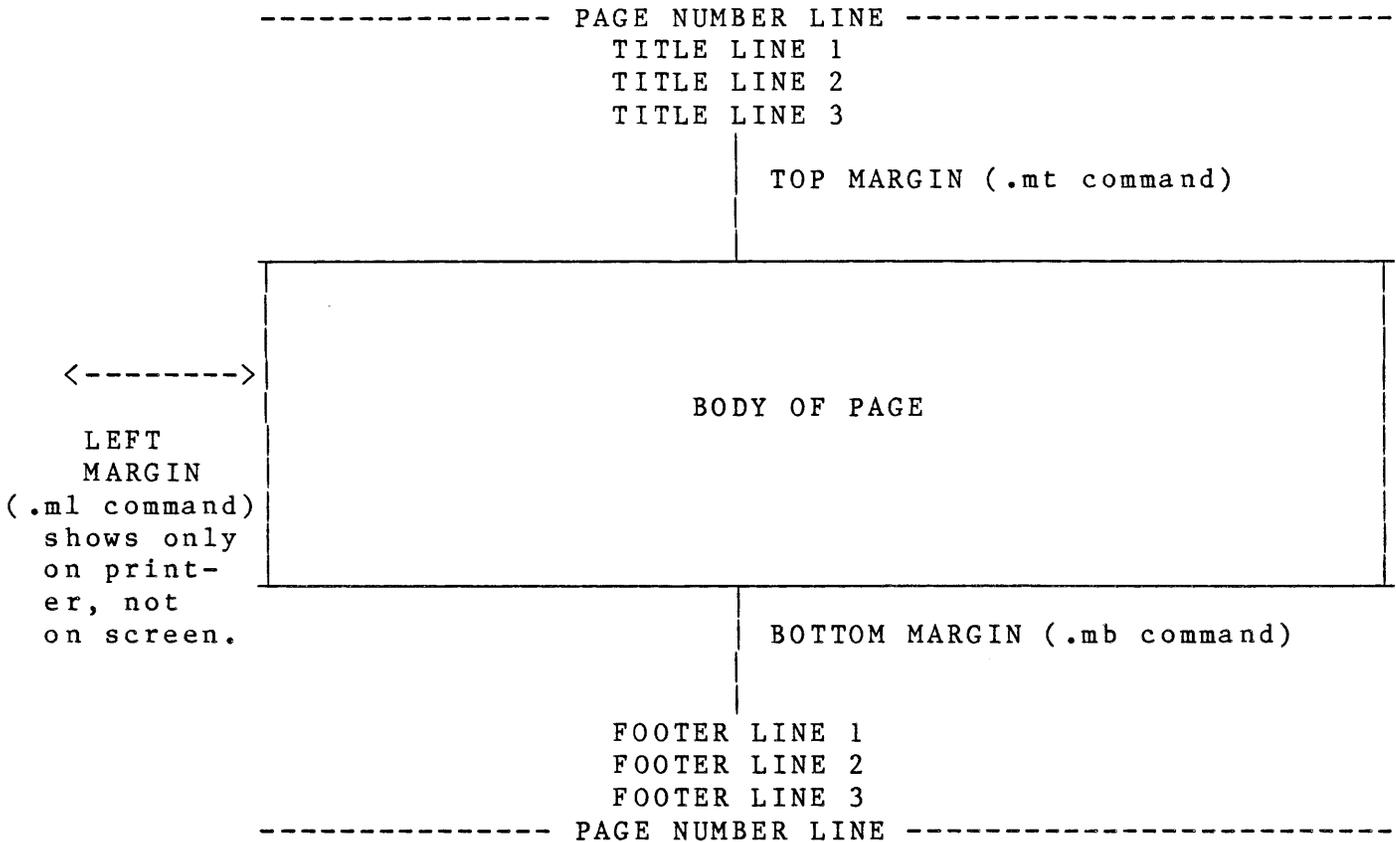
FIGURE 4 - WORD/7 Print Page Format

```
                              WORD/7 Print Menu
        _____


        FUNCTIONS:        _     PRINT Document
                                Quit this Menu

        PRINT FORMS:            Continuous Forms?    = Y
                                Lines/Page of Form   = 66

        PAGE NUMBERS:           Numbering Option     = 1
                                INITIAL Page Number  = 1

        PRINTING:               Text Lines/page      = 50
                                Text Line Spacing    = 1
                                No. of Copies        = 1
                                Use FORM FEEDS?      = Y
                                FIRST Page to Print  = 1
                                LAST  Page to Print  = 50
                                Printer Device       = PRINTER:
```

FIGURE 5 - Print Options Menu

V. SYSTEM CONFIGURATION

Selecting the "Set System Configuration" option of the Main Menu displays the menu shown in figure 6. An option is selected by positioning the cursor in front of the desired function, and pressing the RETURN key.

Several of the options modify system information stored in the "WORD/7 Configuration File" (named WORD7.PARMS). WORD/7 searches all mounted disks for this file when execution begins and reads information about the terminal, printer, and edit command assignments. The file is rewritten after execution if any information is changed.

A. Set Current Disk

WORD/7 always keeps one disk name as the "current disk" from which documents are read and to which documents are written. The filing functions also use the current disk when displaying document names. The current disk is set to the system "prefix" disk when WORD/7 is executed and may be changed by this option.

This option displays the names of all disks currently on the system and prompts for one of the names to become the new current disk.

B. Set Current Date

The date is remembered in order to mark files with the last modified date. However, it is important that the date be set with this option each day to ensure that the modified date is meaningful.

Invoking this option results in prompts for the month, day, and year. Entering just RETURN for any prompt will retain the old value, which is especially useful when only the day is being changed.

C. Define Document Style

Several edit options are grouped together as "Document Style" options and apply to every new document created. This allows a company or department to define a "standard" style for all new documents created (although different options may be specified in Edit for non-standard documents). All prompts should be answered with a character or number followed by RETURN. Just pressing RETURN keeps the current setting.

Paragraph indent amount - The number of columns of indent for the first line of paragraphs when formatting in edit.

Format with right justification? - "Y" means paragraph formatting will include right justification, "N" means not.

MARGINS - Five sets of margins may be defined for document editing. Left and right column are specified for each.

Keyword start character - Keyword names used with the "Keyword Substitution" facility will start with the letter defined here. The usual character is ampersand (&).

D. Define Terminal Configuration

Characteristics of the terminal being used are contained in the system "Configuration File" and may need to be modified before using the program from your specific terminal.

This option proceeds through each of the following terminal attributes and command sequences, displaying the current values, and allowing new values to be entered. Each line displays the integer values for a one to five character sequence. Pressing RETURN keeps the current setting while typing up to five integer numbers changes the command sequence.

If the configuration file is so different from the terminal being used that it is impossible to execute the system at all, the file should be deleted and WORD/7 executed. The program will pick up the cursor keys, and some minimal terminal information from the operating system and the following options can then be used to define the remaining information.

CURSOR DISPLAY ATTRIBUTE - The character sequence to display a square block cursor. A value of zero will leave the the cursor with the attributes it had when the program was invoked.

CURSOR NON-DISPLAY ATTRIBUTE -The character sequence to make the cursor invisible. This value should be set to zero if CURSOR ATTRIBUTE above is zero, or if the terminal doesn't have the ability to display an invisible cursor.

NORMAL FIELD ATTRIBUTE - The character sequence that begins a normal video, (white on blank) non-underlined field. If the terminal does not require a screen position for the attribute, this sequence should be terminated with

and 950 terminals. Should equal 148 for those
terminals and zero otherwise.

E.   Define Printer Configuration

This option proceeds through each of the following printer command
sequences, displaying the current values, and allowing new values
to be entered. Each line displays the integer values for a one to
seven character sequence. Pressing RETURN keeps the current
setting while typing up to seven integer numbers changes to new
values.

Carriage RETURN on Line Print - (Y/N) - The value is always
'Y' for a SAGE computer.

PRINTER INIT CHARACTERS - The character sequence to be sent
to the printer whenever a document starts to print.
Many times no sequence is needed and this will be set
to nulls (or zeros). It may, however, be desired to
send a sequence that resets the printer to its power up
state or sets to a particular horizontal pitch.

PRINTER Start UNDERLINE Chars - The sequence of characters
that, when received by the printer, starts underlining
subsequent characters. On printers without this
function, the value should be set to nulls (zero) and
the program will underline characters by printing a
character, backspacing, and printing the underscore
character.

PRINTER End UNDERLINE Chars - The character sequence that
signals the printer to stop underlining subsequent
characters. On printers without this function, the
value should be set to nulls (zeros) along with the
value for starting underlining.

PRINTER Start BOLD Chars - The character sequence that
signals the printer to start printing in boldface
characters. On printers without this function, the
value should be set to nulls (zeros) and the program
will print bold characters by printing a character,
backspacing, and printing the character again.

PRINTER End BOLD Chars - The character sequence that signals
the printer to stop printing in boldface characters.
On printers without this function, the value should be
set to nulls (zeros).

PRINTER Start NEW PITCH Chars - A character sequence that

signals the printer to change to another horizontal pitch. The choice of pitch is arbitrary and may represent compressed print or expanded pitch. On printers that do not support other print pitch, the value should be set to nulls (zeros).

PRINTER End NEW PITCH Chars - A character sequence that ends the new horizontal pitch set above and returns to the normal setting.

PRINTER Set Form Length Chars - This character sequence is sent to the printer at the start of each document to set the number of print lines on the print paper being used. Printers use various command sequences which always contain either one or two digits that specify the number of lines per page. The command sequence should be entered here with the digit positions replaced with the number sign (#, ASCII code 35).

> EXAMPLE:
> A printer requires the sequence "ESC F n n", where the characters "n n" represent the lines per form. The value should be set to "27 70 35 35".

PRINTER device name - The operating system device name for the printer should be entered here, including the colon. Typical values are "PRINTER:" for the parallel printer port and "REMOUT:" for the remote output port.

SPECIAL Char seq 1 - 10 - Ten special sequences may be entered here to be invoked by using the .Cn command (see section "Defining Special Print Characters"). Possible functions for these special characters are: start superscript or subscript, stop superscript or subscript, different horizontal and vertical pitches, and special printing modes or fonts such as italics.

F. Define Edit Keys

Different keys may be assigned to the various commands in the WORD/7 Edit Function. Each command may be set to a sequence of from one to five keys. The current setting is first displayed and may be retained by just entering the equals sign "=" (don't press RETURN). A new key or sequence of keys may be specified by entering the key(s) followed by the equals sign.

It is important that certain keys that have significance to the operating system and the terminal not be assigned to any Edit function. These typically include CTRL-S, CTRL-X, CTRL-C, and

others.   Refer to Appendix A for typical edit command assignments,
and Appendix D for specific examples.

This option also prompts for the maximum number of edit lines in a
document.   This value should always be set to 430 at the current
time.

```
  WORD/7  System Configuration Menu
  _____


              QUIT this menu

      _       Default DISK      = SYS:

              Current Date      = 12/28/82

              DEFINE Document Style

              DEFINE TERMINAL Setup

              DEFINE PRINTER Setup

              DEFINE EDIT Commands
```
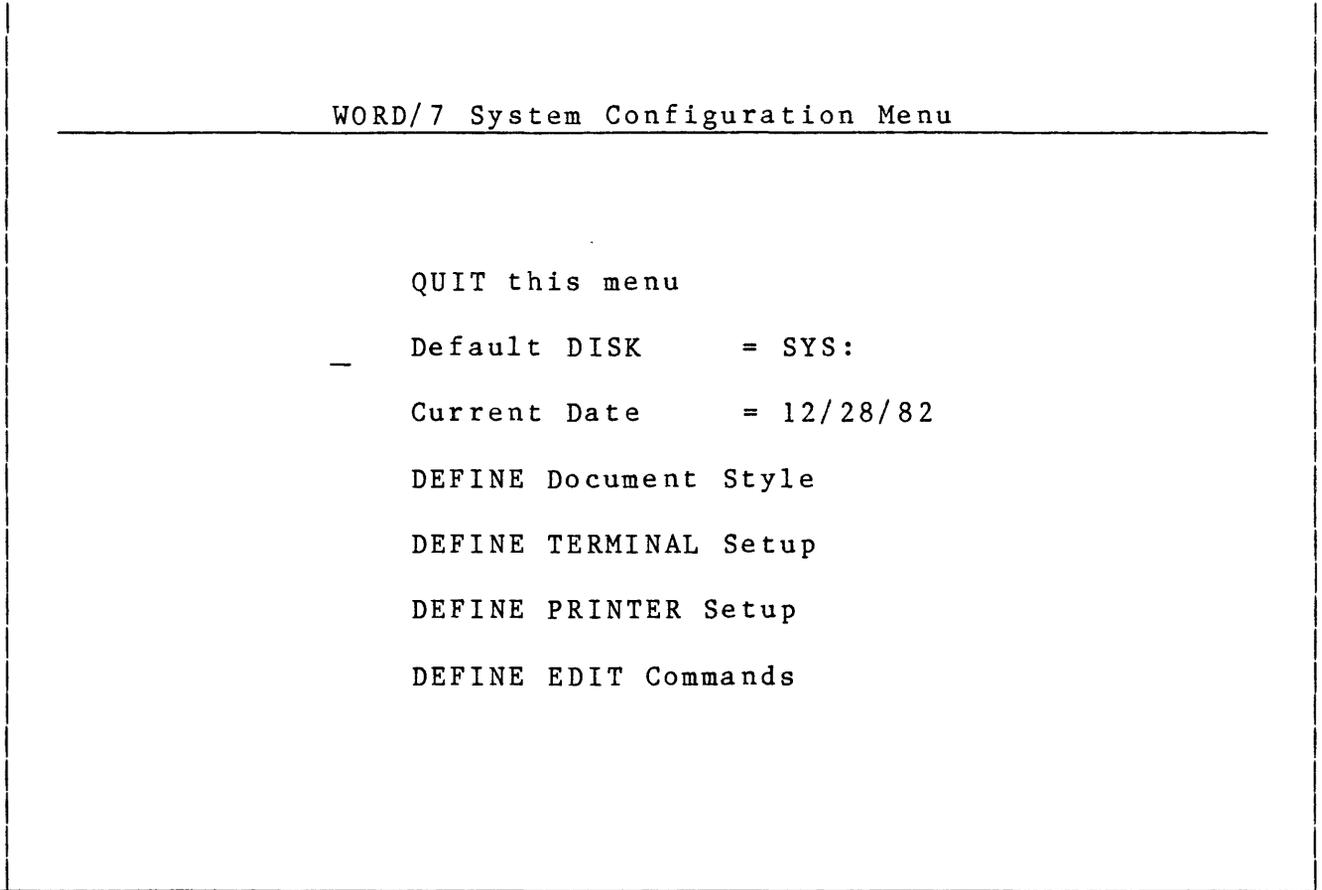
FIGURE 6 - System Configuration Menu

GLOSSARY OF TERMS

25th line - The bottom line of the CRT screen which is used for status and error messages.

arrow keys - See cursor keys

backup - To copy the contents of a disk onto another to protect against loss of documents.

BLOCK Commands - Commands of WORD/7 Edit mode tat COPY, MOVE, or DELETE entire groups of lines.

bold print - A type of printing where letters are printed multiple times so they appear darker on paper.

bug - A problem or mistake in a computer program that causes incorrect results when using the program.

caps - An option of printing where all letters are printed as uppercase.

character - Letters, numbers, and other symbols printed on a printer or CRT are referred to as characters.

command - An instruction to the computer to perform some function or action. Instructions to WORD/7 are generally typed at the keyboard.

continuous forms - A type of paper where the bottom of one page is joined to the top of the next page forming a continuous series of pages. This type of form is particularly convenient since a printer can feed several sheets without intervention.

CPU - Central Processing Unit - The part of a computer which performs arithmetic calculations and logical comparisons.

CRT - Cathode Ray Tube - see "display".

cursor - The spot on a CRT screen which indicates where typed characters will appear. As letters are typed, they appear at the cursor position and the cursor moves to the right.

cursor keys - The set of keys marked with left, right, up and down arrows which control movement of the CRT cursor.

delete - The function of removing a character or line from a document, or removing a document from where it is stored on a diskette.

disk - A magnetic storage device that looks somewhat like a phonograph record and stores computer programs and data. There are two classes of disks: hard disks and diskettes. They function in a similar manner but a hard disk is permanently mounted inside the computer, sealed from dust and dirt, and runs much faster.

diskette - Also known as a "floppy disk".

display - The television-like part of a computer terminal on which letters, numbers and other characters are printed to communicate with the person using the computer.

document - A letter, memo, report, manual, mailing label, or any other written correspondence.

document name - WORD/7 allows document names of up to 13 characters including alphabetic, numeric and other characters including period, hyphen, and others. Each document on a given disk must have a unique name for identification.

DOT commands - Commands that are typed into a WORD/7 document that always begin with a period (or dot), and specify some special instructions about how the document is to printed. (examples are underlining, bold print, and skipping to a new page)

error - A malfunctioning of a computer system or a bad recording of information on a disk.

error message - A message displayed to inform the operator that an error has occurred and that special action may be required. Messages are generally displayed on the bottom or top line of the CRT display screen.

ESC key - A key used throughout WORD/7 to mean "get out" or "escape" from a question or dialog with the computer. The key is usually labelled with the letters "ESC".

Escape key - See ESC key above.

editing - The function of WORD/7 that facilitates making changes to a document.

filing functions - A set of functions of WORD/7 that allow documents stored on disk to be deleted, renamed, printed, stored, or viewed.

floppy disk - See diskette.

form feed - Most printers can feed paper an entire sheet at a time by pressing a button labelled "FORM FEED". The computer can also

perform the function of pressing this button when it prints documents and most of the time WORD/7 will function in this manner.

format – The function of WORD/7 which moves words within a paragraph to close up any blank spaces and perform left and right justification.

function keys – Special keys of the computer keyboard usually labelled with F1, F2, or PF1, PF2, etc. These keys are used in EDIT to specify functions like scrolling and line formatting.

Home key – A key in WORD/7 which generally means to position the cursor to the top or near the top of the display screen.

indent amount – A number which defines how many columns the first line of paragraphs is to be indented. This quantity is changed by the INDENT command which is entered on the top line in the Edit Display Screen.

insert mode – A mode within the WORD/7 Editing functions where letters typed are inserted at the cursor position. Existing letters are shifted to the right and possibly moved down to the next line.

keyboard – The typewriter-like part of a computer terminal which is the primary method by which a person gives instructions to the computer.

left-justify – The function of moving a line of text so that the first non-blank character is aligned with the currently defined left margin.

message line – The bottom line of the CRT which is used to display informational and error messages in WORD/7. On some terminals, messages will also be displayed on the top line.

menu – A method of presenting information and choices on a computer CRT display. A variety of options are described and one is chosen by either positioning the cursor in front of it or typing a letter identified with the option.

menu-driven – A computer system that uses menus as described above as its primary technique of communicating with the person using the system.

overtype mode – A mode within WORD/7 Edit where any character typed will overlay the character at the cursor location.

page footer – An optional group of lines that may be specified to be placed at the bottom of each printed page of a document. The

footer may be added, changed, or deleted as often as desired throughout printing of the document.

page title - An optional group of lines that may be specified to appear at the top of each printed page of a document. The title lines may be added, changed, or deleted as desired throughout printing of the document.

paragraph - A group of lines, possibly with an indented first line, that are separated from previous and following lines by a blank line or a paragraph DOT command.

primary command - An editing command which is entered on the top line (tab line) of the edit display.

printer - The mechanical device connected to a computer which prints documents on paper.

program - A stored set of computer instructions that can command the hardware to perform meaningful information processing.

rename - A function of the WORD/7 Filing System that allows the name of a document stored on disk to be changed.

replace - A function of the WORD/7 Editing System that allows a specified string of characters to be replaced with another string. The replace operation may always be repeated by pressing a single key and therefore replace many or all occurrences of the specified string.

RETURN key - A key on computer keyboard corresponding to the carriage return on a typewriter. Pressing this key in WORD/7 sends the characters typed to the system for processing.

right-justify - The function of moving a line of text so that the last non-blank character is aligned with the currently defined right margin.

screen - See "display".

store - The act of putting an image of a document onto a disk for later retrieval. The document is given a descriptive name and copied from main memory of the computer to a disk.

string - A series of letters, numbers, or other characters ended by the RETURN key.

text processing - The computer functions associated with creating, changing, storing, and printing documents of all types.

underlined print - A special type of printing where words or lines

are printed with continuous underlining.

word - Any sequence of non-blank characters.

word processing - See text processing.

wordwrap - A feature of the WORD/7 Editor where words that would extend past the right margin of the document are automatically moved to the next line without having to press the RETURN key.

Summary of WORD/7 Edit Commands

DISPLAY POSITIONING COMMANDS   ASSIGNED KEY

      UP 1 Line   UP ARROW
      DOWN 1 Line   DOWN ARROW
      LEFT 1 Column   LEFT ARROW
      RIGHT 1 Column   RIGHT ARROW
      TAB RIGHT   TAB
      TAB LEFT   BACK TAB
      Top Line of Display   HOME
      Beginning of Document   HOME HOME
      End of Document   HOME HOME HOME

CHARACTER COMMANDS

      DELETE Character   CHAR DELETE
      INSERT Character Mode   CHAR INSERT
      END INSERT Mode   DEL

WORD COMMANDS

      NEXT Word   CTRL/n
      PREVIOUS Word   CTRL/p

MARGIN COMMANDS

      NEXT Margin   ESC n
      PREVIOUS Margin   ESC p

LINE COMMANDS

      INSERT Line   LINE INSERT
      DELETE Line   LINE DELETE
      ERASE to End of Line   LINE ERASE
      LEFT Justify Line   F1
      CENTER Line   F2
      RIGHT Justify Line   F3
      SPLIT Line   F4
      BLOCK Command   F7
      SCROLL DOWN   F9
      SCROLL UP   F10
      UN-DELETE Line   CTRL/u

PARAGRAPH COMMANDS

LEFT Justify Paragraph	F1	(Shifted)
CENTER Paragraph	F2	(Shifted)
RIGHT Justify Paragraph	F3	(Shifted)
SPLIT Paragraph	F4	(Shifted)
FORMAT Paragraph	F8	(Shifted)
NEXT Paragraph	F9	(Shifted)
PREVIOUS Paragraph	F10	(Shifted)

PRIMARY COMMANDS (entered on top line followed by RETURN)

EXIT Block command	E	
FIND Character String	F	(or F5 key)
LINE Information	L	
Set Edit OPTIONS	O	
REPLACE Character String	R	(or F6 key)
SAVE Document	S	

END EDIT   ESC ESC

Summary of WORD/7 Printing Commands

COMMAND   DESCRIPTION

.*   COMMENT LINE

.CB c   Define character "c" as the BOLD character
.CC c   Define character "c" as the CAPS character
.CP c   Define character "c" as the PITCH character
.CS c   Define character "c" as the STOP character
.CU c   Define character "c" as the UNDERLINE character
.CU c NOSPACE   UNDERLINE char that requires no space
.C1 c   Define character "c" as special character ONE
.C2 c   Define character "c" as special character TWO

        .
        .
        .
.C9 c   Define character "c" as special character NINE
.C10 c   Define character "c" as special character TEN

.Fn   Next line contains PAGE FOOTER LINE n (1,2,or 3)
.Fn DEL   Delete PAGE FOOTER LINE n
.Fn ODD   Next line contains FOOTER n for odd pages
.Fn EVEN   Next line contains FOOTER n for even pages
.FE   End PRINT-TIME formatting.
.FS left indent right JUST
                      Start PRINT-TIME formatting. Specifies LEFT
                      MARGIN, INDENT COLUMNS, RIGHT MARGIN and
                      optional JUSTIFICATION.

.H1   Generate level 1 SECTION HEADING
.H2   Generate level 2 SECTION HEADING
.H3   Generate level 3 SECTION HEADING
.H4   Generate level 4 SECTION HEADING
.HT 1   Specifies Outline Format SECTION HEADINGS
.HT 2   Specifies Dewey-Decimal SECTION HEADINGS
.HI   Initialize SECTION HEADING counts to 0

.IN docname   INSERT named DOCUMENT into print

.KW filename   Named file contains keyword values

.MB n   Define bottom margin of n lines
.MP n   Define margin from top of page n lines
.ML n   Define left margin of n columns
.MT n   Define top margin of n lines

.OFF   Turn "DOT" command processing OFF
.ON   Turn "DOT" command processing ON

.C- c   Subscript (Flag does not use space)
.C+ c   Superscript   ''

```
.P                      Paragraph break
.PC n                   Page eject conditionally on the number n
.PG                     Page eject to top of next page
.PN                     Next line is the PAGE NUMBER Mask

.SK n                   SKIP "n" lines when printing

.TC docname             Generate Table of Contents to the named document
.TE                     Enter the next line in the Table of Contents
.Tn                     Next line contains PAGE TITLE LINE n (1,2,or 3)
.Tn DEL                 Delete PAGE TITLE LINE n
.Tn ODD                 Next line contains TITLE LINE n for odd pages
.Tn EVEN                Next line contains TITLE LINE n for even pages
```

I. <u>EDIT MESSAGES</u> (In alphabetical order)

<u>BEGINNING</u>

The display has been positioned to the first lines of the
document. The <u>first line</u> is at the top of the screen.

<u>Can't mark TAB LINE</u>

The top line of the screen (the TAB LINE) cannot be marked as
a line to to be MOVED, COPIED, or DELETED. Move the cursor to
any line other than the top line and press the F7 key again.

<u>COMMANDS ARE: Copy, Exit, Find, Lines, Options, Print, Replace,
Save, View</u>

This HELP message displayed in response to a question mark on
the top line lists the commands that are valid to enter on
that line. A command may be entered by positioning to the top
line and typing the first character of the command followed by
RETURN.

<u>Document xxxxxx copied</u>

The document named xxxxxx has been copied <u>into</u> the document
currently being edited. The copied document still exists on
disk after the copy.

<u>Document xxxxxx saved</u>

The document named xxxxxx has been written successfully to
disk.

<u>END of Document</u>

The display has been positioned to the last lines of the
document. The <u>last line</u> is at the bottom of the screen.

<u>Enter command on top line</u>

This command is displayed whenever the HOME key is pressed.
The cursor is placed on the top line of the screen (the TAB
LINE) where any edit primary command may be typed followed by
RETURN.

INSERT Mode

This message indicates that the system is currently in
CHARACTER INSERT mode. Typing in this mode moves existing
characters on the line to the right to insert
each character typed.

Mark DESTINATION of BLOCK COPY

A block of lines has been marked to be copied and the computer
needs to know where to copy them. The first and last lines of
the block are shown with the characters "===>" in the first
few columns. Position the display to the line after which you
want the marked block of lines copied and press the F7 key.
If you don't really want to copy the lines, position to the
top line of the screen with the HOME key and type the EXIT
command.

Mark DESTINATION of BLOCK MOVE

A block of lines has been marked to be moved and the computer
needs to know where to move them. The first and last lines of
the block are shown with the characters "===>" in the first
few columns. Position the display to the line after which you
want the block of lines moved and press the F7 key. If you
don't really want to copy the lines, position to the top line
of the screen with the HOME key and type the EXIT command.

Mark DESTINATION of document COPY

A block of lines has been marked for copying and the computer
needs to know where the block is to be copied. The first
and last lines of the block are shown with the characters
"===>" in the first few columns. Position the cursor to be on
 the line after which you want the lines copied and press the
F7 key. If you don't really want to copy the lines, position
to the top line of the screen with the HOME key and type the
EXIT command.

Mark LAST LINE of BLOCK COPY

The first line of a block to be copied has been marked and
displays the characters "===>" in the first few columns.
Position the display to the last line to be copied and press

the F7 key.   If you don't really want to copy the lines,
position to the top line of the screen with the HOME key and
type the EXIT command.

Mark LAST LINE of BLOCK DELETE

The first line of a block to be deleted has been marked and
displays the characters "===>" in the first few columns.
Position the display to the last line to be deleted and press
the F7 key. If you don't really want to delete the lines,
position to the top line of the screen with the HOME key and
type the EXIT command.

Mark LAST LINE of BLOCK MOVE

The first line of a block to be moved has been marked and
displays the characters "===>" in the first few columns.
Position the display to the last line to be moved and press
the F7 key.   If you don't really want to move the lines,
position to the top line of the screen with the HOME key and
type the EXIT command.   \

No find string

The REPEAT FIND key (F6) was entered before a string of
characters was entered for the FIND command. Enter a FIND
command on the top line of the screen followed by RETURN and
then type a string of characters to find.

No room for Replace

There was not room on the line for the REPLACE command to
insert the new string. Split the line to make room, and retry
the REPLACE command.

OVERTYPE mode

This message indicates that the computer is currently in
OVERTYPE mode. Any character on the screen may be changed by
positioning the cursor over it and retyping.

Paragraph FORMATTED

   The paragraph containing the cursor has been formatted. Words
   have been moved around to place as many as possible on each
   line, and right margin justification may have been performed
   depending on the setting of the JUSTIFY mode.

Save changes? (y/n or return)

   This message is displayed when leaving edit after making any
   changes to a document. If you want to save all edit changes
   on disk, enter the letter "y" followed by return to be
   prompted for the document name. Entering the letter "n" will
   leave edit and all changes will be lost. Entering just the
   return key returns edit.

String Found

   The specified FIND STRING was found and the cursor is left at
   the beginning of the string.

String Not Found

   The document was searched from the cursor position to the end
   of the document and the FIND string was not found.

II. <u>SAVE MESSAGES</u> (In alphabetical order)

<u>Document Exists, Reuse? (y/n)</u>

> The document name specified for the save already exists. To replace the currently existing version on disk, enter "y". Otherwise enter "n" and you will be prompted to enter a new name.

<u>Document name xxxxxx? (y/n)</u>

> In this message, xxxxxx represents the name of the document you have just edited. To save the changed version under the same name, respond with "y". Note that the <u>old</u> version of the document will be replaced and no longer exist on disk. A reply of "n" will result in the message below.

<u>Document name?</u>

> Respond to this message with a valid document name for the document being saved. If you want to quit without saving, press the ESC key.

<u>Name Too Long, Shortened</u>

> Document names may not exceed 13 characters in length. A longer name will be limited to 13 characters and this message printed. This message is for information only and does not require any action.

III. FILING MESSAGES (In alphabetical order)

COMMANDS ARE: C(opy, D(elete, E(dit, P(rint, R(ename or V(iew
              Document

   This HELP message is displayed whenever an invalid command is
   typed in front of a document name on the FILE SELECTION
   DISPLAY. Each command is entered by typing only the first
   letter of the command name followed by RETURN.

Confirm delete? (y/n)

   This prompt ensures that a document is not deleted
   inadvertently. An answer of "y" results in the document being
   deleted, and an "n" aborts the delete.

DISK Not MOUNTED

   No disk was found with the name specified. Either another
   name should be specified or the desired disk inserted and the
   same disk name specified again.

Document xxxxxx DELETED

   The document xxxxxx has been deleted from disk.

Document RENAMED

   The selected document has been renamed. The cursor is placed
   in front of the new name on the selection screen.

Document xxxxxx not Found

   The document named xxxxxx was not found on the disk. This
   usually only occurs if the disk is removed after obtaining the
   File Selection display of the filing system. Insert the disk
   and try the command again.

End of Document

   The complete document has been viewed. Entering any character
   from the keyboard will return to the FILE SELECTION display.

Enter NEW Disk Name or "?"

The cursor is placed at the top of the screen over the current disk name. Another disk name may be typed to display the document names on it, or a question mark will display the names of all disks currently mounted on your computer.

NEW Name Exists

A document already exists on disk with the new name specified in a rename operation. No rename is performed.

NEW Name INVALID

The new name specified for a rename operation is not a legal document name. The name might be too long, contain invalid characters, or contain blanks. Refer to the section of this manual on NAMING OF DOCUMENTS for more information about valid names.

No Documents on Disk

No WORD/7 documents were found on the disk with the name entered. This message is followed by a list of the disks currently mounted on the computer and waits for one to be specified.

Replace xxxxxx? (y/n)

The specified destination for a document copy already exists on disk. Respond with the letter "y" to replace it or "n" to terminate the copy operation.

xxxxxxx Continued

The document named xxxxxx is continued but the computer is waiting for the current screen to be viewed before going on. Enter any character from the keyboard and the next lines will be displayed.

IV. PRINTING MESSAGES (In alphabetical order)

Continued

The document is continued but the computer is waiting for the
current screen to be viewed before going on. Enter any
character from the keyboard and the next lines will be
displayed.

Document xxxxxx NOT FOUND

An insert print command (.in) specified a document name that
could not be found. Check that the name is correctly spelled.

End of Print

The complete document has been printed. Enter any character
from the keyboard to return to the PRINT OPTIONS MENU.

Insert Disk xxxxxx

A document is being printed from a disk that is not inserted
on the system. Insert the disk with name xxxxxx and press
RETURN.

Insert Paper

The system is waiting for the next page of paper to be
inserted in the printer before continuing the print operation.
Insert the paper and type any character on the keyboard to
continue printing. Note that this message is only displayed
if you are not using continuous form computer paper (specified
in the PRINT OPTIONS MENU).

Keyword file error - Document not found

The specified file of keywords in a .KW DOT command could not
be found on disk. Correct the file name and re-print the
document.

No MEMORY to insert document

The limit of computer memory has been reached while inserting a document within another. This usually only happens while printing from edit. Leave the edit function and try printing from the filing functions where more memory is available.

Table of Contents error - Disk not mounted

The document name specified for the generated table of contents refers a disk that is not mounting. Type any character to continue printing without generating the Table of Contents.

xxxxxx Continued

The document named xxxxxx is continued but the computer is waiting for the current screen to be viewed before going on. Enter any character from the keyboard and the next lines will be displayed.

WORD/7 TERMINAL CONFIGURATION

TERMINAL model	TELEVIDEO 925/950			FREEDOM 100		
CURSOR DISPLAY attribute	27	46	50	27	46	48
CURSOR NON-DISPLAY attribute	27	46	48	27	46	50
NORMAL CRT attribute	27	71	48	27	71	48
UNDERLINE field attribute	27	71	56	27	71	56
BOLD Text VIDEO attribute	27	71	52	27	71	52
BOLD UNDERLINED attribute	27	71	58	27	71	58
ERASE to end of line	27	84		27	84	
ERASE to end of screen	27	89		27	89	
ERASE SCREEN	26			26		
GOTOXY	0			0		
Has 25th line?	Y			Y		
Char Seq to LOAD 25th line	27	102		27	102	
Char Seq to SHOW 25th line	27	103		27	103	
25th line NORMAL attribute	144			32		
25th line REVERSE attribute	148			32		

TERMINAL model	DEC VT100 (ANSI)				DEC VT52			
CURSOR DISPLAY attribute	0					0		
CURSOR NON-DISPLAY attribute	0					0		
NORMAL CRT attribute	27	91	48	109	32	0		
UNDERLINE field attribute	32	27	91	52	109	0		
BOLD Text VIDEO attribute	32	27	91	55	109	0		
BOLD UNDERLINED attribute	32	27	91	56	109	0		
ERASE to end of line	27	91	48	75		27	75	
ERASE to end of screen	27	91	48	74		27	74	
ERASE SCREEN	27	91	50	74		27	72	27 74
GOTOXY	0					0		
Has 25th line?	N					N		
Char Seq to LOAD 25th line	0					0		
Char Seq to SHOW 25th line	0					0		
25th line NORMAL attribute	0					0		
25th line REVERSE attribute	0					0		

Page 83

WORD/7 TERMINAL CONFIGURATION

```
TERMINAL model                    QUME VT102
CURSOR DISPLAY attribute          27  46  50
CURSOR NON-DISPLAY attribute      27  46  48
NORMAL CRT attribute              27  71  48
UNDERLINE field attribute         27  71  56
BOLD Text VIDEO attribute         27  71  52
BOLD UNDERLINED attribute         27  71  58
ERASE to end of line              27  84
ERASE to end of screen            27  89
ERASE SCREEN                      26
GOTOXY                            0
Has 25th line?                    N
Char Seq to LOAD 25th line        0
Char Seq to SHOW 25th line        0
25th line NORMAL attribute        0
25th line REVERSE attribute       0
```

```
TERMINAL model                    LEAR SIGLER ADM22
CURSOR DISPLAY attribute          0
CURSOR NON-DISPLAY attribute      0
NORMAL CRT attribute              27 91 48 109   32
UNDERLINE field attribute         32 27 91   52 109
BOLD Text VIDEO attribute         32 27 91   55 109
BOLD UNDERLINED attribute         32 27 91   56 109
ERASE to end of line              27 91 48  75
ERASE to end of screen            27 91 48  74
ERASE SCREEN                      27 91 50  74
GOTOXY                            0
Has 25th line?                    N
Char Seq to LOAD 25th line        0
Char Seq to SHOW 25th line        0
25th line NORMAL attribute        0
25th line REVERSE attribute       0
```

SUGGESTED EDIT COMMAND KEY ASSIGNMENTS

TERMINAL model	TELEVIDEO 925/950	FREEDOM 100
COMMAND	KEY(S)	KEY(S)
CURSOR Right	RIGHT ARROW	RIGHT ARROW
CURSOR Left	LEFT ARROW	LEFT ARROW
CURSOR Up	UP ARROW	UP ARROW
CURSOR Down	DOWN ARROW	DOWN ARROW
SCROLL Up	F9	F9
SCROLL Down	F10	F10
HOME	HOME	HOME
TAB	TAB	TAB
BACK TAB	BACK TAB	BACK TAB
DELETE Char	CHAR DELETE	CHAR DEL
INSERT Char Mode	CHAR INSERT	CHAR INS
END Char Insert Mode	DEL	DEL
DELETE to End of Line	LINE ERASE	CLR EOL
FIND Char String	F5	F5
REPLACE Char String	F6	F6
NEXT word	CTRL/n	CTRL/n
PREVIOUS word	CTRL/p	CTRL/p
NEXT margin	ESC n	ESC n
PREVIOUS margin	ESC p	ESC p
DELETE Line	LINE DELETE	LINE DEL
UNDELETE line	CTRL/u	CTRL/u
INSERT Line	LINE INSERT	LINE INS
LEFT JUSTIFY line	F1	F1
CENTER line	F2	F2
RIGHT JUSTIFY Line	F3	F3
SPLIT line	F4	F4
BLOCK line commands	F7	F7
LEFT JUSTIFY Paragraph	F1 (shifted)	F1 (shifted)
CENTER Paragraph	F2 (shifted)	F2 (shifted)
RIGHT JUSTIFY Paragraph	F3 (shifted)	F3 (shifted)
SPLIT Paragraph	F4 (shifted)	F4 (shifted)
FORMAT Paragraph	F8 (shifted)	F8 (shifted)
DOWN Paragraph	F9 (shifted)	F9 (shifted)
UP Paragraph	F10 (shifted)	F10 (shifted)

Command to QUIT edit	ESC ESC	ESC ESC
Maximum number of edit lines	430	430
FUNCTION Key Description =		

LEFT CENTER RIGHT SPLIT FIND REPL BLOCK FORMAT DOWN UP

SUGGESTED EDIT COMMAND KEY ASSIGNMENTS

TERMINAL model	DEC VT100 & VT52	QUME VT102
COMMAND	KEY(S)	KEY(S)
CURSOR Right	RIGHT ARROW	RIGHT ARROW
CURSOR Left	LEFT ARROW	LEFT ARROW
CURSOR Up	UP ARROW	UP ARROW
CURSOR Down	DOWN ARROW	DOWN ARROW
SCROLL Up	ESC 9	~~ESC 9~~ *ESC '*
SCROLL Down	ESC 0	~~ESC 0~~ *ESC b*
HOME	EDIT	HOME
TAB	TAB	TAB
BACK TAB	ESC TAB	BACK TAB *(TAB SHIFTED)*
DELETE Char	PF1	~~PF1~~ *PF2*
INSERT Char Mode	PF2	~~PF2~~ *PF1*
END Char Insert Mode	DELETE	DEL
DELETE to End of Line	ESC 1	PF4 (shifted)
FIND Char String	ESC 5	ESC 5
REPLACE Char String	ESC 6	ESC 6
NEXT word	CTRL/n	CTRL/n
PREVIOUS word	CTRL/p	CTRL/p
Delete word		*CTRL/d*
NEXT margin	ESC n	ESC n
PREVIOUS margin	ESC p	ESC p
DELETE Line	PF4	PF4
UNDELETE line	CTRL/u	CTRL/u
INSERT Line	PF3	PF3
LEFT JUSTIFY line	ESC 1	ESC 1
CENTER line	ESC 2	ESC 2
RIGHT JUSTIFY Line	ESC 3	ESC 3
SPLIT line	ESC 4	~~ESC 4~~ *ESC s*
BLOCK line commands	ESC 7	ESC 7 *ESC j (join line)*
LEFT JUSTIFY Paragraph	ESC . 1	~~ESC . 1~~ *ESC l*
CENTER Paragraph	ESC . 2	~~ESC . 2~~ *ESC c*
RIGHT JUSTIFY Paragraph	ESC . 3	~~ESC . 3~~ *ESC r*
SPLIT Paragraph	ESC . 4	~~ESC . 4~~ *ESC 4*
FORMAT Paragraph	ESC . 8	~~ESC . 8~~ *ESC 8*
DOWN Paragraph	ESC . 9	~~ESC . 9~~ *ESC 9*
UP Paragraph	ESC . 0	~~ESC . 0~~ *ESC 0*
Command to QUIT edit	ESC ESC	ESC ESC
~~Maximum number of edit lines~~	~~430~~	~~430~~
FUNCTION Key Description	blanks	blanks *(nc)*

BEGINNING of Document   *CTRL/b*
END of Document   *CTRL/e*

JOIN 2 LINES   *ESC j*

SUGGESTED WORD/7 PRINTER CONFIGURATIONS

PRINTER Type	OKIDATA ML84, 92
KEYWORD Start char	&
Carriage RETURN on Line Print	Y
PRINTER Init Chars	27 48 30 27 54 {DP, 10-CPI, 6-LPI}
PRINTER Start UNDERLINE Chars	27 67
PRINTER End UNDERLINE Chars	27 68
PRINTER Start BOLD Chars	0
PRINTER End BOLD Chars	0
PRINTER Start NEW PITCH Chars	29 27 56 {12-CPI, 8-LPI}
PRINTER End NEW PITCH Chars	30 27 54 {10-CPI, 6-LPI}
PRINTER Set Form Length Chars	27 70 35 35
PRINTER device name	
SPECIAL Char seq 1	27 74 {SUPERSCRIPT}
SPECIAL Char seq 2	27 76 {SUBSCRIPT}
SPECIAL Char seq 3	27 49 {CORRESP QUALITY}

PRINTER Type	C.Itoh Starwriter F10
	NOTE: Operate in SERIAL MODE.
KEYWORD Start char	&
Carriage RETURN on Line Print	Y
PRINTER Init Chars	27 31 12 {10-CPI}
PRINTER Start UNDERLINE Chars	0
PRINTER End UNDERLINE Chars	0
PRINTER Start BOLD Chars	0
PRINTER End BOLD Chars	0
PRINTER Start NEW PITCH Chars	27 31 10 {12-CPI}
PRINTER End NEW PITCH Chars	27 31 12 {10-CPI}
PRINTER Set Form Length Chars	27 70 35 35
PRINTER device name	
SPECIAL Char seq 1	27 30 4 27 10 {SUPERSCRIPT}
SPECIAL Char seq 2	27 30 4 10 {SUBSCRIPT}
SPECIAL Char seq 3	27 30 8 {RETURN TO 6-LPI}

```
NOTE:   CPI = Characters per inch, horizontal pitch
        LPI = Lines per inch, vertical pitch
        DP  = Data processing print mode
```

SUGGESTED WORD/7 PRINTER CONFIGURATIONS

PRINTER Type   GEMINI 10 Dot Matrix
KEYWORD Start char   &
Carriage RETURN on Line Print   Y
PRINTER Init Chars   27 48 30 27 54   {DP, 10-CPI, 6-LPI}
PRINTER Start UNDERLINE Chars   27 67
PRINTER End   UNDERLINE Chars   27 68
PRINTER Start BOLD Chars   0
PRINTER End   BOLD Chars   0
PRINTER Start NEW PITCH Chars   29 27 56   {12-CPI, 8-LPI}
PRINTER End   NEW PITCH Chars   30 27 54   {10-CPI, 6-LPI}
PRINTER Set Form Length Chars   27 70 35 35
PRINTER device name
SPECIAL Char seq 1   27 74   {SUPERSCRIPT}
SPECIAL Char seq 2   27 76   {SUBSCRIPT}
SPECIAL Char seq 3   27 49   {CORRESP QUALITY}

PRINTER Type   EPSON MX-80
KEYWORD Start char   &
Carriage RETURN on Line Print   Y
PRINTER Init Chars   27 50 18   {6-LPI, Normal}
PRINTER Start UNDERLINE Chars   0
PRINTER End   UNDERLINE Chars   0
PRINTER Start BOLD Chars   27 71
PRINTER End   BOLD Chars   27 72
PRINTER Start NEW PITCH Chars   15   {Compressed}
PRINTER End   NEW PITCH Chars   18   {Normal   }
PRINTER Set Form Length Chars   27 67 35
PRINTER device name

NOTE: CPI = Characters per inch, horizontal pitch
        LPI = Lines per inch, vertical pitch
        DP = Data processing print mode

WORD7 Word Processing Program
User Manual Addendum

1. The functions of left justifying, centering and right justifying lines
(function keys F2, F3, and F4) while editing a document have been improved
to be more flexible. Function key 2 now enters "Adjust Mode" where the
current line may be shifted left or right by pressing the left or right
cursor keys repeatedly. The line shifts one column each time a key is
pressed. Once a line is "adjusted" to the proper column, Adjust Mode is
ended by pressing the Accept key (F1), the adjust mode key (F2) again, or
pressing ESC twice.

   Adjusting several lines is very easy. The first line is adjusted to the
desired column as explained above and then the down cursor key used to
automatically adjust each succeeding line.

   Another option within "adjust mode" is to type one of the letters "L, C, or
R" to left justify, center or right justify lines respectively.

2. Another new editing function is called "Kolumn Mode" and is similar to
Adjust Mode, but works only on the portion of the line from the cursor
position to the right. Kolumn Mode can be used to shift part of a line to
the right (which inserts spaces at the cursor position) or to the left
(characters are removed at the cursor position). This mode is particularly
useful for editing documents which contain columns of numbers where it is
desired to shift the whole column to the left or right.

   Kolumn Mode is started by positioning the cursor to the desired column and
pressing the F3 key. The right and left cursor keys will shift the right
part of the line to the right or left just as they do in Adjust Mode above.
the up and down arrows may be used to move up and down and shift several
lines. The Accept key (F1), the Kolumn Mode key (F3), or the ESC key may be
used to end Kolumn Mode.

3. Along with the two new modes for the F2 and F3 keys, the "split line"
command has been reassigned to the F4 key to be much more convenient. The
"join lines" command is reassigned to the shifted F4 key on keyboards that
can used function keys in conjunction with the shift key.

4. A new option on the Print Options screen allows you to be prompted at each
page of a document and to either print the page or skip it.

5. The Document Selection Screen now gives the time that a file was last
updated as well as the date.