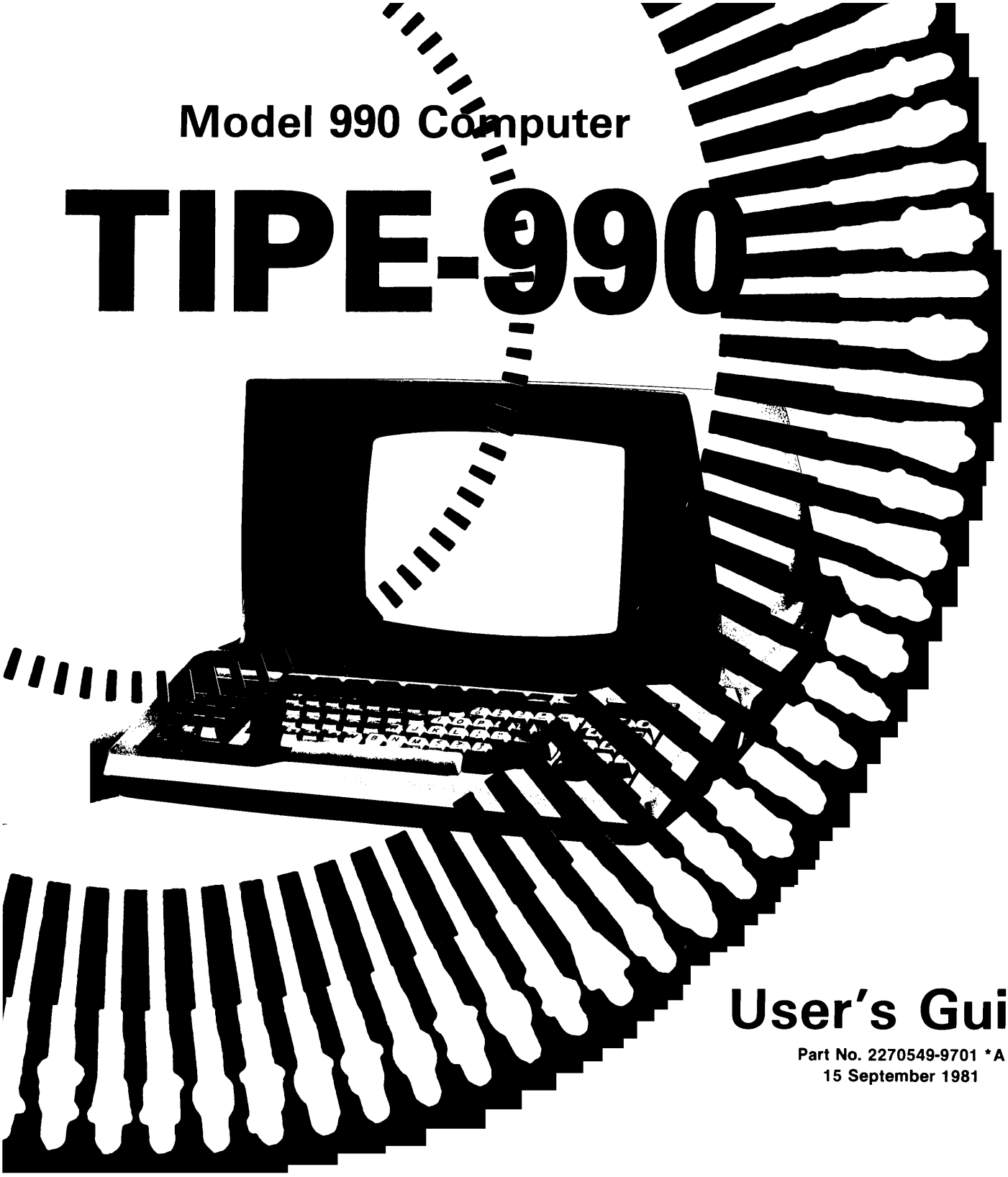
Model 990 Computer

TIPE-990



User's Guide

Part No. 2270549-9701 *A
15 September 1981

TEXAS INSTRUMENTS

INCORPORATED

LIST OF EFFECTIVE PAGES

INSERT LATEST CHANGED PAGES AND DISCARD SUPERSEDED PAGES

Note: The changes in the text are indicated by a change number at the bottom of the page and a vertical bar in the outer margin of the changed page. A change number at the bottom of the page but no change bar indicates either a deletion or a page layout change.

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PAGE NO.	CHANGE NO.	PAGE NO.	CHANGE NO.	PAGE NO.	CHANGE NO.
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iii - v	1	5-1 - 5-23	0		
vi	0	6-1 - 6-7	0		
vii - ix	1	A-1 - A-10	0		
x	0	B-1 - B-7	1		
1-1 - 1-4	0	C-1 - C-14	0		
1-5 - 1-6	1	D-1 - D-10	1		
1-7 - 1-10	0	Index-1 - Index-10	1		
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Preface

This manual is intended to provide the reader with an introduction to the Texas Instruments Page Editor (TIPE) and the operation of that package with the Model 990 Computer. TIPE-990 includes several word processing features and these features are described in detail in a self-teaching format for the inexperienced user. Each of the functions of TIPE are described and then presented to the user in exercises and procedures that teach the operation of the package.

Section 1 provides an introduction to TIPE-990 and its basic operations, and lists the major features of the package. Section 1 also contains an introduction to the equipment that comprises TIPE-990. Document creation, the process of creating or typing the initial copy of a document, is described in Section 2. The steps to be followed to print a document and the instructions that can be used to change the appearance of the document during printing are described in Section 3. Section 4 details text editing functions of TIPE-990 and provides exercises to text edit documents created in Section 2. Form letter requirements, including exercises for creation and printing of form letters, are described in Section 5. Section 6 includes a description of TIPE-990 formatting codes and methods of document assembly that can be used for special applications.

Appendix A is a condensed operating summary and includes a detailed description of each of the function keys and formatting codes. A list of DX10 operating system commands that can be used in conjunction with TIPE-990 are detailed in Appendix B. Appendix C lists all the messages that are displayed during TIPE-990 operations, including a description of each message and any operator activity that is required to recover from an error condition. A list of DNOS operating system commands that can be used in conjunction with TIPE-990 are detailed in Appendix D.

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Introduction

1.1 GENERAL INFORMATION

The TIPE-990 (Texas Instruments Page Editor, referred to as TIPE in this manual) package provides word processing features for the creating, filing, printing, and editing of memos, reports, and letters, including form letters. TIPE operations can be performed at any desired Model 911 Video Display Terminal.

TIPE is a combination of programs (software) and devices (hardware) designed to operate as part of the Texas Instruments DS990 Computer family. TIPE is designed to include the primary features required to efficiently produce letters and documents while maintaining ease of operation and minimal training requirements. Documents can be printed by an optional letter quality printer (called the LQ45), or by the Model 810 matrix printer. The purpose of this User's Guide is to acquaint the user with all TIPE features, and to provide exercises that help teach the operation of the package.

This section of the manual includes a description of the equipment, an exercise introducing some of the word processing features of the package, a list of terms used in the manual, and a look at the content of the other sections.

1.2 EQUIPMENT

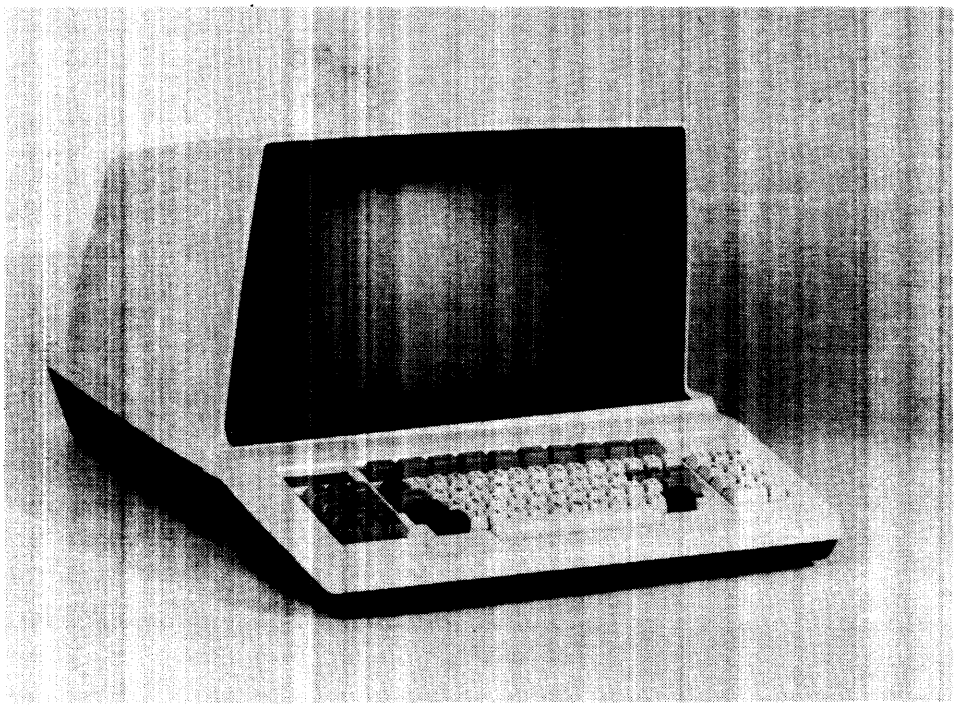
The equipment required to perform page editing and printing operations includes the following: *Model 911 Video Display Terminal and Keyboard *Model 810 Matrix Printer, and/or the *Model LQ45 Letter Quality Printer

These devices are described in the following paragraphs, in the context of how they operate when used for creating, editing and

printing applications.

1.2.1 911 Video Display Terminal (VDT) and Keyboard.

The 911 VDT includes the display screen for the display of TIPE menus and messages that direct the operator in the creation, filing, editing and printing of documents. The display screen has a screen capacity of 24 lines; 22 lines of text and two lines for display of the "ruler" and for messages. The ruler is a line at the bottom of the screen that shows the current margin and tab settings. Figure 1-1 is an illustration of the 911 VDT and keyboard.



(A)143715

Figure 1-1. 911 Video Display Terminal and Keyboard

The keyboard contains most of the controls for operation of the page editing functions (see Figure 1-2). The keyboard consists of four groupings of keys. The alphanumeric keys are located in the center of the keyboard. The cursor movement and control keys are located at the left, the function keys are the top row, and the numeric keypad is at the right. The color of the keys is

important in that it helps the operator differentiate between normal alphanumeric keys and keys that perform or initiate specific functions. The TIPE package includes stick-on key legends for individual keys and two strips of key names that are to be placed on the keyboard above the cursor movement keys and below the function keys. Whenever specific keys are referenced, they are called by the function (e.g., NEXT PAGE, SELECT BLOCK rather than F1, F3) or by the letter designation on the key. Some of the alphanumeric keys are used in combination with other keys to enter codes that format the text. Appendix A describes all the keys on the keyboard, and how they are used during TIPE operations. It is not necessary to memorize the functions of the keys at this point; it is more important to become familiar with the keys by using them in performing TIPE operations.

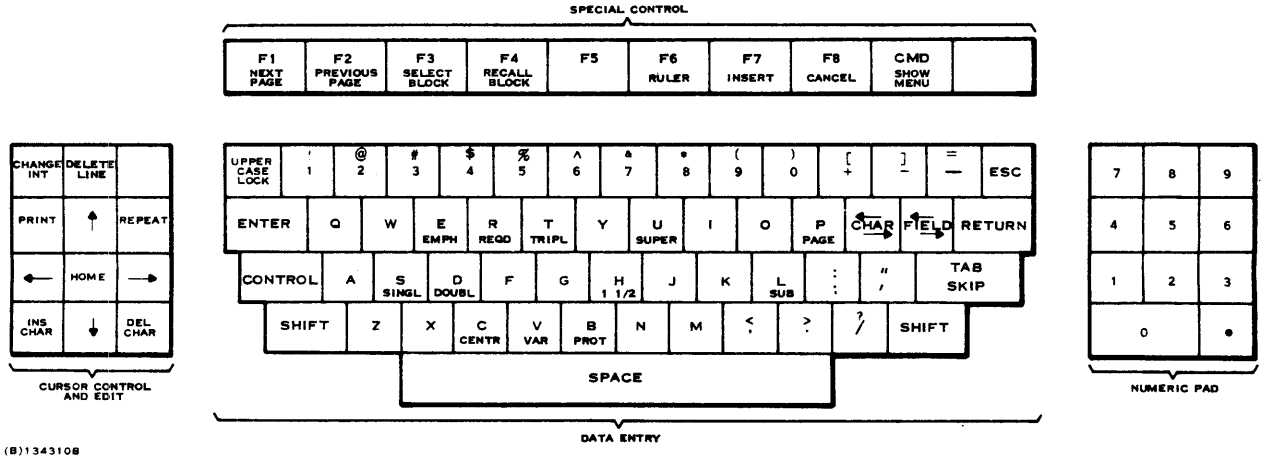


Figure 1-2. TIPE Keyboard

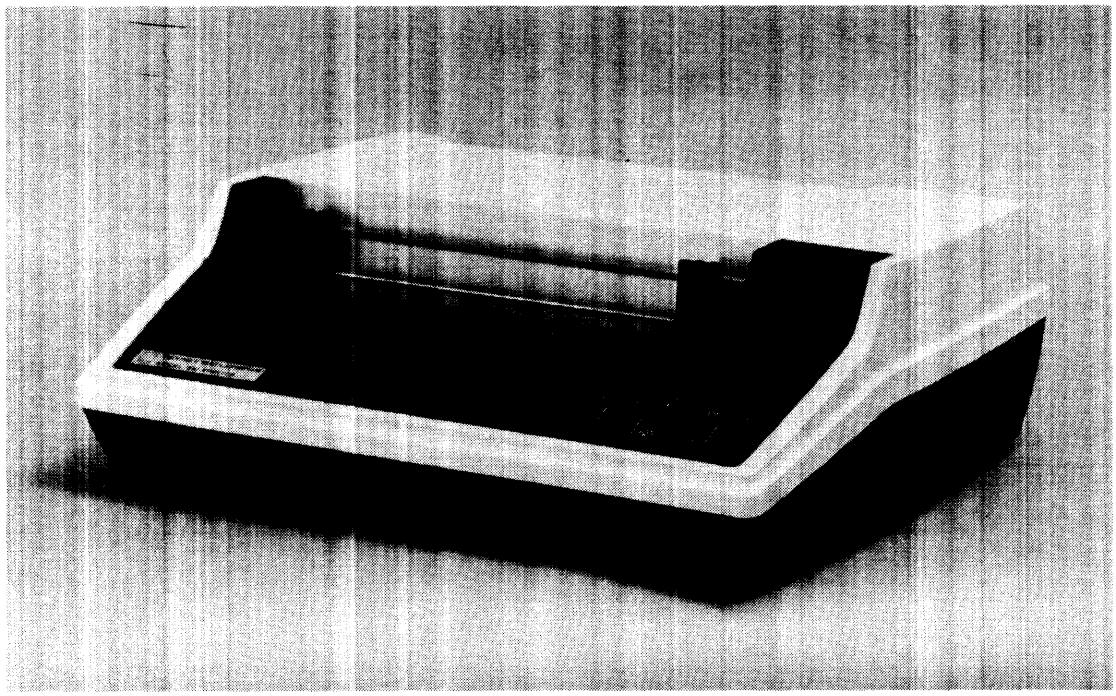
1.2.2 The 810 and LQ45 Printers

TIPE can use either a matrix printer or a letter quality printer for the printing of documents. The Model 810 Matrix Printer (the characters are formed by dots) prints at speeds up to 150 characters per second (cps). The LQ45 printer is a letter quality printer that uses a printwheel for character generation. The LQ45 prints at speeds up to 45 cps and produces a printed page well suited for business letters and formal reports.

If both the 810 and the LQ45 are available, the 810 printer, because of the speed of printing, would normally be used for the first printing of the document. Then the document can be proofread and any typographical errors can be corrected before printing the final version of the document.

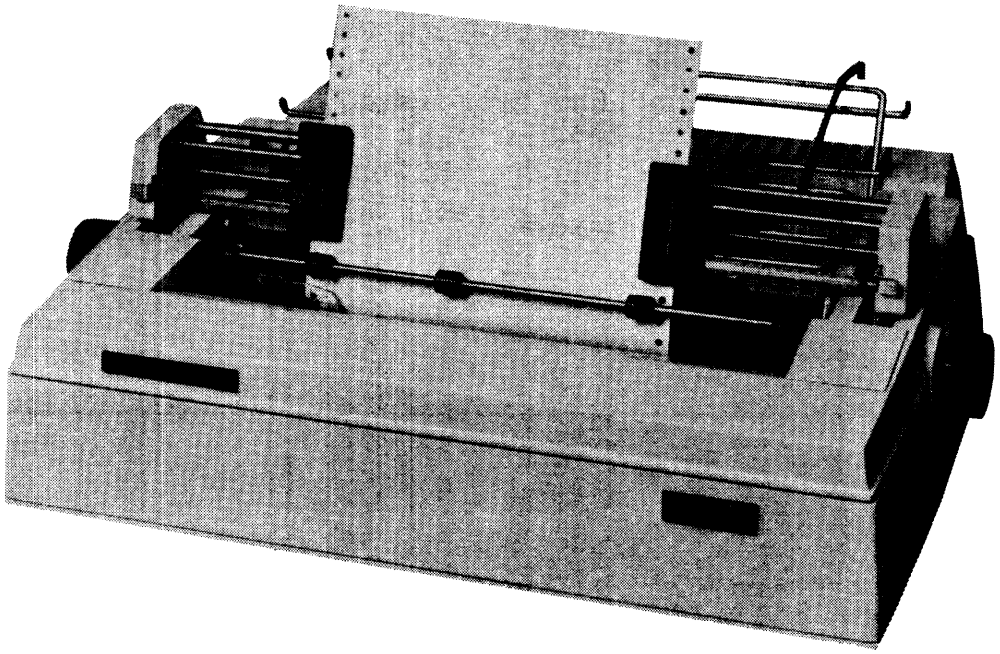
The Model 810 Matrix Printer is shown in Figure 1-3. The LQ45 Letter Quality Printer is shown in Figure 1-4.

The specific procedures for preparing a printer for operation are included in a manual that is supplied with each printer. Refer to the appropriate manual for the procedure to change a ribbon, insert paper, change a printwheel, or other procedures.



(A)143714

Figure 1-3. Model 810 Matrix Printer



(A)143716

Figure 1-4. LQ45 Letter Quality Printer

1.3 GETTING STARTED

One of the ways that an operator can learn something is by reading about it, another way to learn something is to do it. This manual contains both reference material and practical exercises, but it is not necessary to read all the reference material before attempting the exercise procedures. The following exercise, called "Getting Started", is an example of the type of exercises and procedures that are contained in other sections of this manual. The text in the getting started exercise is the material that is keyed (typed) when performing the "Getting Started" procedure in Table 1-1. Table 1-2 lists the steps to follow to print the first exercise.

1.3.1 Naming The Document.

Each document must be stored in a "directory". This directory can be one that already exists. If preferred, a special directory can be established for TIPE documents. A "synonym" can be assigned to the directory. This synonym can be used when creating documents. The name given to the document is the name used to identify and store that document when it is filed.

Filing is the process of transferring the document from the display screen where it is created to a computer system storage device. The first part of the file name is the synonym that represents the name of the directory. The last part of the file name, which is separated from the synonym by a period, is the part of the name that is unique for each document. Several documents may have the same synonym. A file name can include up to eight characters after the period.

GETTING STARTED EXERCISE 1

MEMO

TO: WHOM IT MAY CONCERN

This memo was created by our new TIPE-990, the Texas Instruments Page Editor, and me! I was reading the manual, just following directions and the manual told me to create this document. This is called getting started. After I typed this memo, I filed it by pressing the SHOW MENU key, then keying F and pressing RETURN. Then I printed it, all before I had read more than a few pages. I followed all the directions and here it is. This is just a small example of some of the things that I will be learning as I read the rest of this manual.

Yours Truly,

(Type your name here)

Table 1-1 is a step by step procedure that should be followed to type and file the Getting Started memo in the box.

Table 1-1 Getting Started Procedure

STEP	PROCEDURE
1.	The 911 VDT should be turned on and displaying the operating system menu (the menu displayed can vary depending on site requirements). Key TIPE and press RETURN. Another menu, the TIPE-990 menu, is displayed.
2.	Key C and press RETURN. A message is displayed asking for the document file name.
3.	Key the file name of the document this way: Key the

assigned synonym (the prefix), a period (.), then EX1 (for Exercise 1) and press RETURN. The following is displayed: LINES PER PAGE = 55

4. For this exercise, 55 lines per page is acceptable, so press RETURN. The screen changes to the text entry format, and a highlighted rectangle called the cursor is displayed on line 1, column 1.

5. Press the RETURN key four times to create blank lines at the top of the memo. The symbols on the screen are the graphic characters that represent a return.

6. Key the word MEMO and press RETURN. The graphic symbol after the word memo means that a return has been entered at that point. The symbol is not part of the text, so it is not printed when the document is printed.

7. Press RETURN again to add a blank line.

8. Key "TO: WHOM IT MAY CONCERN" and press RETURN. Press RETURN again to add a blank line.

9. Now start keying the text for the memo, as you would when using a regular typewriter. If the text being keyed is all capital letters (when it shouldn't be), release the UPPER CASE LOCK key and use the Left Arrow key to backspace the cursor and start again. Errors can be corrected by typing the new character over the old character. If a message stating "Type text to be inserted, and finish by pressing INSERT" is displayed, continue to key text to correct the error, and press the INSERT key when the corrections are complete. You do not have to press RETURN at the end of each line, just continue typing. You must press RETURN to end partial lines.

10. After keying the last sentence of the memo, press RETURN twice, key "Yours Truly", and press RETURN. Press RETURN again to add a blank line, and then key your name and press RETURN to end the memo.

11. Press the SHOW MENU (CMD) key. The TIPE-990 menu is displayed, along with a message showing the name of the document being created.

12. Key F to file the document and press RETURN. The following message is displayed:

```
FILE DOCUMENT
SAVE DOCUMENT IN FILE NAME: (syn).EX1
```

13. The file name is correct so press RETURN. The document is filed and the TIPE-990 menu is redisplayed.

14. At this point, because there is nothing else to create or edit, key Q and press RETURN to quit TIPE document creation/editing operations.

15. The next thing to do is print the memo; perform the procedure in Table 1-2.

Table 1-2 Getting Started Printing Procedure

STEP	PROCEDURE
1.	Make sure that the printer designated as LP01 is ready. Key TIPP and press RETURN. The TIPE-990 Print Document menu is displayed.
2.	The file to be printed is the one that was created in the previous procedure. That name (syn).EX1, is displayed if you are doing this right after Table 1-1. Press RETURN to go to the next request. Press RETURN two more times to move to the end of the menu. These requests are explained in detail in Section 3.
3.	The memo is printed on the line printer designated as LP01. While it is being printed a "Print In Progress" message is displayed on the screen. When the message disappears and the operating system menu is redisplayed the print operation is complete; check the printer for the memo.

1.4 TIPE FEATURES

The features of TIPE provide the user with the capability of performing a wide variety of page editing operations. The following descriptions introduce some of the features of the system. Other sections of the manual provide additional

information about each of these features.

WORDWRAP/AUTOMATIC RETURN

Whenever the right margin is reached, the cursor and any unfinished word move to the next line automatically. Manual returns (with the RETURN key) are required only to mark the end of a partial line, the end of a paragraph, or to add blank lines.

FOREGROUND OR BACKGROUND PRINTING

The user can specify either foreground or background printing. Foreground printing allows the user to halt the print operation before completion to insert more paper, change a printwheel, etc. Background printing allows other activity (e.g., creation, editing) to be performed at the terminal, while documents are being printed at the same time.

SHARED/MULTIPLE PRINTERS

Several operators using the TIPE package can share the same printer; only one print operation is allowed for each printer, but several users can have access to the printer(s). Additional printers can be connected to TIPE, and the operator can specify which printer to use for an operation.

FORM LETTER PRINTING

TIPE includes the capability of merging variable data with the body of a letter to produce form letters automatically. Each letter then has the appearance of being a hand-typed original, since it is "tailored" for each recipient. The variables can also be used for documents where portions of those documents contain variable information.

FREE MOVING CURSOR

The cursor control keys allow the cursor to be moved to any point within a document very quickly and with a minimum of key presses.

TEXT SCROLLING

Function and cursor control keys are provided that scroll the text both horizontally and vertically, a character or a line at a time, or in large blocks. The user can quickly display either the beginning or the end of the document by using cursor control keys in combination with each other.

AUTOMATIC PAGINATION AND REPAGINATION

During the creation of a document TIPE automatically paginates the text into the desired number of lines per

page. A symbol is displayed on the screen to denote the start of the second and subsequent pages. Repagination, the restructuring of the document into pages of a specified length, occurs automatically during printing.

INSERT/DELETE FUNCTIONS

The user has complete control over the insert and delete functions. Items as small as one character or as large as an entire document can be inserted and/or deleted.

MOVE OPERATIONS

Move operations are used to relocate a specified block of text from one position to another. The user can specify a block as small as a character or as large as the entire document for the move operation.

RECALL OPERATIONS

The recall operation is used to recall either a moved block, a copied (stored) block, or any other named document from storage into another document. This activity occurs on the display screen under control of the user.

BLOCK STORE OPERATIONS

A block store operation is used to make a copy of a specified block of material and transfer the copy to storage. The stored block can be recalled into the displayed document or any other document.

DOCUMENT ASSEMBLY

Document assembly is the process of creating a document by recalling stored blocks of text to create letters, reports, etc.

STORED FORMATS

Each time a document is printed, the instructions that are used to format the printed page are stored with that document. The next time the document is printed, the instructions (parameters) do not require reentry unless the format is to be changed.

1.5 TIPE OPERATIONS

This manual is divided into sections, each section representing an operation or a specific function that is available to the operator. There are also appendices at the back of the manual with condensed operating procedures and operating system related information. The sections of this manual are as follows:

* Section 2 - Document Creation
* Section 3 - Printing
* Section 4 - Text Editing
* Section 5 - Form Letters
* Section 6 - Special Applications
* Appendix A - Quick Reference Summary
* Appendix B - DX10 Operating System Considerations
* Appendix C - Messages
* Appendix D - DNOS Operating System Considerations

1.5.1 Document Creation

The document creation section describes the basic features used to key text at the keyboard and includes some of the formatting codes that can be used. Exercises and step by step procedures that both explain and teach TIPE operations are included.

1.5.2 Printing

The printing of a document, either to a file or by the printer is described in Section 3. The instructions related to the printing of a document, and how these instructions can be used to format the printed page in different ways are described. The various print menus and exercise procedures reinforce the reference material with practical experience.

1.5.3 Text Editing

Text editing, the process of revising a document, uses some of the powerful functions of TIPE. This section describes the functions that delete, move, store, and recall blocks of text. The insert function is also described. Exercises and procedures, revising the same documents created in Section 2, guide the user through some extensive text editing operations.

1.5.4 Form Letters

The form letters section is devoted exclusively to the activity required to create and print form letters. Several examples and exercises illustrate and explain what the user has to do before

form letters can be printed.

1.5.5 Special Applications

The special applications section, like the form letters section, describes features and functions that are not confined to just creating a document, printing a document, or text editing a document. Special codes that affect the format of the printed document, and a technique for performing document assembly operations are described in this section.

1.5.6 Quick Reference Summary

Appendix A is a summary of the operating procedures and includes a detailed description of the keyboard and the functions enabled by each key. The operating procedures condense the information in the various sections of the manual into a quick reference guide.

1.5.7 DX10 Operating System Considerations

Appendix B consists of items related to the DX10 operating system. Some of these operating system considerations are not necessary during normal TIPE operations, but there are instances when this information may be needed. The appendix contains a summary of operating system commands that may be useful to the TIPE user.

1.5.8 Messages

Appendix C is a listing of the messages that can be displayed during TIPE operations. Some of the messages help the user by telling what to do next; other messages are displayed when an error occurs. Appendix C lists the messages, and where necessary, describes the user activity required to recover from an error condition.

1.5.9 DNOS Operating System Considerations

Appendix D consists of items related to the DNOS operating system. Some of these operating system considerations are not necessary during normal TIPE operations, but there are instances when this information may be needed. The appendix contains a summary of operating system commands that may be useful to the TIPE user.

2

Document Creation

2.1 GENERAL INFORMATION

TIPE includes a software program that allows the Model 911 Video Display Terminal (display screen and keyboard) to function as a sophisticated word processing station for the creation and editing of letters and documents. This section describes the naming of documents, what is involved in the creating of a document, the screen format, set-up/formatting functions, and exercises in the creation of documents.

After initiating the TIPE operation, by keying TIPE and pressing RETURN, a menu is displayed and the operator can specify the type of operation to be performed. All commands are entered by keying the desired character or characters on the keyboard and using the RETURN key to start the operation. TIPE includes many features that can be used to create documents. Some of these features are similar to standard typewriter features, and others provide a creation flexibility that is not possible with a typewriter.

2.2 DOCUMENT NAMES

Certain considerations, related to the operating system, are necessary for proper operation of the page editor. Before a document can be created, an organized method of naming documents must be established. Generally, it is the responsibility of personnel at the site that are familiar with the computer to prepare the system for the use of TIPE. This preparation involves little more than entering directory names and synonyms for those names. A synonym is an abbreviation of a string of characters used to identify a file. A file can be a letter, a report, or any other data stored on the computer system; however, the kinds of files that TIPE works with are primarily letters and reports. The use of a synonym for part of the document name makes it easier and quicker for the operator to enter and remember document names. A suggestion to make it easier to remember synonyms is to use the operators' initials as the synonym for their directories.

The following are some examples of synonyms and document names.

JHT.MEMO1	LBT.REPORT
JHT.REPORT	LBT.NOTES
ALW.MEMO1	JKL.BUDGET
ALW.LETTER	JKL.MEMO
ALW.STATUS1	JKL.SCHEDULE

Each of the synonyms (set of initials) represents a separate directory that is set up exclusively for that operator. It is not a requirement that synonyms be three letters, in fact a synonym may be only one letter if desired.

2.3 WHAT IS INVOLVED IN CREATING A DOCUMENT?

After keying TIPE and pressing RETURN, a menu of the available operations and a message are displayed. The message tells the user what to do to initiate any of the operations. If a command is entered out of the required sequence, another message is displayed on the last line of the screen. The messages are often self-explanatory but if a more detailed description is desired, refer to Appendix C of this manual. The SHOW MENU (CMD) key on the top row of the keyboard can be used during any of the create document operations to redisplay the TIPE-990 menu.

```
TIPE-990 Document Creation & Editing Program

     C - Create a new TIPE-990 document
     E - Edit an existing TIPE-990 document
     F - File away the document now being created/edited
     D - Disregard changes made since last "C" or "E"
     Q - Quit using the creation/editing program

Type one of the letters listed above and press RETURN:
```

Figure 2-1. TIPE-990 Creation and Editing Operations Menu

Each letter on the menu represents a command or operation to the program. The Create operation is represented by the letter C. A create operation is selected to create a document that does not

presently exist. The E key is pressed to either edit or to look at an existing document. After a document is created or after changes have been completed during an edit, the F key is pressed to file the new or revised document. The D key can be used to either delete the newly created document before it is filed, or to disregard the changes (if any) made during the edit operation. For example, the D key would be used after using the E key to simply look at a document. The Q key is used to quit the create/edit operation and causes the system to redisplay the normal operating system menu.

Immediately after keying C and pressing RETURN, the system requests the name of the document and the number of lines per page. The name is a combination of the synonym (abbreviation) and a unique suffix. For example, DOC.REP1 could represent a document named report 1, and DOC.REP2 could be report 2. The period is important because it serves as the separator between the synonym (representing the directory name) and the name of the document. The name can include up to eight characters after the period, and it must start with an alphabetic character. The number of lines per page is 55 unless that number is replaced with something else. When the system displays a default value (like 55 lines per page), the default value is automatically specified when the RETURN key is pressed. When both the name and lines per page are keyed and/or accepted, the display screen changes to the text entry format (see Figure 2-2).

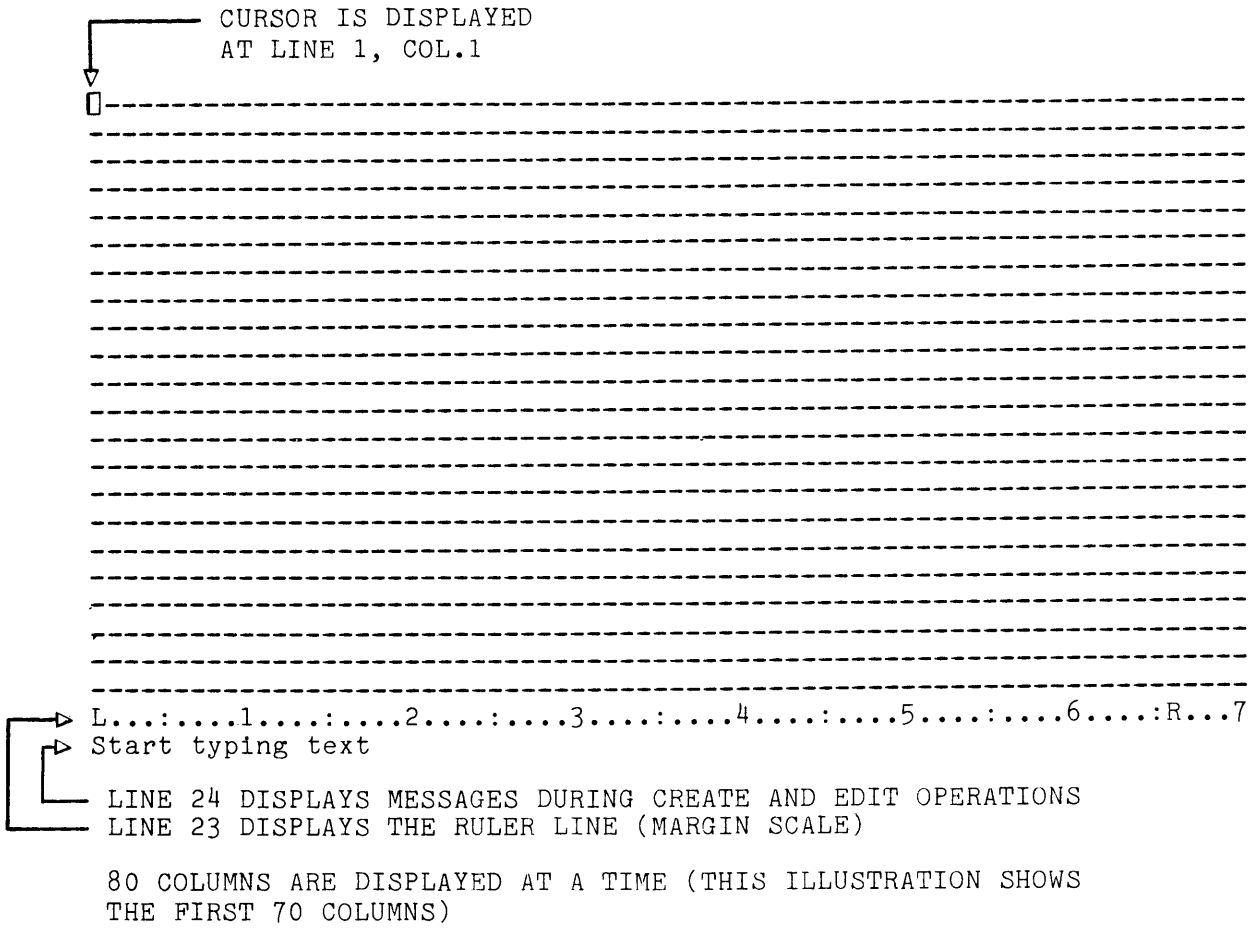


Figure 2-2. Text Entry Display Screen, 70 Character positions

2.4 CREATE DOCUMENT DISPLAY SCREEN FORMAT

The display screen of the 911 VDT includes 24 lines and allows the display of 22 lines of text (each line can include up to 140 characters). Lines 23 and 24 of the screen are used to display the ruler line (margin scale) and messages, respectively. The dashes on the display screen represent character positions. These dashes are called fill characters. When a character or space is keyed, it takes the place of a fill character. Fill characters allow the user to look at a line and know which positions are occupied by spaces. Spaces are considered part of

the text, while fill characters are not.

2.4.1 Ruler Line.

The ruler line (see Figure 2-3) is used to display the current left and right margin settings and any tab settings that are in effect. The existing left and right margin settings are designated by L and R, respectively. The ruler line displays the first 80 character positions. The Right Arrow key can be used to display the ruler line beyond the 80th character position (up to character position 140). The numbers on the ruler line aid in determining the position of the cursor when setting margins or tabs. Number 1 on the ruler line represents position 10, number 2 represents position 20, and so on until position 100, which is represented by 0, then 1 again which represents 110, 2 representing 120, etc.

Any tab settings that are in effect are displayed as either a T (regular tab) or a D (decimal tab) on the ruler line.

2.4.2 Adjust or Fixed Mode.

There are two modes which may be used during the creation of documents, Adjust and Fixed mode. The mode of operation is designated by the MODE:A (or F) display at the lower right corner of the display screen. The operator can specify the desired mode by keying A for Adjust or F for Fixed and pressing the RETURN key.

Adjust mode is used most often because it incorporates the automatic word wrap feature of TIPE. Automatic word wrap eliminates the need to press the RETURN key after each line of text. When typing in Adjust mode, and a character (not a space) is keyed at the right margin setting, the unfinished word and the cursor automatically wrap to the next line. The only time that the RETURN key is pressed is to denote the end of a paragraph, to end partial lines, or to create additional white space between lines. A RETURN must be keyed at the end of the last line in a paragraph, and at the end of the last line in a document.

Fixed mode is used when entering numbers in columns or when entering text that for some reason should be right justified within a column. Fixed mode operations do not include the automatic word wrapping or cursor wrapping features of Adjust mode. The RETURN key or the TAB SKIP key must be pressed to move the cursor to the next line. Words or numbers are not moved to any subsequent line, only the cursor is moved. Exercise 4 (in this section of the manual) provides practice in the creation of

Fixed mode material.

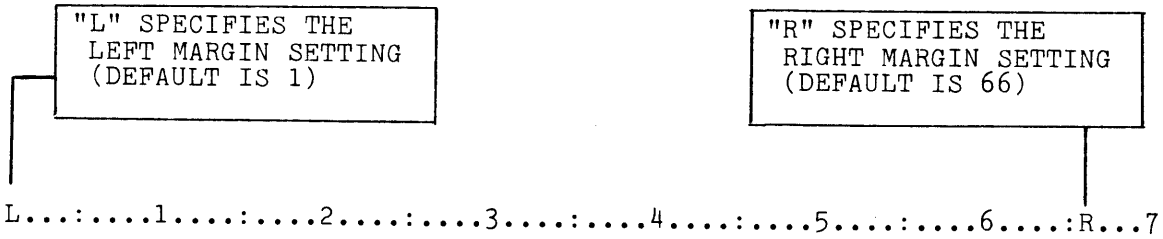


Figure 2-3. Ruler Line Example

2.4.3 Messages.

Messages are displayed on line 24 of the display screen at various times during TIPE operations. Some messages are informational and tell the user that the specified operation is complete; other messages are displayed as the result of an error condition. At various times the display terminal sounds an audible tone to call the user's attention to the display screen. The messages displayed during document creation or any of the other operations are listed and described in Appendix C.

2.5 DOCUMENT SET-UP AND CREATION FUNCTIONS

TIPE provides several keyboard functions that are used during document creation to perform text formatting either on the screen or when the document is printed. The following functions are used for document set-up and basic text formatting during create document operations:

* Margin setting
* Tab setting
* Automatic centering
* Automatic underscoring

These functions are used to set up the format of the document (margins and tabs) and to enter codes for items that affect the document during the printing operation (automatic centering and underscoring). The next exercise, Exercise 2, provides some practical experience in using these functions.

2.5.1 Margin Setting.

The system provides default margin settings of 1 and 66, corresponding to a line approximately six and one half inches long at 10 characters per inch (which is the pitch of the default printer). The left and right margin settings are displayed on the ruler line; the L represents the left margin and the R represents the right margin. The margins can be changed by pressing the RULER (F6) key to move the cursor to the ruler line, then by using the arrow keys to move the cursor to the desired setting(s), keying an L and/or an R and pressing RETURN. It is not necessary to delete the old settings. The right margin cannot be set beyond character position 132 (to allow room for formatting codes on the line). When changing existing margins or tabs, the DELETE LINE key can be used to delete the old settings on the line, and then the new settings can be keyed. Using DELETE LINE deletes everything on the ruler line, so new margins and/or tabs must be keyed. If desired, old settings can be spaced over (with the space bar) to delete them.

2.5.2 Tab Setting.

Setting tabs is similar to setting the margins. The RULER key is pressed to move the cursor to the ruler line, then the arrow keys are used to position the cursor to the desired tab setting. Tabs are specified by keying a T (regular tab) or a D (decimal tab) at the desired position(s). Regular tabs function like tabs on a standard typewriter. When the TAB SKIP key is pressed, the cursor moves to the next tab setting.

Regular tab settings are not stored with the document but decimal tabs are. If regular tabs are used, keep a record of the tab settings, since the settings are not stored with the document. Later, if more material is to be added into the tabbed material, it will be a simple matter to set tabs on the ruler line. Any tab settings that exist on a Fixed mode line (generally decimal tabs) are saved with the document. There is an exercise later in this section that provides experience with tabs.

Decimal tabs are specifically for entries of text or numbers that are to be right justified and are used when creating documents in the Fixed mode of operation. Decimal tabs must be followed by a decimal point entry on the ruler line. The decimal point is used as the decimal alignment mark for the entry of numbers or as the end of field mark for text in columns. When decimal tabs and decimal points are used in Fixed mode, they are displayed both on the ruler line and on the current text entry line of the display

screen. Figure 2-4 illustrates the Ruler line with decimal tabs and decimal points for use in Fixed mode operations.

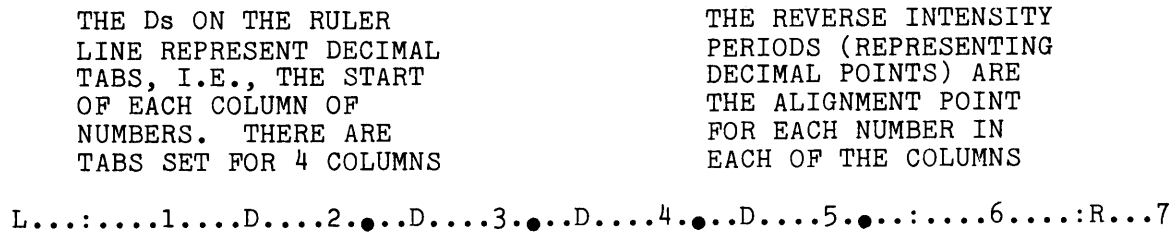


Figure 2-4. Ruler Line With Decimal Tabs

2.5.3 Automatic Centering.

Automatic centering is accomplished quickly and easily with TIPE. Whenever a heading, paragraph title, or some other item is to be centered, the user simply presses the ENTER key then presses the C key. As soon as the RETURN key is pressed to move the cursor off the line containing the center code (displayed as a reverse intensity C) the words on that line are centered within the left and right margins. Characters displayed in reverse intensity are displayed at a different brightness level than the rest of the text.

2.5.4 Automatic Underscoring.

Automatic underscoring is the same as underlining part of the text. On a typewriter, this is a time consuming operation that requires the operator to backspace to the start of the underscore, and then key each underscore to the end. Automatic underscoring on TIPE is enabled by entering a code prior to and at the end of the text to be underscored. The text is underscored when the document is printed. Double underscoring is ignored on the 810 printer.

The underscoring code is entered by pressing the ENTER key, followed by pressing the underscore key (_) for single underscoring, or the equal key (=) for double underscoring. The underscore code is used in pairs; the second underscore code that is entered terminates the underscore function. Underscore codes are displayed on the screen at reverse intensity. The ENTER _ sequence is keyed when the cursor is positioned on the first character to be underscored. The function is turned off by positioning the cursor on the character or space after the last

character to be underscored, then pressing ENTER and _ again.

2.5.5 Document Creation Exercise.

The following exercise and the procedure (Table 2-1) provide practical experience in setting up the document margins, using the format functions to underscore and center items, and filing the created document.

The text for the exercise, the source material to be keyed, is the following boxed-in text. This material is created and filed by following the step-by-step procedure in Table 2-1.

EXERCISE 2 DOCUMENT CREATION EXERCISE

EXERCISE 2

This is the second exercise in a series of exercises designed to both explain and teach the operation of TIPE, the Texas Instruments Page Editor. Some of the features that you will be using in this exercise are margin setting, automatic underscoring, automatic centering of headings, and learning how to file the document.

The exercise is intended to show how easy it is to use the TIPE system as a typing machine and how this can make even a routine job interesting and fun.

TIPE FEATURES

We will be going over the basics of setting margins, entering codes for line spacing changes, automatic underscoring and some of the other most often used functions. As the text is keyed, it is displayed on the screen. When the right margin is reached, the cursor moves to the next line. Unfinished words that are too long to fit on the line are moved to the next line. This is called word wrapping.

CURSOR CONTROL

One of the most important features that makes doing a job easier is the way that you control movement of the cursor (the cursor is that bright rectangle on the display screen). The cursor moves whenever a character is keyed; it always shows the place where the next keyed character is going to be displayed.

The cursor can be moved to any desired location within the text by using the cursor control keys. The cursor control

keys are located in the block of keys at the left side of the keyboard. The HOME key is also used for cursor control. When the HOME key is used, followed by an arrow key, the cursor moves very quickly in the direction of the arrow. HOME and the Up Arrow move the cursor to the first line of the display screen, or the first line of the previous display screen (if the cursor was already on line 1). The HOME key works in combination with the Down Arrow key to move the cursor to the last line. This is called vertical block scrolling.

When the HOME key is pressed, followed by pressing the Right and/or Left Arrow keys, the cursor moves right and left across large blocks of text. If the cursor is at the right margin, the HOME then the Left Arrow key can be used to backspace the cursor immediately to the left margin. This is called horizontal block scrolling.

Sometimes the arrow keys are used with the REPEAT key to move the cursor quickly, but not so quickly that you cannot see the cursor move. This sequence is used to move the cursor to a certain line (vertical scrolling) or to a certain character position within a line (horizontal scrolling).

Another way to view what has been entered is by using the PREVIOUS PAGE and the NEXT PAGE keys. These keys do not affect the cursor position, but instead cause the text to scroll vertically page by page. This is called page scrolling. The number of lines in each page is the same number that was specified when the document was created. When you look at a page on the screen, a reverse intensity P is displayed at the left margin for the first line of each page (look at the second to the last line of the previous paragraph). The reverse intensity P is not displayed with the first line of page one but starts with the first line of page two. If you had specified 10 lines per page instead of 55, line 11 would have a reverse intensity P in front of it, as would line 21, line 31, etc.

The procedure for keying the material from the preceding exercise is detailed in Table 2-1. Before beginning this procedure, make sure that the system is running (a menu may be displayed) and that a directory name and synonym is assigned for the document files (if there is a question about this, see the person responsible for the installation of TIPE).

Table 2-1 Document Creation Procedure

STEP PROCEDURE

INITIATE TIPE-990 OPERATIONS

1. Key TIPE and press the RETURN key. The system displays the TIPE-990 menu.

2. Key C for a create operation, and press the RETURN key. The system displays the following request: TYPE NAME OF DOCUMENT TO BE CREATED:

3. Key the assigned synonym, a period, then EX2 (this represents exercise 2). The document name, (syn).EX2 is displayed. (When performing create document operations, document names can be lowercase characters, and can consist of up to eight characters following the period.) Press RETURN. The system displays the following: NUMBER OF LINES PER PAGE: 55

4. Press the RETURN key to accept the default value of 55 lines per page. The display screen changes to the text entry format (the same as illustrated in Figure 2-2). The cursor is at the line 1 column 1 position.

SETTING MARGINS

5. Press the RULER (F6) key. The cursor moves to the ruler line where all margin and tab setting as well as mode selection is specified.

6. Move the cursor to position 10 (hold the REPEAT key and press the right arrow key) and key an L. This L represents the left margin setting; it is not necessary to delete the old margin setting.

7. Press the HOME key then press the Right Arrow key to move the cursor to position 80, then use the Left arrow to move the cursor back to position 70, key an R (right margin setting) and press the RETURN key. The cursor moves to the MODE:A display.

8. Press the RETURN key to remain in Adjust mode. The cursor returns to line 1 but is now at position 10, the new left margin.

CENTERING THE TITLE AUTOMATICALLY

9. Key the title of the exercise (EXERCISE 2), then center it by pressing the ENTER key, the C key (a reverse intensity C is displayed on line 1), and then the RETURN key. Press the RETURN key again to create space between the title and the first line to be keyed. The title is centered on line 1 between the left and right margins (the centering occurs after the cursor is moved to the next line).

10. Begin keying text from the exercise, notice that when the right margin is reached, the words and the cursor automatically wrap to the next line. If the keyed text is all capital letters, release the UPPER CASE LOCK key (The black key in the upper left corner of the keyboard). The UPPER CASE LOCK can be used to lock the keyboard in uppercase when entering commands or capitialized text.

UNDERSCORING AUTOMATICALLY

11. There are several words or groups of words in the exercise that are underscored. The underscore codes can be entered as the material is keyed, or the codes can be entered after all the text in the exercise is keyed. The method used to mark text to be underscored is as follows.

    a. When the cursor is positioned on the first character to be underscored, press the ENTER key then press the underscore key (_).

    b. Key the word or words to be underscored, and when the cursor is one space beyond the last underscored character, perform the same sequence (ENTER _) to turn off the underscore function.

NOTE

Remember, the first ENTER_ starts the underscoring and the second ENTER_ stops the underscoring.

    c. The underscores are not displayed on the screen; however, graphic characters (_) are displayed in

low intensity where the ENTER_ sequence is keyed. The actual underscoring occurs when the document is printed.

12. Continue to key text, entering the automatic centering codes, and the automatic underscore codes where necessary. Go to the next step to file the document.

FILING THE DOCUMENT

13. When the entire example has been keyed, press the SHOW MENU (CMD) key. The system displays the TIPE-990 operations menu. The name of the document currently being created is also displayed at the lower left of the screen.

14. Key the F command to initiate the file operation and press the RETURN key. The system displays the following:

```
FILE DOCUMENT
SAVE DOCUMENT IN FILE NAME: (syn).EX2
```

15. Press the RETURN key to file the document with the displayed file name. The document name could have been changed at this point if desired. The system redisplays the TIPE-990 menu.

16. Key the Q command to quit the create/edit mode, and press the RETURN key. "Editing session terminated" is displayed briefly at the lower left, then the operating system menu is displayed on the screen. The document just created can be printed by performing the procedure in Table 3-1. It is not necessary to complete the next exercise before printing this material; however, come back to this point to continue the create exercises. Remember to set the UPPER CASE LOCK key to key commands that must be all uppercase characters.

2.6 FORMATTING AND SIMPLE TEXT EDITING FUNCTIONS

The operator can enter codes that change the line spacing of the document when it is printed. The codes are displayed on the screen, but the line spacing is not changed until the document is printed. A variable line spacing exercise is the next exercise

in this section, and can be performed by following the procedure in Table 2-2.

The text editing functions that are often performed during document creation are character insertion/deletion and overstriking of incorrect characters. The text editing section of this manual (Section 4) describes other text editing functions that are available with TIPE. The functions of insertion/deletion of characters and the overstriking of incorrect characters are described, but are not included in Exercise 3.

2.6.1 Variable Line Spacing.

Documents are created and printed with single spacing unless a variable line spacing code is entered somewhere within the text. There are four code sequences available with the TIPE system to format the line spacing of printed documents. Text can be preceded by a line spacing code that signifies space and a half, double or triple spacing, or single spacing if the spacing was changed previously. All lines on the display screen are displayed single spaced.

The line spacing codes can be entered anywhere on the line as they take effect with the next line. A good practice to follow is to put a line spacing code on a line by itself and then press the RETURN key. This makes it easy to see the code. The specified line spacing is in effect until another code is entered to change the spacing. The ENTER key is used with one of the following keys to set the spacing:

* S - single spacing
* H - line and a half spacing (single spacing on the 810)
* D - double spacing
* T - triple spacing

Remember, unless otherwise specified during document creation (or in a subsequent editing operation), the document is printed single spaced. Any spacing codes that are keyed are displayed in reverse intensity at the point of entry.

2.6.2 Character Insertion/Deletion.

There are two methods of inserting additional text into a document, character insertion and unlimited insertion. Character

insertion is commonly used during document creation, while unlimited insertion is used more often when text editing a previously created document. Unlimited insertion, enabled by using the INSERT key, is described in Section 4.

Unnecessary characters can be deleted either by deleting the characters one at a time, by deleting an entire line, or by deleting a block (described in Section 4). Normally, if characters are deleted during document creation, they are deleted one at a time.

Characters are inserted by pressing the INS CHAR (Insert Character) key when the cursor is positioned at the place where one or more characters are to be inserted. Each time the key is pressed, a space is inserted; all characters to the right of the cursor are moved one space to the right. This opens the word or the line for the typing of additional characters.

Character deletion is enabled by positioning the cursor over the character to be deleted and pressing the DEL CHAR (Delete Character) key. Each time the key is pressed, a character is deleted and the remaining characters are moved one space to the left. Continuing to press the DEL CHAR key causes text on the following line to be wrapped up to the line containing the cursor (if in the Adjust mode of operation).

2.6.3 Overstriking.

Overstriking is simply keying one character over another. If a word is not spelled correctly, it can often be corrected by substituting the correct character for the incorrect character. The cursor must be positioned over the character to be changed, then the other character (or space) should be keyed. It is important to remember that the space bar is used to key spaces. The space bar should not be used to move the cursor because it replaces characters with keyed spaces. Cursor movement is enabled by using the cursor control keys at the left of the keyboard. If overstriking occurs near the right margin, TIPE automatically goes into insert mode (unlimited insertion). This creates extra space for text and prevents a word wrap from overwriting existing text. A message is displayed that tells the user to key the text to be inserted and then to terminate the insert by pressing the INSERT key.

2.6.4 Variable Line Spacing Exercise.

Exercise 3 deals with variable line spacing. The exercise is keyed by following the procedure in Table 2-2.

VARIABLE LINE SPACING EXERCISE 3

Variable line spacing is used within a document to set one paragraph off from another. TIPE provides four line spacing commands that allow single spacing (single spacing is also the default), line and a half, double, and triple spacing. These commands are entered by pressing the ENTER key then the S (single space), H (line and a half), D (double space), or the T (triple space) key. The text that follows the entered command, which is displayed on the screen as a reverse intensity character, is printed with the selected spacing.

There can be variable spacing within the same document. As an

example within an example, this text is printed double spaced.

Any spacing changes are accomplished by entering another spacing

command at the desired position. Until another spacing command is

entered, the text is printed with the most recently specified

spacing.

Spacing commands do not affect the text displayed on the screen. The only time that the line spacing is changed is when the document is printed. Also, spacing commands within a document are for that document only. The next document that is created is automatically formatted with single spacing unless spacing commands are used within that document.

Table 2-2 Variable Line Spacing Procedure

STEP	PROCEDURE
1.	Key TIPE and press the RETURN key. The TIPE-990 operations menu is displayed.
2.	Key C for a create operation and press the RETURN key. The following is displayed: CREATE DOCUMENT TYPE NAME OF DOCUMENT TO BE CREATED:
3.	Key the assigned synonym, a period, then EX3 (this

represents exercise 3), and press RETURN. The following is displayed: NUMBER OF LINES PER PAGE: 55

4. Press the RETURN key to accept the default value of 55 lines per page. The display screen changes to the text entry format (see Figure 2-2). The cursor is at line 1, column 1.

5. Check the ruler line to ensure that the margins are 1 and 66 and that Adjust mode is specified. Key the first paragraph of the exercise, and press RETURN twice after the last line.

6. Press the ENTER key, then press the D key, and then press RETURN. A low intensity D and the Return graphic are displayed at the left margin. Text material keyed after the D is double spaced when printed.

7. Key the text of the second paragraph. When the paragraph is complete, press the RETURN key.

8. At this point, press the ENTER key, key S, then press the RETURN key again. A low intensity S and the Return graphic are displayed at the left margin. Text material keyed after the S is single spaced when printed.

9. Key the third paragraph of the exercise, and press the RETURN key at the end of the last line.

10. File the document by performing the following procedure. Press the SHOW MENU key, key F (File command) and press the RETURN key twice. The document is filed with the name used to create the document. The TIPE-990 menu is redisplayed.

11. Key Q and press RETURN to quit the create/edit operation.

2.7 FIXED MODE DOCUMENTS

As previously described, Fixed mode is primarily used to key columns of numeric data. This is the type of operation where decimal tabs and decimal points are used to mark the left edge and alignment column of numeric fields. The word wrapping feature of TIPE does not function during the creation of

documents in Fixed mode; the user must manually mark the end of each line (by pressing RETURN or the TAB key).

2.7.1 Fixed Mode Exercise.

The Fixed mode exercise procedure is detailed in Table 2-3. This procedure requires some items to be keyed in Adjust mode and other items in Fixed mode. The column headings are entered in Adjust mode and the numerical data is entered in Fixed mode. Fixed mode is used to set up multiple right-justified fields on the same line. These fields use the decimal point as alignment for the numbers that are entered.

FIXED MODE EXERCISE 4

OFFICE ITEM	JANUARY	FEBRUARY	MARCH
STANDARD PAPER	76.75	50.00	62.50
PENS	25.00	37.50	12.50
PENCILS	8.00	8.00	16.00
DESKS	480.00	0.00	240.00
CHAIRS	120.00	60.00	60.00
FILE CABINETS	80.00	240.00	120.00
DRAFTING EQUIPMENT	36.50	21.00	16.98
TABLES	94.50	128.60	200.00
PLANTS	69.52	27.80	94.32
DESK LAMPS	19.95	46.99	12.99
TOTALS	1010.22	619.89	835.29

Table 2-3 Fixed Mode Exercise Procedure

STEP	PROCEDURE
1.	Key TIPE and press the RETURN key. The TIPE-990 menu is displayed.
2.	Key C for a create operation and press the RETURN key. The following is displayed: CREATE DOCUMENT TYPE NAME OF DOCUMENT TO BE CREATED:

3. Key the assigned synonym, a period, then EX4 (this represents exercise 4), and press RETURN. The following is displayed: NUMBER OF LINES PER PAGE: 55

4. Press the RETURN key to accept the default value of 55 lines per page. The display screen changes to the text entry format (see Figure 2-2). The cursor is at the line 1, column 1 position.

ENTER REGULAR TABS

5. Press the RULER key to move the cursor to the ruler line. Press the REPEAT key and the Right Arrow key to move the cursor to position 24 then press the T key (denotes a tab at that position).

6. Again, press the REPEAT key and the Right Arrow key to move the cursor and key tabs (key a T) at positions 38 and 55 and press the RETURN key. Incorrect entries on the Ruler line can be corrected by keying spaces over them. The cursor moves to MODE:A.

7. Press the RETURN key to stay in Adjust mode. The cursor moves to line 1, position 1 of the display.

8. Key the first line of the exercise, starting with "OFFICE ITEM". Press the TAB key to move the cursor to positions 24, 38, and 55 for the month entries. Press the RETURN key when the line is complete, and press RETURN again to add a blank line.

ENTER DECIMAL TABS

9. Press the RULER key to move the cursor to the ruler line (to set decimal tabs for the columns).

10. Press the DELETE LINE key to delete the old tab settings (the margin settings are also deleted). The ruler line is blank, allowing new margins and tab settings to be keyed.

11. Ensure that the cursor is at position 1 and key L for the left margin setting.

12. Set the first decimal tab on the ruler line by performing the following.

    a. Move the cursor to position 20 and key D (decimal

tab) The D marks the left edge of the first column of numbers.

b. Move the cursor to position 27 and key a decimal point (period). The decimal point is the alignment point for the number.

13. Key the other decimal tabs as follows:

a. Move the cursor to position 35, key D and move the cursor to position 42 and key a decimal point.

b. Move the cursor to position 50, key a D and move the cursor to position 57 and key a decimal point.

14. Move the cursor to position 66, key R for the right margin, and press the RETURN key to move to MODE:A.

15. Key an F to specify Fixed mode and press RETURN. The cursor moves to line 3 of the screen; Ds and decimal points are displayed on line 3.

16. Ensure that the UPPER CASE LOCK key is set and key the first line in the following manner:

a. Key STANDARD PAPER and press the TAB key

b. Key 76.75 and press the TAB key

c. Key 50.00 and press the TAB key

d. Key 62.50 and press the TAB key

NOTE

Notice that when the TAB key is pressed, the numbers automatically move to the right and align on the decimal point. Pressing the TAB key after 62.50 moves the cursor to the next line, where again Ds and decimal points are displayed.

UNDERSCORE THE LAST ENTRIES & USE PRINT KEY

17. Key each of the remaining lines in the same manner.

When the "DESK LAMPS" dollar figures are ready to be keyed, perform the following to include the underscores.

a. After keying "DESK LAMPS" press the TAB key. The cursor moves just to the right of the first D.

b. Press the ENTER key and then press the underscore key (_). An underscore is displayed in reverse intensity.

c. Press the space bar twice, then key 19.95.

d. Again press the ENTER key and then key an underscore.

e. Press the TAB key. The cursor moves to the next field.

18. Press the PRINT key and look at the screen. Notice that the numbers line up properly when the graphic characters are not displayed. This is the way the material appears when it is printed.

19. Press the PRINT or RETURN key to resume the create operation.

    a. Press the ENTER key and then press the underscore key (_). An underscore is displayed in reverse intensity.

    b. Press the space bar twice, then key 46.99.

    c. Again press the ENTER key and then key an underscore.

    d. Press the TAB key. The cursor moves to the next field.

20. Key the final number and underscore it in the same manner.

    a. Press the ENTER key and then press the underscore key (_). An underscore is displayed in reverse intensity.

    b. Press the space bar twice, then key 12.99.

    c. Again press the ENTER key and then key an underscore.

d. Press the TAB key. The cursor moves to the next line.

21. Press the PRINT key to remove the graphic characters and line up the columns of numbers. Press PRINT or the RETURN key to resume the create operation. Press the RETURN key to add a blank line.

22. Key the word "TOTALS", press the TAB key, and key 1010.22. Press the TAB key again, key the next total, press TAB, then key the final total and press the RETURN key.

23. Entry is complete; press the SHOW MENU key, key F and press RETURN twice to file the document with the name (syn).EX4. The TIPE menu is redisplayed.

24. Press the Q key then press the RETURN key to quit the create/edit operations. The operating system menu is redisplayed. Perform the procedure in Table 2-4 to print the three exercises created in this section of the manual.

2.8 PRINT THE EXERCISES PROCEDURE

The exercises that have just been created can be printed by folowing a procedure similar to the procedure in Section 1. It is not necessary to be completely familiar with the print menu requests or the print parameter options to cause a document to be printed successfully. The procedure in Table 2-4 should be followed to print each of the three exercises created in this section.

Table 2-4 Print Operation Procedure

STEP	PROCEDURE
1.	Ensure that the printer is ready for printing operations. Continuous forms paper should be inserted in the printer. Key the command TIPP and press RETURN to initiate the print operation. The following menu is displayed on the screen:

PRINT TIPE-990 DOCUMENT

DOCUMENT FILE NAME:
CHANGE PRINT PARM (Y OR N): NO
ATTENDED PRINTER (Y OR N): YES

2. Key the file name used to identify the first exercise in Section 2, (syn).EX2 and press RETURN. (When you return to this step to print the other exercises, key the appropriate file names.) The cursor moves to the next selection (i.e., the CHANGE PRINT PARM prompt).

3. Press the RETURN key. This entry means that the parameters are not being changed for this operation. The cursor moves to the next selection.

4. Press the RETURN key; this specifies that the print operation is an attended operation and that printing is to take place in the foreground. At this point the print operation begins; the following is displayed:

TIPE-990 PRINT IN PROGRESS

FUNCTION KEYS	DESCRIPTION
NEXT PAGE	STOP PRINT AT THE END OF A PRINTED PAGE
CANCEL	CANCEL THE PRINTING OF THIS DOCUMENT

5. The preceding message is displayed only when an attended printer operation is specified. As soon as the print operation is complete, the operating system menu is displayed. If desired, you can remove the completed document form the printer, or wait until the other documents are printed.

6. Return to Step 1 and perform the procedure again to print (syn).EX3 (key that as the name of the document to be printed). As soon as that operation is complete, go back to Step 1 again to print (syn).EX4 (key that as the name of the document to be printed).

NOTE

These three exercises are being printed by the default printer (usually the default is the 810 printer) therefore the underscoring does not look the same as it would if printed by the letter quality printer.

This completes the reference and exercise material for Section 2. Proceed to the next section to learn about the printing parameters, and to gain more experience in the printing of documents.

3

Printing

3.1 GENERAL INFORMATION

This section describes the print options and the operating procedures that control the printing of documents by TIPE. The program controlling the print operation is separate from the program controlling the creation/editing operation. Documents can be printed in the background, which means that the user, after the print operation is started, can return to the creation or editing of other documents. If desired, documents can be printed in the foreground, which means that the user can monitor the printing operation status via the display terminal. The printer that is used can be either the Model LQ45 letter quality printer or the Model 810 matrix printer.

After initiating the print operation, a menu is displayed, and the user can specify the type of printing operation to be performed. Selections from the first menu may result in the display of additional menus (e.g., if the operator chooses to change print parameters). Although some items in the print parameters relate to form letters, a separate discussion of form letters is presented in Section 5 of this manual.

3.2 PRINTING A DOCUMENT

Before starting a print operation, the printer to be used should be made ready (e.g., the paper should be inserted, the proper printwheel installed, etc.). The steps required to make a printer ready for a print operation are dependent on the type of printer being used. Refer to the appropriate printer operation manual for the ready procedures.

After starting the printing operation, a series of prompts, requesting entry of the document file name and other items, is displayed on the screen (see Figure 3-1). The user must key the name of the file to be printed, and then can accept the displayed (default) values or change the print parameter and attended printer selections.

```
PRINT TIPE-990 DOCUMENT

        DOCUMENT FILE NAME:
CHANGE PRINT PARM (Y OR N):  NO
 ATTENDED PRINTER (Y OR N):  YES
```

Figure 3-1. TIPE Print Operation Menu

3.2.1 DOCUMENT FILE NAME.

The DOCUMENT FILE NAME is the name of the document to be printed. This is the same name used when the document was filed after the create document operation. The name consists of the synonym (the abbreviation previously assigned), a period, and then the remainder of the document name (in Section 1 and Section 2, the exercises were filed with the names (syn).EX1, (syn).EX2, etc.). The unique portion of the document name (following the period) can consist of up to eight characters. After the name is keyed, the RETURN key is pressed to move the cursor to the CHANGE PRINT PARM option.

3.2.2 CHANGE PRINT PARM.

This prompt is asking if the user wants to change the print parameters (options) associated with the specified document. If the document has not been printed previously, the default parameters are used. If the document has been printed before (either to a file or to a printer), the parameter values that were used for the previous print operation are used for this operation. If the parameter values are to be changed, or if the parameters should be checked before printing the document, a Y is keyed followed by RETURN. A subsequent display shows all the print parameter values and any of the values can be changed (except the document file name).

3.2.2.1 Form Letter Considerations.

If the documents to be printed are form letters, the Change Print Parm prompt should be answered YES, unless the form letters were printed previously. Form letter printing is specified in the print parameters and requires additional information for successful completion (refer to Section 5 of this manual for more information on form letters).

3.2.3 ATTENDED PRINTER.

This prompt is asking if the printer is going to be attended during the print operation. Attended printing means printing in the foreground; the terminal is used to control printing and display messages related to the print operation. The terminal cannot be used for document creation or text editing. If NO is the answer to this prompt, then the document is printed in the background, and create or edit TIPE operations, other than printing can be initiated. When a background print operation is complete, a message is displayed after the user quits the create/edit operation. The default for attended printer is YES, which means printing in the foreground.

Another item related to attended or unattended operation is the type of paper that is used. When single sheet paper is used with the letter quality printer, attended operation must be specified. When continuous forms paper is used, the operation can be attended if desired. The attended operation allows the use of certain function keys to halt and resume the print operation at any time.

When attended printer operations are in progress, the following message is displayed:

TIPE-990 PRINT IN PROGRESS

FUNCTION KEYS	DESCRIPTION
NEXT PAGE	STOP PRINT AT THE END OF A PRINTED PAGE
CANCEL	CANCEL THE PRINTING OF THIS DOCUMENT

The operator can press either of the listed keys, NEXT PAGE or CANCEL, to either stop the printing at the end of the current page, or to terminate the print operation. When the printing is temporarily stopped, by pressing the NEXT PAGE key, it can be resumed by pressing the RETURN key. When the operation is complete, the operating system menu is redisplayed.

3.3 PRINT OPERATION PROCEDURE

Table 3-1 contains the procedure to be followed to print Exercise 2 (created in Section 2). Some of the requests may be unfamiliar; however, simply follow the steps as presented in Table 3-1. A description of each print parameter is presented later in this section. There are steps in the procedure that

direct the user to print the document on the letter quality printer and to change the lines per page parameter. If a letter quality printer is not included with the system, then disregard that step in the procedure. These are just two of the things that can be changed with the print parameters. There are other exercises that illustrate some of the other things that can be done prior to printing a document.

Table 3-1 Print Operation Procedure, Exercise 1

STEP	PROCEDURE
1.	Ensure that the printer is ready for printing operations. Continuous forms paper should be inserted in the printer. Key the command TIPP and press RETURN to initiate the print operation. The following menu is displayed on the screen: PRINT TIPE-990 DOCUMENT DOCUMENT FILE NAME: CHANGE PRINT PARM (Y OR N): NO ATTENDED PRINTER (Y OR N): YES
2.	Key the file name used to identify the first exercise in Section 2, (syn).EX2 and press RETURN. The cursor moves to the next selection (i.e., the CHANGE PRINT PARM prompt).
3.	Key a Y and press the RETURN key. This entry enables display of the print parameters so that one or more of those parameters can be changed. The cursor moves to the next selection.
4.	Press the RETURN key; this specifies that the print operation is an attended operation and that printing is to take place in the foreground. The print parameters (Figure 3-2) are displayed on the screen. The DOCUMENT NAME parameter includes the name entered in Step 2 of this procedure. The cursor is at the PRINTER OR FILE NAME parameter.

NOTE

If a letter quality printer is not included with your system then disregard steps 5 and 6 and go to step 7.

5. Key the name of the letter quality printer (probably LP02, but it may be different at your site) and press the RETURN key. The cursor moves to the next selection (the OUTPUT FORMAT: 810 parameter).

6. Key LQP to tell the program that letter quality format is desired and then press RETURN.

7. Press RETURN until the cursor is at the LINES PER PAGE parameter. Key 40 to specify 40 lines per page, then press the RETURN key. The document, which was created with 55 lines per page is to be repaginated during printing to 40 lines per page. The cursor moves to the next selection (NUMBER OF COPIES).

8. Press the ENTER key to skip the remaining parameters. The ENTER key is pressed at any point to signify that the default values are to be accepted for the remaining parameters. At this point the print operation begins; the following is displayed:

```
        TIPE-990 PRINT IN PROGRESS

FUNCTION KEYS          DESCRIPTION

NEXT PAGE        STOP PRINT AT THE END OF A PRINTED PAGE
CANCEL           CANCEL THE PRINTING OF THIS DOCUMENT
```

9. The preceding message is displayed only when an attended printer operation is specified. As soon as the print operation is complete, the operating system menu is displayed. Check the printer for the completed document.

3.4 PRINT PARAMETERS

Print parameters are the instructions that tell the print program how the specified document should be printed. If the document has been printed before, the instructions used for the last print operation are in effect until changed. Each document, after it

is printed, includes the instructions (parameters) used for that document. Any time that it is necessary to change parameters, a Y is entered for the CHANGE PRINT PARM prompt. After responding to the first series of prompts, the print document parameters are displayed on the screen (see Figure 3-2). The values shown in the illustration are the default values for the parameters.

```
                TIPE-990 PRINT DOCUMENT

                          DOCUMENT NAME :
                   PRINTER OR FILE NAME : LP01
       OUTPUT FORMAT (810, LQP OR TEXT) : 810
 REPLACE EXISTING OUTPUT FILE (Y OR N) : N
                  FORM LETTERS (Y OR N) : N
                   STARTING PAGE NUMBER : 1
                     ENDING PAGE NUMBER : ALL
          RIGHT JUSTIFICATION (Y OR N) : Y
    LEFT MARGIN DISPLACEMENT (0 TO 99) : 10
         LINE NUMBER TO BEGIN PRINTING : 1
              LINES PER PAGE (1 TO 99) : 55
                        NUMBER OF COPIES : 1
     SHEET FEED (SINGLE OR CONTINUOUS) : C
                  PAGE NUMBERS (Y OR N) : N
                                 PITCH : 12
               PAPER LENGTH (IN LINES) : 66
```

Figure 3-2. Print Operation Parameters

3.4.1 DOCUMENT NAME.

The DOCUMENT NAME is the name keyed in response to the DOCUMENT FILE NAME prompt (the first prompt that is displayed after starting the print operation). This is the name of the document that is going to be printed. The document name cannot be changed at this point.

3.4.2 PRINTER OR FILE NAME.

This parameter specifies either the printer or the name of the file where the document is to be transferred. The default for this parameter is LP01; this represents line printer number 1. Another printer name can be entered, or a file name can be entered. Because repagination (the changing of the contents of a page based on lines per page) occurs during the print cycle, it may be desirable to print a document to a file before transferring it to a printer. Then the document is in the same format as if it were transferred to a printer and can be inspected for possible text editing changes before transfer to

the printer. Refer to paragraph 3.5 for detailed instructions on printing to a file.

3.4.3 OUTPUT FORMAT

This parameter allows the user to specify the format of the document to be printed. The 810 printer cannot do some of the things that the letter quality printer can do (e.g., double underscoring works only with the LQ45 printer), and the output format is determined by the printer that is to be used. There are three possible entries for this parameter: 810, LQP, and TEXT; 810 is the default.

When 810 is the value, the text is printed (either to a file or a printer) as if it were going to an 810 printer (the text includes page ending codes, etc.). The document can be printed by either of the available printers or to a file when 810 is the output format parameter.

When LQP is the value, the text is printed as if it were going to a letter quality printer. The document can be printed to a file or can be printed by the LQ45 printer, but should not be printed by the 810 printer. As mentioned, the letter quality printer (LQP) output format allows text to be printed to a file for subsequent printing by a letter quality printer. When the text (in LQP format) is in a file, the PF command (refer to Appendix B or Appendix D) can be used to queue several documents for printing on the letter quality printer.

The TEXT value causes the document to be printed as straight text, without any formatting codes, page ending codes, etc. TEXT is the value that is used when printing descriptor and data files (required for form letters) to a file. In conjunction with TEXT as the value, the LEFT MARGIN DISPLACEMENT must always be zero (0), RIGHT JUSTIFICATION is always answered with an N, and PAGE NUMBERS must be NO, and LINE NUMBER TO BEGIN PRINTING must be 1.

3.4.4 REPLACE EXISTING OUTPUT FILE

This parameter allows the user to specify (when printing to a file) whether the file should be replaced by the printed document. The default value is NO. If the default is accepted and the file already exists, the print operation does not occur (a message is displayed). This prevents the accidental overwriting of an existing file by another document. The only time a print to an existing file is successful is if REPLACE EXISTING OUTPUT FILE is answered with a Y.

3.4.5 FORM LETTERS

This parameter is asking if the document to be printed is a form letter or contains variables. The default value is NO. If the document does not use form letter variables, the RETURN key is pressed to move the cursor to the next parameter. If the document is a form letter, a Y is keyed. A subsequent display requests more information about the names of required files. The examples and exercises for the preparation of form letters are in Section 5.

3.4.6 STARTING PAGE NUMBER

The STARTING PAGE NUMBER parameter allows the operator to specify which page should be the first page printed. Normally the first page of a document is the first page printed, therefore the default value is 1. The default of 1 (and ALL for the ending page number parameter) must be used if it is desired that the page codes (lower case reverse intensity P) accurately reflect the start of each page in the file. Regardless of the specified page numbers, the document is repaginated when printed, but the page codes are entered automatically in the file only when 1 and ALL are the selections.

In some cases, a document may consist of several pages, only one of which has been changed since the last time the document was printed. Rather than reprint the entire document, the user can specify the single page as the page to be printed (this parameter is used in conjunction with the ending page number parameter). The number of lines printed on each page is determined by the lines per page specified when the document is created. The lines per page can be changed at print time if desired. The STARTING PAGE NUMBER parameter can also be used when printing to a file.

3.4.7 ENDING PAGE NUMBER

The ENDING PAGE NUMBER parameter allows the operator to specify the last page to be printed. Normally all pages of a document are printed, so the default value for this entry is ALL. This can be changed to any other value to allow the printing of fewer than all the pages. For example, if only one page is to be printed, then the STARTING PAGE NUMBER and the ENDING PAGE NUMBER would be the same number. The ENDING PAGE NUMBER parameter can also be used when printing to a file. (Refer to the description of the STARTING PAGE NUMBER prompt for information related to the page codes and repagination.)

3.4.8 RIGHT JUSTIFICATION.

The RIGHT JUSTIFICATION parameter allows the user to specify whether the document should be right justified when printed. This means the text has an even right margin; all the lines end at the same character position, giving the document a formal, finished look. If right justification is not desired, N (NO) is entered for this parameter and the document is printed with a ragged right edge, giving the document a hand-typed look. This parameter also functions when printing to a file.

3.4.9 LEFT MARGIN DISPLACEMENT.

The LEFT MARGIN DISPLACEMENT parameter allows the user to specify the number of character positions to indent the document when the document is printed. Figure 3-3 illustrates the part of a business letter that is the left margin displacement. If a LEFT MARGIN DISPLACEMENT of 0 (zero) is used, the document is printed with the first character at the far left edge of the paper. The placement of text on a page is dependent on both the left margin of the created text and the displacement value. If text with a left margin of 10 is printed with a displacement of 10, the text is printed starting at character position 20.

The default value of 10 automatically moves the printhead 10 character positions to the right, providing a margin of approximately one inch. If the other defaults are used when creating a document, i.e., if the left and right margins are 1 and 66 respectively, a line of text would be 6.6 inches long (printed at 10 pitch). This would produce a right margin on the paper of nearly one inch. This parameter can also be used when the document is printed to a file. If the document is printed by the letter quality printer, the left margin displacement should be changed to 12 to provide a one inch left margin (at 12 pitch).

3.4.10 LINE NUMBER TO BEGIN PRINTING.

The LINE NUMBER TO BEGIN PRINTING parameter uses a default value of 1, which specifies that the first line to be printed is printed on line 1 of the paper. If printing should start on a different line, meaning a larger top margin is necessary, the number of the desired line can be keyed. For example, to print the first line on line 10 of the paper, the number 10 is keyed in response to this parameter. See Figure 3-3 for an illustration showing how the top margin can be changed by changing this parameter.

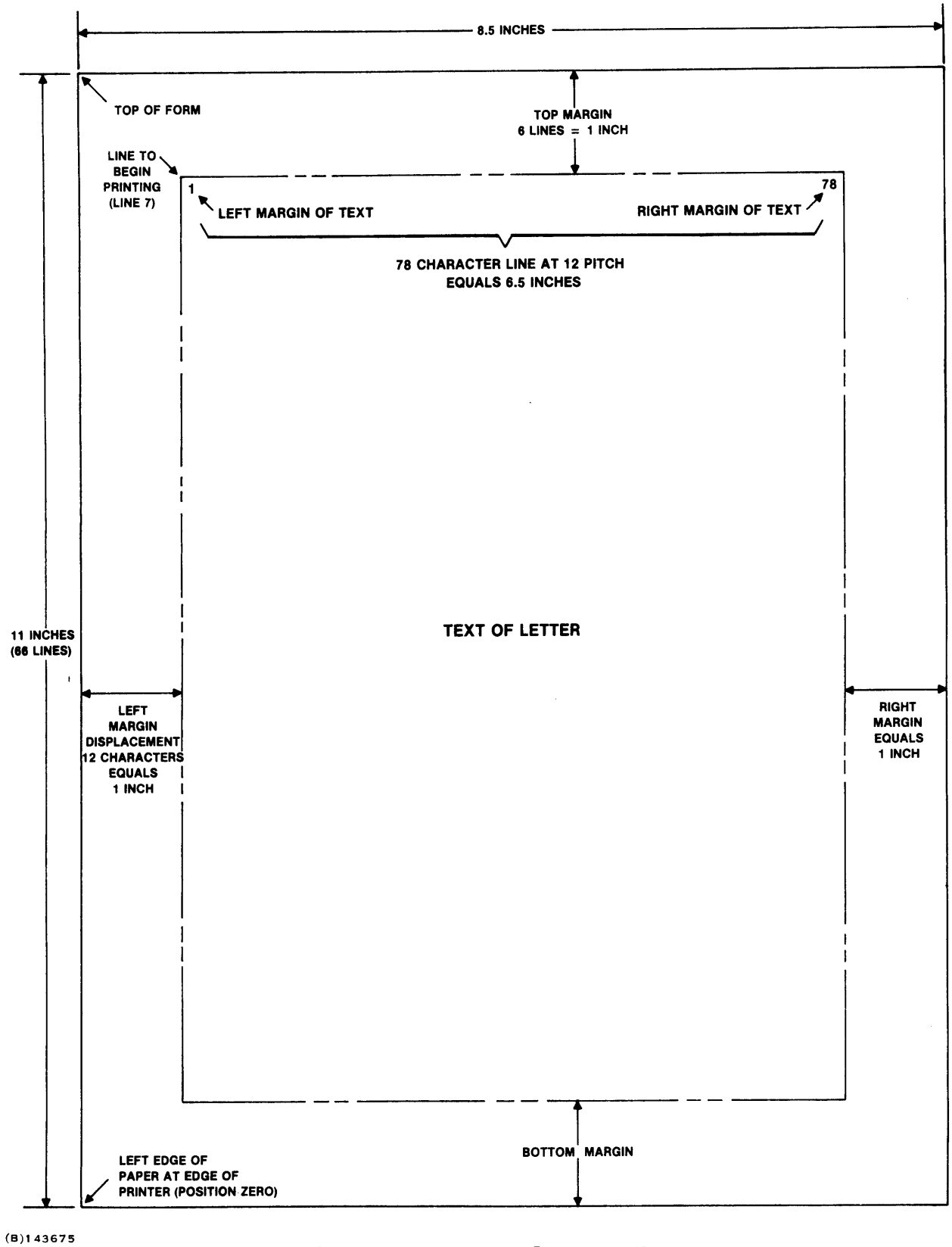


Figure 3-3. Business Letter Example

3.4.11 LINES PER PAGE.

The LINES PER PAGE parameter includes a default value that is the same as the number of lines specified when the document was created. This can be changed to some other desired value, and when the document is printed, it is automatically repaginated (page length is changed) to reflect the revised LINES PER PAGE value.

3.4.12 NUMBER OF COPIES.

The NUMBER OF COPIES parameter can be used to specify how many copies of the document are to be printed. The default value is one copy. The maximum number of copies that can be specified is nine. This parameter also works when the document is printed to a file.

3.4.13 SHEET FEED.

The SHEET FEED (Single or Continuous) parameter is asking whether the paper in the printer is a single sheet of paper or continuous forms paper. Normally, the continuous forms paper is used and Continuous (C) is the default value. If single sheet paper is used, an S for Single is entered, and subsequently, the print operation must run in the foreground so the user knows when to insert additional paper for multiple page documents. Single sheet print operations require a Y (yes) answer to the ATTENDED PRINTER parameter (the default for ATTENDED PRINTER is YES).

3.4.14 PAGE NUMBERS.

The PAGE NUMBERS parameter is used to either enable or disable the automatic page numbering function of the print program. If page numbers are desired, a Y is entered in response to this parameter, and a subsequent menu is displayed that requests information related to the page numbering.

When page numbers are specified, the menu in Figure 3-4 is displayed after the display of the Print Document parameters.

```
TIPE-990 PAGE NUMBERING SPECIFICATION

          FIRST PRINTED PAGE NUMBER:  1
   POSITION (LEFT, RIGHT, OR CENTER):  L
       LINE NUMBER ON WHICH TO PRINT:  60
       NUMBER PREFIX (30 CHAR. MAX.):  Page _____________________
```

Figure 3-4. Page Numbering Specification Menu

3.4.14.1 FIRST PRINTED PAGE NUMBER.

The value entered in response to this instruction is the page number that is to be on the first printed page of the document. The default is 1 unless another value has been entered for a previous print operation. The displayed value is accepted by pressing the RETURN key. The page number increments automatically with each additional page.

3.4.14.2 POSITION.

The POSITION instruction is used to specify the position on the bottom of the page where the page number is to be printed. The page number can be printed at the left margin, the center, or the right margin of the document by keying L, C, or R respectively, followed by pressing the RETURN key. The default value is L unless it has been changed for a previous print operation.

3.4.14.3 LINE NUMBER ON WHICH TO PRINT.

This instruction is used to specify the line number on the paper where the page number is to be printed. The default is line 60 unless it was changed for a previous print operation.

NOTE

The amount keyed for the LINE NUMBER ON WHICH TO PRINT must be greater than the sum of the amounts keyed for the LINE NUMBER TO BEGIN PRINTING and the LINES PER PAGE parameters.

3.4.14.4 NUMBER PREFIX.

The NUMBER PREFIX instruction is used to specify a prefix for the page number. The prefix can be up to 30 characters in length. The default for the number prefix is the word "Page". A space

must be keyed after "Page" to have a space before the number when the document is printed. This is also true for any other prefix that is used, a space must follow the prefix if a space is desired when the page is printed.

3.4.15 PITCH.

The PITCH parameter determines the number of characters that are to be printed per inch when the document is printed by the letter quality printer. The PITCH parameter is ignored when the document is printed by the 810 printer. The default value is 12, which is the same spacing (characters per inch) as an elite typeface. Any value from 6 to 24 can be entered in response to this parameter; however, the most commonly used spacing for letters, reports, etc. is either 10 or 12 pitch. Occasionally there may be a need to print a formal document, e.g., a financial report, at 15 or more characters per inch. The PITCH parameter does not affect the spacing of displayed documents, the document must be printed on the LQ45 printer to view the result of pitch changes.

3.4.16 PAPER LENGTH.

The PAPER LENGTH parameter allows the operator to specify the length of the paper in lines. The default for this parameter is 66 lines which corresponds to 11 inch paper. There is continuous forms paper that is less than 66 lines per form, and the parameter should be changed for those instances.

To determine the number of lines for the length, multiply the length in inches by 6 lines per inch (e.g., 11 inch paper times 6 lines per inch equals 66 lines).

3.5 PRINT TO A FILE PROCEDURE

The procedure in Table 3-2 demonstrates printing to a file, using the starting and ending page parameters and the page numbering parameter. The document that is going to be printed to a file is the same as in the previous procedure.

Table 3-2 Print To A File Procedure

STEP	PROCEDURE
1.	Key the command TIPP and press RETURN to initiate the print operation. The following menu is displayed on the screen: PRINT TIPE-990 DOCUMENT DOCUMENT FILE NAME: CHANGE PRINT PARM (Y OR N): NO ATTENDED PRINTER (Y OR N): YES
2.	Key the file name used to identify the first exercise in Section 2, (syn).EX2 and press RETURN. The cursor moves to the next selection (i.e., the CHANGE PRINT PARM prompt).
3.	Key a Y and press the RETURN key. This entry enables display of the print parameters so that one or more of those parameters can be changed. The cursor moves to ATTENDED PRINTER.
4.	Press the RETURN key; this specifies that the print operation is an attended operation and that printing is to take place in the foreground. The print parameters (Figure 3-2) are displayed on the screen. The DOCUMENT NAME parameter includes the name entered in Step 2 of this procedure. The cursor is at the PRINTER OR FILE NAME parameter.
5.	Key the name (syn).PREX2 (this represents Print Exercise 2). This instruction tells the program that the document named (syn).EX2 is to be printed to a file named (syn).PREX2 rather than to a printer. Press RETURN. The cursor moves to the OUTPUT FORMAT prompt.
6.	Press RETURN three times to move to the STARTING PAGE NUMBER parameter.
7.	Key the number 2 and press the RETURN key. This means that the first page to be printed is page 2 of the document. The cursor moves to ENDING PAGE NUMBER.
8.	Key the number 3 then press the TAB SKIP key to delete the two L's and move the cursor to the next parameter. This specifies that the last page to be printed is page 3 of the document.

9. Press the RETURN key three times to move the cursor to the LINES PER PAGE parameter. The last time the document was printed, it was at 40 lines per page. Key 25 and press RETURN to change the document to 25 lines per page. The cursor moves to the next selection.

10. Press the RETURN key two times to move the cursor to the PAGE NUMBERS parameter. Key a Y and press RETURN. A subsequent display requests information related to page numbering. The cursor moves to PITCH.

11. Press the ENTER key to signify that the remaining parameters are acceptable. The ENTER key can be used at any point to notify the program that the default values are to be accepted for the remaining parameters.

12. At this point the PAGE NUMBERING SPECIFICATION menu is displayed (see Figure 3-4). Key the number 2 as the FIRST PRINT PAGE NUMBER and press RETURN. The cursor moves to the POSITION specification.

13. Key a C to specify the center of the document and press ENTER. The print operation begins; the display screen displays the "Print In Progress" message until the operation is complete. The document printed to a file can be viewed by entering the SF (Show File) command, pressing RETURN, entering the name of the file (syn).PREX2, and pressing RETURN again.

NOTE

The SF command is not a TIPE command, but is a computer operating system command. There are other operating system commands that can be used. Appendix B of this manual includes an abbreviated list of DX10 commands. Appendix D of this manual includes an abbreviated list of DNOS commands.

This completes the reference and exercise material for Section 3. Proceed to the next section to gain experience with the text editing features of TIPE.

4

Text Editing

4.1 GENERAL INFORMATION

Text editing is the process of revising a document. Some text editing is quite simple and may take place during the creation of a document. Some of the functions discussed in Section 2 of this manual (e.g., overstriking, character deletion, character insertion, etc.) are simple text editing functions. The text editing functions covered in this section are not normally used during the creation of a document. Often it is better to print the document, check it for corrections or improved phrasing, and then perform all the major text editing at one time. However, the text editing functions described in this section could be performed during creation of a document.

TIPE provides extensive text editing functions that allow filed documents or sections of documents to be reformatted, moved, deleted, stored (copied), and recalled into either that document or another document. TIPE includes a powerful insert capability that allows insertion of one or more lines within existing text. As text is inserted, it is automatically adjusted to fit within the margins. When the Insert function is complete (all the text to be inserted has been keyed), the INSERT key is pressed a second time to terminate the Insert. As described previously (refer to "Overstriking" in Section 2), the Insert function is enabled automatically if the user is overstriking characters and characters are keyed past the right margin.

4.2 TEXT EDITING FUNCTIONS

Three function keys (i.e., SELECT BLOCK, RECALL BLOCK, and INSERT) are used to enable many of the text editing functions that are described in this section. Other function keys, as well as the cursor movement keys, are also used during text editing, but most of these have been described previously. Figure 4-1 is an illustration of the keyboard used with TIPE; the function keys are on top row of the keyboard.

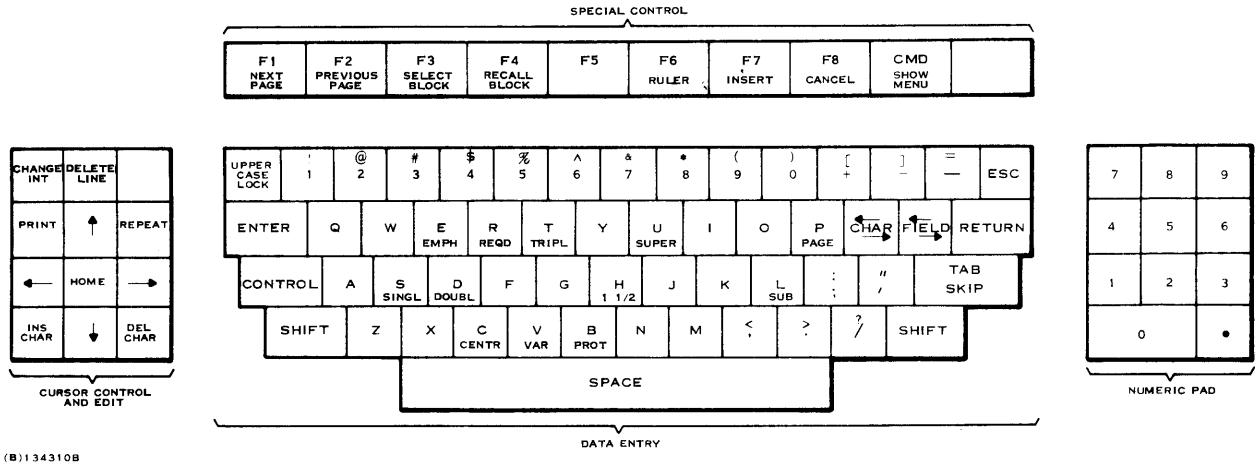


Figure 4-1. TIPE Keyboard

4.3 SELECT BLOCK FUNCTIONS

The SELECT BLOCK key is used to mark a block of text for one of several text editing functions. The position of the cursor when the key is pressed marks the beginning of the selected block. A graphic symbol is displayed at the cursor position and the user is requested to position the cursor to the end of the block and press SELECT BLOCK a second time. The second SELECT BLOCK marks the end of the selected block and the entire block (which could be a word, sentence, paragraph, page, or the whole document) is displayed in reverse intensity. Then the cursor moves to the message line and the following message is displayed:

Enter D (Delete), M (Move), S (Store), R (Reformat):

The user then keys the character representing the desired type of operation. The next step depends on which of the functions is selected. If D or M (Delete or Move, respectively) is the selected function, the marked block is no longer displayed. If S (Store) is the selected function, the user is requested to enter a file name where the block is to be stored. Storing a block does not remove it from the text that is displayed on the screen. If R (Reformat) is the selected function, the format of the block can be changed. If the CANCEL key is pressed before pressing the RETURN key, TIPE disregards the Select Block functions, as if the

SELECT BLOCK key had not been pressed.

4.3.1 Delete Function.

The Delete function is used to delete a block of text from the document displayed on the screen. The block can be as small as one character or as large as the entire document. After pressing the SELECT BLOCK key (marking the beginning of the block) the user is requested to position the cursor at the end of the block and to press the SELECT BLOCK key. Then the select block function message is displayed and the user presses D and the RETURN key to delete the block. Everything between the block markers (graphic symbols on the display screen) is deleted and text is adjusted to fill the vacancy.

4.3.2 Move Function.

The Move function is used to move a block of text from the displayed document to a storage buffer. The moved text can be as small or as large as the user specifies. After marking the block to be moved, by pressing the SELECT BLOCK key at the beginning and the end of the block (graphics are displayed as block boundaries), the block is displayed in reverse intensity and the select block function message is displayed. After keying an M for Move, and pressing RETURN, the marked block is no longer displayed and is transferred to a storage area. The text on the screen automatically adjusts to fill the space. The moved block continues to occupy that area in storage until another block is moved. The text that has been moved can be recalled to the display screen for insertion in that document or another document by pressing the RECALL BLOCK key and the TAB SKIP key. The Recall function is described later in this section.

4.3.3 Store Function.

The Store function is used to copy a block of text from the displayed document to a specified file. The stored text can be as small or as large as the operator specifies. The block to be stored is marked by pressing the SELECT BLOCK key at the beginning and the end of the block (graphics are displayed as block boundaries). The marked block is displayed in reverse intensity and the select block functions message is displayed.

After keying an S for Store, and pressing RETURN, the user is requested to enter a file name for the block. After the user keys the file name and presses the RETURN key, the marked block is transferred to storage. Even though the block is now in

storage, it is still part of the original document (in effect, a copy has been made of the marked block). Remember that even a stored block is considered a document. The text that has been stored can be recalled to the display screen for insertion in that document or any other document by pressing the RECALL BLOCK key, then keying the name it is filed under and pressing RETURN. The Recall function is described later in this section.

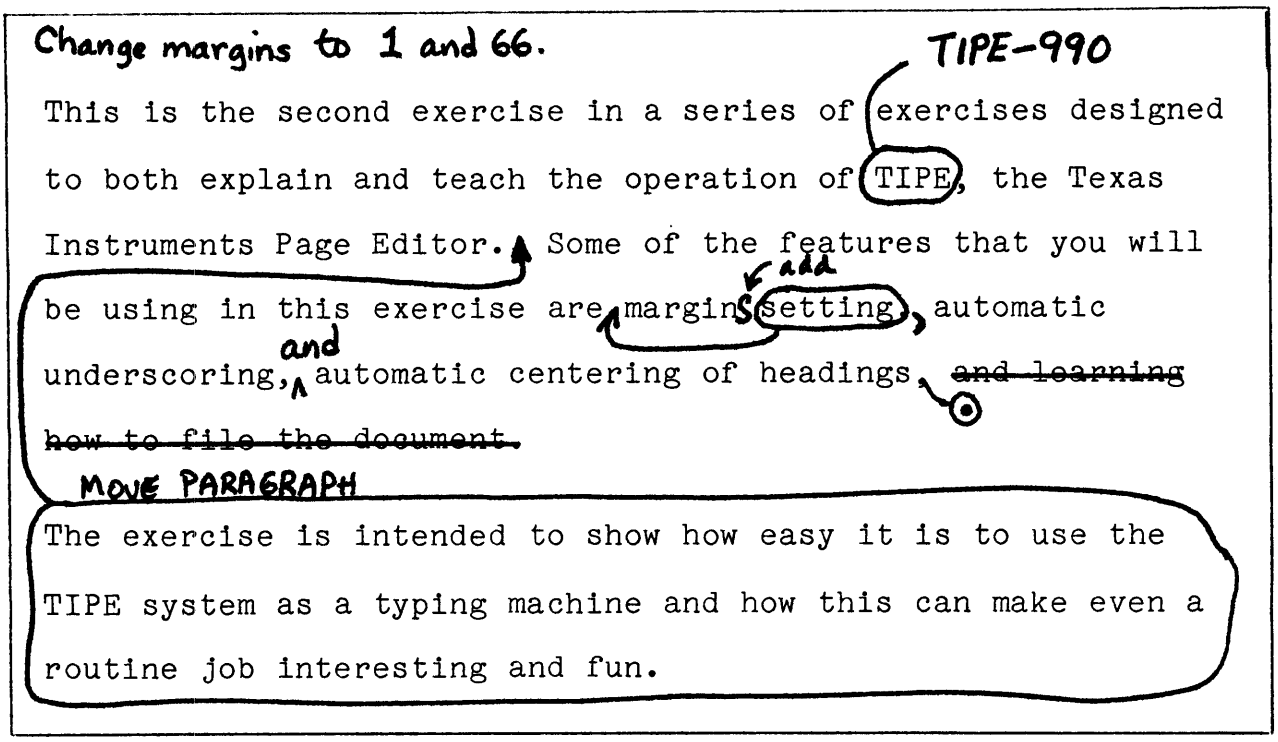
4.3.4 Reformat Function.

The Reformat function is used to change the format of a selected block of text (one or more paragraphs) by allowing the user to change the left and right margin settings. The block is marked in the same manner as the other select block functions. After specifying the Reformat function (by keying R and pressing RETURN), the cursor moves to the Ruler line where the user is requested to enter the new margins/tabs. After the RETURN key is pressed to accept the changes, the selected block is reformatted and the cursor is positioned after the block.

4.4 SELECT BLOCK EXERCISE

The following exercise provides practice with the functions described in the previous paragraphs. In this exercise, the SELECT BLOCK key is used to mark areas of text and then the user performs one or more of the SELECT BLOCK functions.

The following example is part of Exercise 2 which has been hand-marked to show what is to be changed during text editing of the document. The exercise is double-spaced to make it easier to see the revisions. the step by step procedure in Table 4-1 describes how to perform the functions required to change the margins and move portions of the text.



4.4.1 Select Block Exercise Procedure.

Perform the procedure in Table 4-1 to make the changes to the document that are illustrated in the previous exercise example.

Table 4-1 Text Editing Block Select Procedure

STEP	PROCEDURE
1.	Key TIPE and press the RETURN key. The system displays the TIPE-990 menu.
2.	Key E for Edit operations and press the RETURN key. The following is displayed: EDIT DOCUMENT TYPE DOCUMENT NAME TO BE EDITED:
3.	Key the assigned synonym, a period, and EX2, and press RETURN. Exercise 2 is displayed on the screen.
	REFORMAT TO CHANGE MARGINS
4.	The exercise on the screen was created with margins of 10 and 70; it is to be changed to margins of 1 and 66.

The cursor should be at line 1 and column 10 of the exercise.

5. Press the SELECT BLOCK key. A graphic character is displayed in front of the first character. A message is displayed requesting the cursor to be moved to the end of the block.

6. Press HOME and then press HOME again. The cursor moves to the last line of the document. Press HOME then the Right Arrow key to move the cursor beyond the end of the line.

7. Press SELECT BLOCK to mark the end of the block (The entire document has been marked). The marked block is displayed in reverse intensity and the Select Block functions message is displayed on line 24.

8. Press the R key to specify reformat and press RETURN. The cursor moves to the ruler line and new margins and tabs can be entered.

9. Move the cursor to postion 1 and key an L on the ruler line, then move the cursor to position 66 and key an R and press RETURN. The cursor moves to the MODE:A prompt.

10. Press RETURN to remain in Adjust mode. The exercise is reformatted to the new margins of 1 and 66, and the cursor is on the last line of the reformatted exercise.

11. Press the HOME key twice to move the cursor to the beginning of the exercise.

MOVE A PARAGRAPH

12. Move the cursor to the first character position of the second paragraph and press the SELECT BLOCK key. The graphic character representing a block marker is displayed.

13. Move the cursor to the last line of the paragraph and press HOME then the Right Arrow key to move the cursor beyond the end of the line. Press SELECT BLOCK a second time. The block is displayed in reverse intensity and the select block functions message is displayed.

14. Key an M and press RETURN to enable the Move function. The selected block, the second paragraph, is moved from

the screen to a storage area.

15. Read the following paragraph, then perform the procedure in Table 4-2 to recall the paragraph to the screen and to make the other changes.

4.5 RECALL BLOCK FUNCTIONS

The RECALL BLOCK key is used to recall text blocks or entire documents to the display screen. The text blocks or documents recalled can be material that has been moved or stored via a select block operation or can be any TIPE document that has been filed. The recalled material is transferred to the display screen and inserted at the position of the cursor. If the recalled material is placed within a paragraph (i.e., if the cursor is positioned in a paragraph when RECALL BLOCK key is pressed) the recalled block conforms to the margins of the paragraph, unless the recalled block contains a Return graphic. The Return must be deleted to adjust the recalled text to the existing margins. If the cursor is outside a paragraph when the RECALL BLOCK key is pressed, the recalled material is displayed with the same margins as when it was created or filed.

4.5.1 Recall Block Exercise Procedure.

Table 4-2 details the procedure required to recall the block moved in the preceding exercise and to perform the other text editing changes. At the end of the procedure in Table 4-2, when it is time to file the document, the document is renamed. The process of renaming the document creates a new document; both the old document (not including the revisions) and the new document (including the revisions entered in Table 4-1 and the revisions in Table 4-2) are stored in the system with different names.

Table 4-2 Recall Operation and Text Correction Procedure

STEP	PROCEDURE
RECALL BLOCK OPERATION	
1.	Move the cursor to the position where the recalled paragraph is to be inserted. The cursor is located at the first character of the second sentence.

2. Press the RECALL BLOCK function key. A message is displayed requesting entry of the file name. A file name is keyed only to recall stored blocks; a file name is not used to recall a block that has been moved.

3. Press the RETURN key (or the TAB SKIP key if a file name is displayed) to recall the moved block. The block moved in step 14 of Table 4-1 is recalled to the display screen and inserted between the first and second sentences (the position of the cursor when RECALL BLOCK was pressed). The moved block included a Return at the end of the paragraph. The Return graphic is deleted in the next step to merge the sentences and complete the Recall operation.

4. Ensure that the cursor is at the Return graphic at the end of the recalled block and press the DEL CHAR key.

OTHER TEXT EDITING CHANGES

5. Perform the other text editing changes to the first paragraph of the exercise on the screen. Change TIPE to TIPE-990 by using the CHAR INS key to enter spaces for the additional characters then key the spaces. Change "margin setting" to "setting margins" by overstriking the text on the screen. Use the CHAR INS key to insert one additional space for the extra character. Add the word "and" prior to "automatic centering" and a period after "headings". Perform step 6 to delete the remainder of the sentence.

6. The cursor should be positioned at the first character of the material to be deleted. Press the SELECT BLOCK key, move the cursor to the end of the sentence and press SELECT BLOCK a second time. The select block functions message is displayed.

7. Press the D key and the RETURN key to delete the marked block. The end of the sentence is deleted and disappears from the screen.

RENAME DOCUMENT OPERATION

8. Press the SHOW MENU (CMD) key, then key F and press the RETURN key. The following message is displayed:

   SAVE DOCUMENT IN FILE NAME: (syn.EX2)

9. Position the cursor (use the Right Arrow key) over the E of EX2, press the INS CHAR key one time, key a T and

press RETURN. The name of the revised document is (syn).TEX2, representing Text Editing of Exercise 2. A message is displayed asking if this document should be replaced if it already exists. The default is Yes. Any time that a document is revised and filed with a different name, the replace message should be answered with an N (NO). This prevents the accidental overwriting of an existing file. If an edited document is to be filed with the same name, the default of YES is accepted for the replace message.

10. Key N in response to the message and then Press the RETURN key. If the document is not filed with the new file name, it is because that name already exists. If this happens, another file name can be entered. If the file document operation is successful, the TIPE-990 menu is redisplayed. Read the next paragraph (Insert Functions) and perform more text editing procedures as required. Any time that it is necessary to quit editing and return to the operating system menu, key Q and press RETURN.

4.6 INSERT FUNCTIONS

The INSERT key on the top row of the keyboard is used to insert new text within existing text. The position of the cursor marks the spot where text insertion is to begin. When INSERT is pressed, the character under the cursor and everything to the right of the cursor is moved down one line. This creates blank space for the entry of whatever is to be keyed. Word wrapping occurs as the text is keyed, and additional blank space (line-by-line) is available for continued entry without affecting the following text. After keying the inserted text, the INSERT key is pressed again to turn off the insert function and to automatically adjust the following text.

Insert mode is enabled automatically when incorrect text is being corrected by overstriking and the right margin is reached. The operation from that point is the same as if the INSERT key had been pressed to enable the Insert mode. This automatic activation of the Insert mode prevents a word wrap from deleting text that should not be deleted.

The next exercise requires the operator to perform both Select Block functions and Insert functions. When the exercise is displayed on the screen, it also includes the first paragraph

that was revised in Tables 4-1 and 4-2. The first paragraph is not being revised again, therefore it is not shown as part of the exercise. Also, the last paragraph of the exercise is not being changed, so it is not included in the boxed-in material. The margins were changed in the preceding exercise procedure so the text is slightly wider on the screen than in the following exercise. The exercise is also double spaced to make it easier to read the hand-marked revisions.

TIPE FEATURES

We will be going over the basics of setting margins, entering codes for line spacing changes, automatic underscoring and some of the other most often used functions. As the text is keyed, it is displayed on the screen. When the right margin is reached, the cursor moves to the next line. Unfinished words that are too long to fit on the line are moved to the next line. This is called word wrapping.

Insert sentence

Normally, during creation or editing operations, the cursor is within text on the screen

CURSOR CONTROL

One of the most important features that makes doing a job easier is the way that you control movement of the cursor (the cursor is that bright rectangle on the display screen). The cursor moves whenever a character is keyed; it always shows the place where the next keyed character is going to be displayed.

The cursor can be moved to any desired location within the text by using the cursor control keys. The cursor control keys are located in the block of keys at the left side of the keyboard. The HOME key is also used for cursor control.

(A) Recall moved paragraph (see next page).

When the HOME key is used, followed by an arrow key, the cursor moves very quickly in the direction of the arrow. HOME and the Up Arrow move the cursor to the first line of the display screen, or the first line of the previous display screen (if the cursor was already on line 1). The HOME key works in combination with the Down Arrow key to move the cursor to the last line. This is called vertical block scrolling.

Reformat to 10 & 56

add → NOTE

When the HOME key is pressed, followed by pressing the Right and/or Left Arrow keys, the cursor moves right and left across large blocks of text. If the cursor is at the right margin, the HOME then the Left Arrow key can be used to backspace the cursor immediately to the left margin. This is called horizontal block scrolling.

Sometimes the arrow keys are used with the REPEAT key to move the cursor quickly, but not so quickly that you cannot see the cursor move. This sequence is used to move the cursor to a certain line (vertical scrolling) or to a certain character position within a line (horizontal scrolling).

MOVE THIS TO (A) - See previous page.

4.6.1 Insert And Block Select Exercise Procedure. The procedure in Table 4-3 includes step-by-step instructions to enter the revisions from the preceding exercise.

Table 4-3 Text Editing Insert/Block Select Procedure

STEP PROCEDURE

1. The TIPE-990 menu should be displayed on the display screen. If it is not, key TIPE and press RETURN.

2. Key the E command to specify edit operations and press RETURN. The enter document name request is displayed.

3. If the displayed name is (syn).TEX2, press the RETURN key. If not, then key that name or the name used when the document was filed in Table 4-2 and press the RETURN key. The exercise is displayed on the screen.

INSERT FUNCTION

4. Move the cursor to the area of the first change and press the INSERT key. The cursor should be on the first character of the word "The" when the INSERT key is pressed. The following message is displayed. "Type text to be inserted and finish by pressing INSERT." The characters to the right of the cursor, including the character where the cursor is positioned, are moved to the next line. The cursor remains on the line that now has extra space for text insertion.

5. Key the sentence to be inserted; when entry is complete, press the INSERT key to turn off the Insert function. Notice that as material is keyed, word wrapping is automatic and additional blank space is available for continued entry. When the INSERT key is pressed again, the function is terminated, and the text automatically adjusts to fill the blank space. A message is displayed at the lower left of the screen stating "Insert mode terminated".

REFORMAT FUNCTION

NOTE

The next text editing function is the reformatting of the paragraph to turn it into a note. Notes are normally indented on the left and on the right to separate the note from the preceding and following text.

6. Position the cursor on the first character of the paragraph (on the W of the word "When") and press the INSERT key. The line of text moves down one line.

7. Press the ENTER key, key a C, then key NOTE and press the RETURN key. The word "NOTE" is centered within the margins, the following text has moved down another line.

8. Press the INSERT key again to turn off the Insert function, then move the cursor (which is on the W of When) up one line to position it on the same line as the word "NOTE".

9. Press the SELECT BLOCK key. A graphic is inserted marking that line as the beginning of the block.

10. Move the cursor to the last line of the note, press the HOME key and then the Right Arrow key to move the cursor to the end of the line. The cursor is positioned just beyond the graphic Return symbol.

11. Press the SELECT BLOCK key to mark the end of the block, then press the R key for the Reformat function and the RETURN key. The cursor is on the ruler line and TIPE is waiting for new margins to be entered.

12. Move the cursor to position 10 and key an L for the reformatted left margin. Then move the cursor to position 56, key an R for the new right margin, and press RETURN. The cursor moves to the MODE:A prompt.

13. Press the RETURN key to remain in Adjust mode. The paragraph is reformatted (is indented 10 character positions from both the left and the right margins. The word NOTE is centered above the reformatted text.

MOVE AND RECALL FUNCTION

14. Position the cursor at the first character of the paragraph to be moved and press SELECT BLOCK. Move the cursor to the end of the paragraph and press SELECT BLOCK again. The cursor moves to the select block functions message.

15. Key M for move and press RETURN. The selected block, marked by the select block graphic characters, is removed from the display screen.

16. Move the cursor to the place where the text is to be

recalled and press the RECALL BLOCK key. The following is displayed:

Type name of the file the text is in:

17. If a file name is displayed with the previous message (which happens after a document has been stored via a Select Block Store function) press the TAB SKIP key to delete the name, or if no name is displayed, press RETURN. The block is recalled and inserted where the cursor was positioned when RECALL BLOCK was pressed.

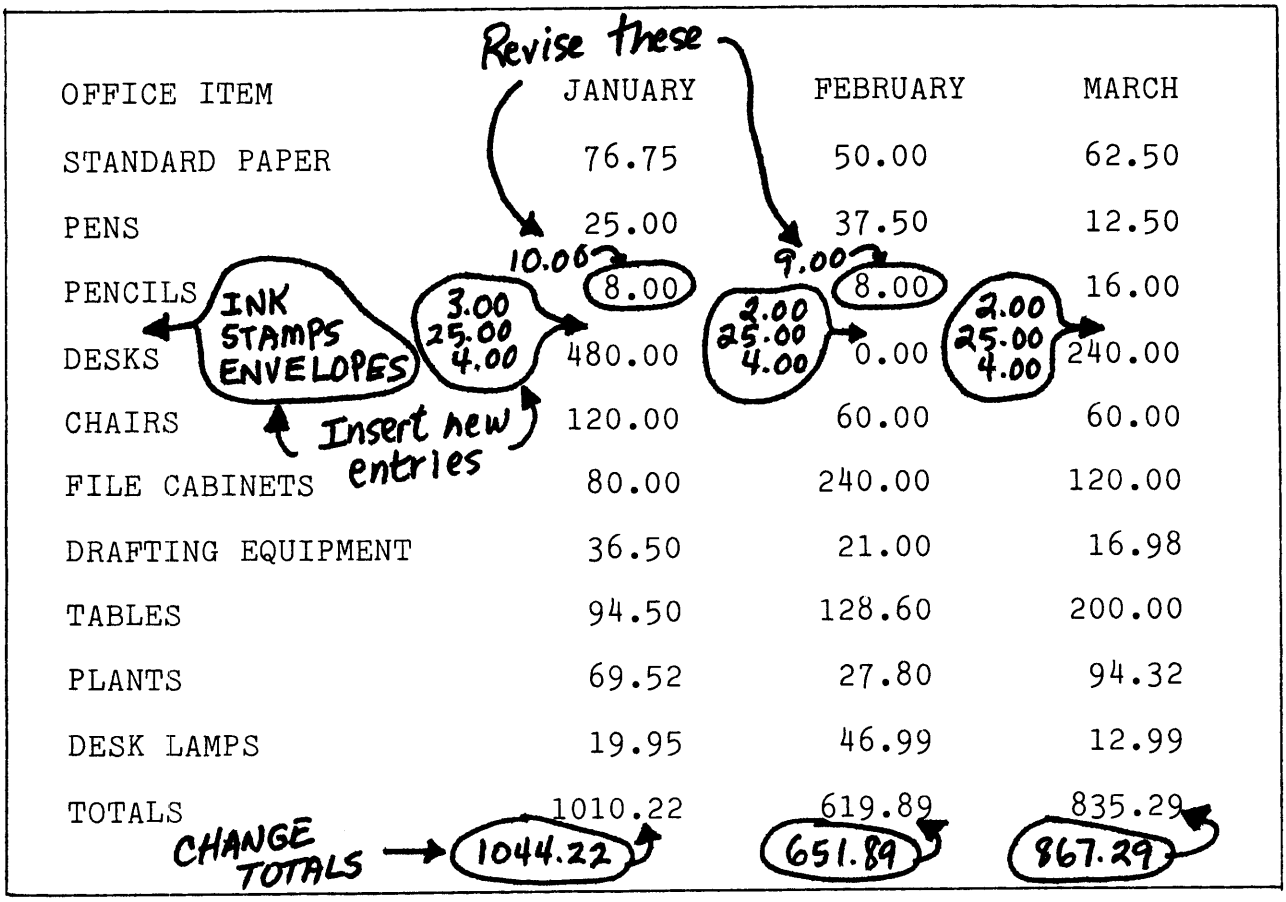
18. Press the SHOW MENU (CMD) key, then key F and press RETURN to file the document. The following is displayed:

SAVE DOCUMENT IN FILE NAME: (syn).TEX2

19. Change the name of the document to (syn).TEX3 (for Text Editing Exercise 3) and press the RETURN key once. A message, asking if the document should be replaced if it exists, is displayed. Key N and press RETURN. The TIPE-990 menu is displayed. If it is necessary to stop at this time, key Q to quit the Create/Edit operations, otherwise continue with the next exercise.

4.7 TEXT EDITING FIXED MODE DOCUMENTS

Text editing of a fixed mode document is different than editing a document created in adjust mode. The example that was created in Section 2 is duplicated below with corrections hand-marked. It is double spaced to make it easier to see the revisions.



Follow the procedure in Table 4-4 to text edit the material from the previous exercise. In Table 4-4, the document is filed with a new name and can be printed by performing a print operation (refer to the print operation information in Section 3 of this manual).

Table 4-4 Fixed Mode Text Editing Procedure

STEP	PROCEDURE
1.	The TIPE-990 menu should be displayed on the display screen. If it is not, key TIPE and press RETURN.
2.	Key the E command to specify edit operations and press RETURN. The enter document name request is displayed.
3.	Key the file name (syn).EX4, and press the RETURN key. The exercise is displayed on the screen.

4. Move the cursor (use the arrow keys) to the first change. Overstrike the incorrect entry with the revised entry.

5. Press the TAB SKIP key to move to the next field.

6. Move the cursor to the next two characters to be changed and key the revised characters. After the last entry on the line, press either TAB SKIP or RETURN to move to the next line (starting with "DESKS").

7. Three lines are to be inserted at this point. Press the INSERT key one time. An extra line is available for entry of the material to be added.

8. Key the first line to be inserted and press either the TAB SKIP key or RETURN at the end of the line. After the last entry, another line with decimal tabs and decimal points is available for entry.

9. Key the second and third lines being added. Notice that after each line is complete another line is available for entry.

10. Press the INSERT key to terminate the insert function. The extra line after the third line entered, containing only Ds and decimal points, is erased.

11. Move the cursor to the totals line and key the revised totals. File the revised document by pressing the SHOW MENU key, key F, press RETURN and change the name to (syn).TEX4 and press RETURN once, key N (to the replace message) and press RETURN again. The TIPE-990 menu is redisplayed.

12. Press the Q key then press the RETURN key to quit the create/edit operations. The operating system menu is displayed.

This completes the exercise and reference material for this section of the manual. Other text editing operations can be performed as desired to become more familiar with the features of TIPE. The next section describes how to create and print form letters.

5

Form Letters

5.1 GENERAL INFORMATION

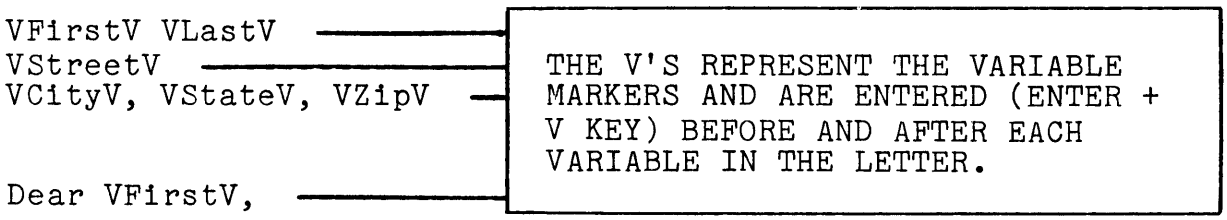
Form letters are letters that have the same basic text and format for several recipients but are personalized in such a way that it appears the letter has been hand-typed just for one person. The problem with most form letters is that they look like form letters. An example of an obvious form letter is one that has two different type styles, one for the name and another for the information in the letter.

This section on form letters describes the TIPE requirements for the creation and printing of form letters. In addition to the reference material, this section contains exercise procedures to take the user through the creation and printing of form letters. The following are required for the production of form letters with TIPE:

* A letter body or template with coded variables
* A descriptor file
* A data file

5.1.1 Letter Template.

Form letters require the preparation of three separate but related items before form letter printing can occur. The letter template should be created first, with variables inserted wherever the information can vary (name, address, etc.). Figure 5-1 is an illustration of a form letter template (letter body) where the names of variables have been entered, rather than names and addresses. The letter V that precedes and follows each variable is the code that identifies the enclosed item as a variable. The code is not printed when the letter is printed but is displayed on the screen when the ENTER key is pressed followed by a V. The variable name (the item between the V's) is the name that is used when creating the descriptor file.



We are pleased that you had an opportunity to attend the product announcement where our new Model VModelV was announced. We feel that the capabilities of the Model VModelV provide answers to many of the problems that the modern office is facing.

In VMonthV we are conducting demonstrations of the Model VModelV in your area. This is to introduce the product on a functional level, and if you are interested in attending the demonstration, please give me a call at 512/999-9999. Again, thank you for your interest.

John Smith
Marketing Representative

Figure 5-1. Sample Form Letter Including Variable Names

5.1.2 Descriptor File.

The descriptor file is a list of all the variable names that are included in a particular letter and is used to describe the column positions (starting and ending) where those variables are included in the data file. Figure 5-3 is a sample descriptor file for the form letter in Figure 5-1. All of the variable names are included, and the numbers to the right of the names are the starting and ending column positions of each variable in the data file. When the descriptor file is keyed, the variable name is the text up to the first space (TIPE allows a variable name to be up to 24 characters long with no intervening spaces). The starting column postion must be keyed starting in column 37 and the ending column position must be keyed starting in column 47. The descriptor file can include up to 100 variables.

Descriptor files are created by using the TIPE Create (C) operation. Before a descriptor file can be used for form letter generation, it must be printed to a file. The name used as the file name for the print operation is the name that is keyed when the print program asks for the name of the descriptor file.

There is more information describing form letter requirements later in this section. Figure 5-2 illustrates the process of producing a form letter.

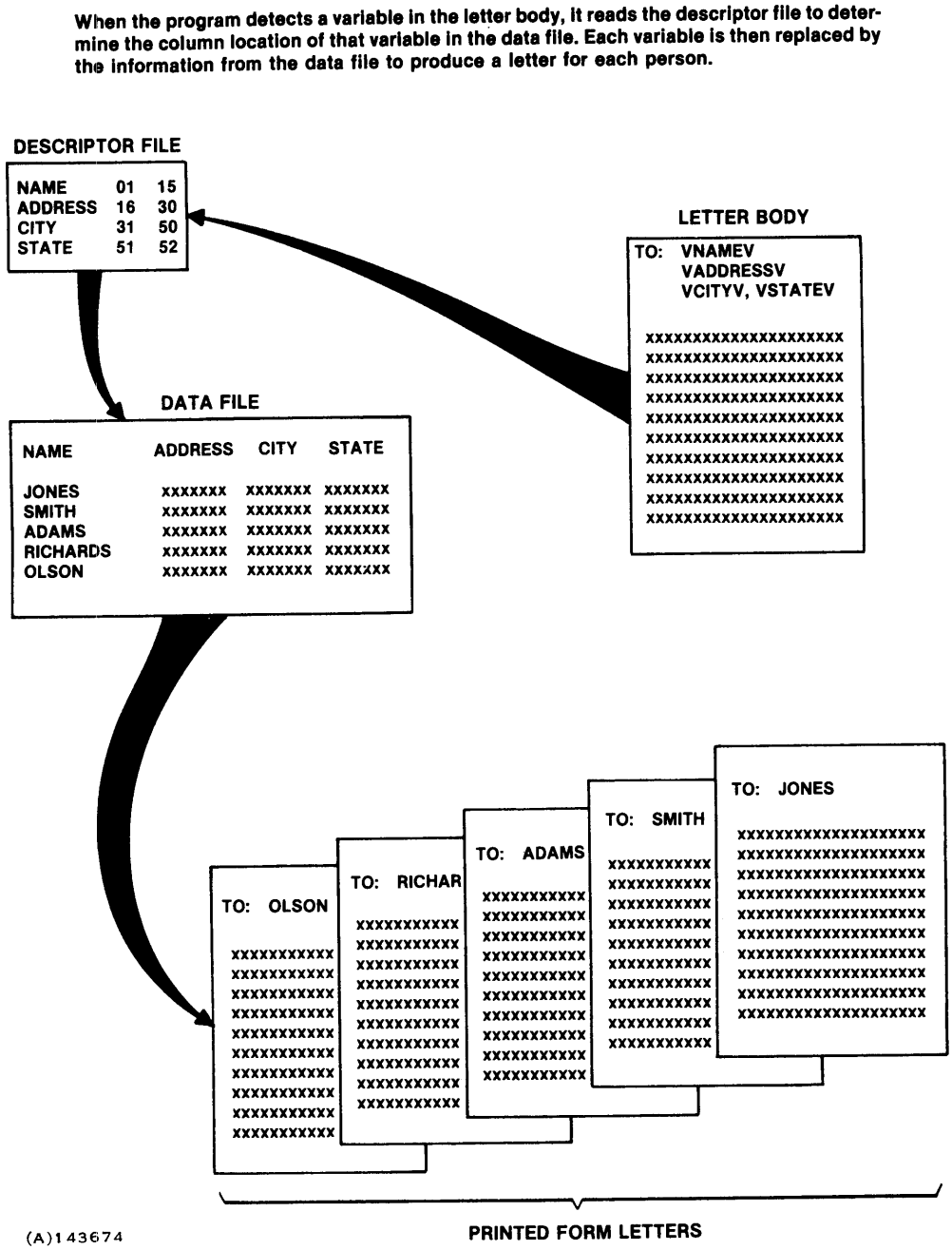


Figure 5-2. The Form Letter Process

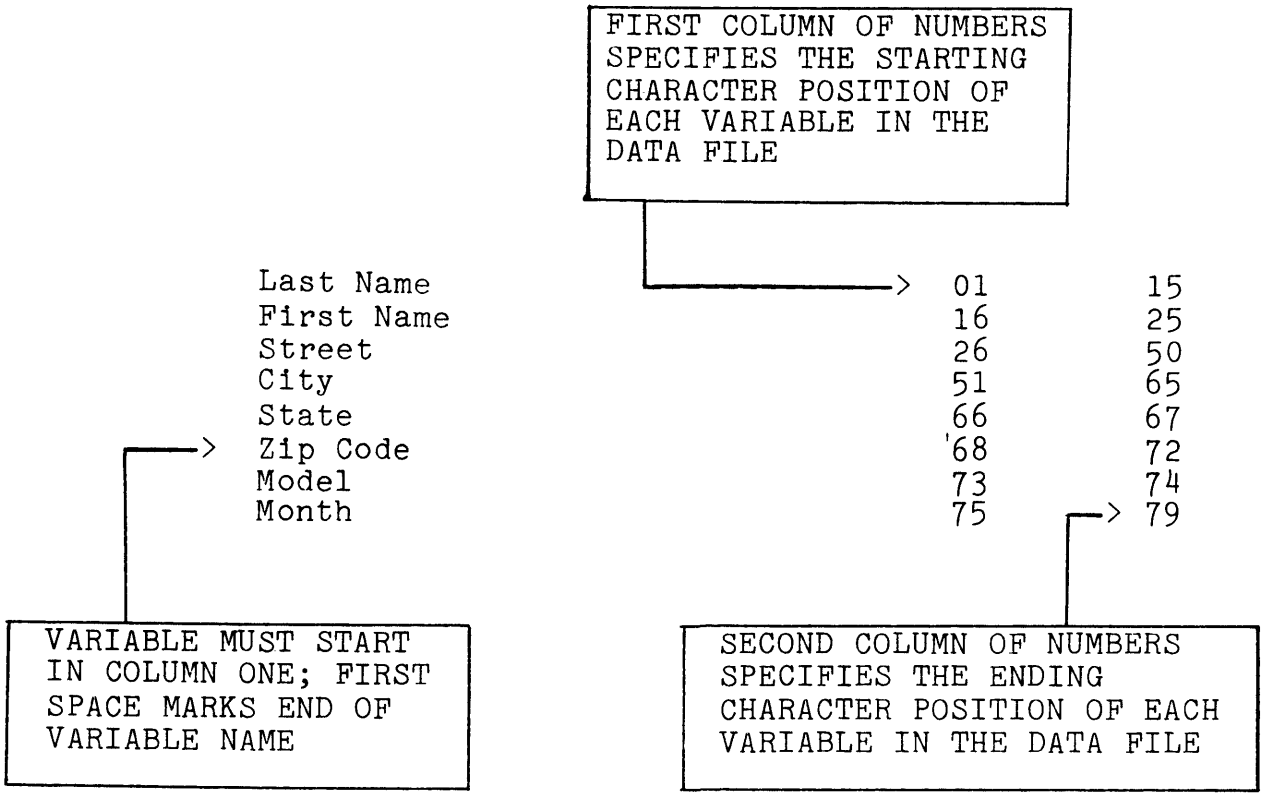


Figure 5-3. Sample Descriptor File For Form Letters

5.1.3 Data File.

The data file is the list of names, addresses, and other items that take the place of the coded variables when form letters are printed. The location of the items in the data file must correspond to the column positions that are specified in the descriptor file. Figure 5-4 illustrates a sample data file for the form letter (Figure 5-1) and the descriptor file (Figure 5-3). Notice that the last name is entered first. This is only a suggested method, but whatever organization is used, the data file information must start in the columns specified in the descriptor file (and cannot go beyond the ending column). The column positions in the illustration do not correspond to the column positions that are to be used when actually creating the data file. The exercise in Table 5-3 describes how to enter the data in the proper columns.

A data file is similar to a descriptor file in that after it is created and filed, it must be printed to a file before being used for form letter generation. There is more information about this requirement later in this section.

```
LAST      FIRST
NAME      NAME          STREET                CITY          ZIP CODE
  |         |             |                     |               |      MONTH
  |         |             |                     |               |       |
Johnson   Ruth      4567 Winding Rd.      Nashville     TN6666699April
Neilson   Wallace   405 Peachtree St.     Atlanta       GA3207499April
Swenson   Sven      6457 Capitol Ave. N.  St. Paul      MN5545596May
                                                          |       |
                                                        STATE   MODEL
```

Figure 5-4. Sample Data File For Form Leters

5.2 FORM LETTER EXERCISE

The form letter exercise involves the creation of the letter template, creation of the descriptor file, and creation of the data file. After these items are created and filed, the user specifies a print operation for the descriptor file, the data file, and then can specify a print operation for the form letter itself (which accesses the descriptor file and the data file to merge the variables with the letter body).

All of these items are created by using the C command and then by keying the text that comprises the document or file. Some additional considerations are necessary for the descriptor file and the data file. Because these files require the data to be entered in particular columns, tab settings marking the starting character positions are used.

5.2.1 Create The Letter.

The letter for the exercise is the same as the one in Figure 5-1 also included here (in the boxed-in area) to make it easier to key when following the procedure in Table 5-1.

FORM LETTER EXERCISE - CREATE THE LETTER

VFirstV VLastV
VStreetV
VCityV, VStateV VZipV

Dear VFirstV,

We are pleased that you had an opportunity to attend the product announcement where our new Model VModelV was announced. We feel that the capabilities of the Model VModelV provide answers to many of the problems that the modern office is facing.

In VMonthV we are conducting demonstrations of the Model VModelV in your area. This is to introduce the product on a functional level, and if you are interested in attending the demonstration, please give me a call at 512/999-9999. Again, thank you for your interest.

John Smith
Marketing Representative

Table 5-1 Creating The Letter Procedure

STEP	PROCEDURE
1.	Key the command TIPE and press RETURN. The TIPE-990 menu is displayed.
2.	Key C (to create) and press RETURN. TIPE asks for the name of the document to be created.
3.	Key the assigned synonym, a period, and the name FORMLET (representing form letter) and press RETURN. Press RETURN again in response to the LINES PER PAGE prompt (specifying 55 lines). The display screen changes to the text entry format.
4.	The inside address contains variables that, when printed, are replaced with the names and addresses of the persons to receive the letters. Variables are keyed by performing the following procedure.

a. Press the ENTER key, key a V, key the variable "First", press the ENTER key again and then key another V. The Vs are displayed in reverse intensity.

b. Press the space bar once to enter a space, then perform the same sequence to key the next variable (press ENTER, key V, key variable, press ENTER, and key V).

c. Press the RETURN key to move to the next line.

5. Key "Street" in the same manner, enclosing the variable name within the variable markers (reverse itensity Vs) and press RETURN to move to the next line.

6. Enclose the "City", "State", and "Zip" variables within the variable markers, keying the spaces and commas where necessary, and press RETURN three times to move the cursor to the salutation.

7. Key the salutation, using variable markers where necessary, and press RETURN twice and start keying the letter. When a variable is reached (i.e., Model, Month) enclose the variable within the Vs. After each paragraph, press RETURN to end the line, and press RETURN again to add a blank line.

8. After keying the closing (remember to press the RETURN key after these partial lines) press the SHOW MENU (CMD) key. The TIPE-990 menu is redisplayed with a message showing the document name (syn).FORMLET.

9. Key the command F to specify the file operation and press RETURN. The following is displayed:

```
FILE DOCUMENT
SAVE DOCUMENT IN FILENAME:  (syn).FORMLET
```

10. Press the RETURN key to file the document. The TIPE-990 menu is displayed. The next step is to create the descriptor file; go to the next exercise.

5.2.2 Create The Descriptor File.

The descriptor file for the exercise is the same as the one in Figure 5-3, and is also included here (in the boxed-in-area) to make it easier to enter when following the procedure in Table 5-2.

FORM LETTER EXERCISE - CREATE THE DESCRIPTOR FILE

Last Name	01	15
First Name	16	25
Street	26	50
City	51	65
State	66	67
Zip Code	68	72
Model	73	74
Month	75	79

Table 5-2 Creating The Descriptor File Procedure

STEP PROCEDURE

1. The TIPE-990 menu should be displayed on the screen. Key the command C (create) and press RETURN. TIPE asks for the name of the document to be created, the message includes the name of the last document created or edited.

2. Key the assigned synonym, a period, and the name DESDOC (representing descriptor document) and press the TAB SKIP key. TAB SKIP is pressed instead of RETURN to skip any extra characters in the name. Press RETURN in response to the Lines Per Page prompt (specifying 55 lines). The display screen changes to the text entry format.

3. Press the RULER key. The cursor moves to the ruler line where tabs are to be entered. The margins remain the same for this exercise.

4. Use the Right Arrow key to move the cursor to position 37 and key a T, then move the cursor to position 47 and key another T. Press RETURN twice to move the cursor

back to line 1, column 1 of the display screen.

5. All the lines of the descriptor file are keyed in the same manner. Key the name of the variable, (e.g., Last Name), press the TAB SKIP key to move to column 37, key the starting column position, press TAB SKIP to move to column 47, key the ending column position, and press RETURN.

6. After all the information is keyed (Month is the last variable), including a Return at the end of each line, press the SHOW MENU key. The TIPE-990 menu is displayed with a message showing the name of the descriptor file.

7. Key the F (file) command to specify the file operation and press the RETURN key. The following is displayed:

```
FILE DOCUMENT
SAVE DOCUMENT IN FILENAME:  (syn).DESDOC
```

8. Press the RETURN key to file the descriptor document with the name (syn).DESDOC. The next step is to create the data file, so go to the next exercise (Table 5-3). The procedure to print the descriptor document to a file is detailed in Table 5-4.

5.2.3 Create The Data File.

The data file for the exercise is the same one as in Figure 5-4, and is also included here in the boxed-in area to make it easier to key when following the procedure in Table 5-3.

FORM LETTER EXERCISE - CREATING THE DATA FILE

```
Johnson  Ruth     4567 Winding Rd.      Nashville    TN6666699April
Neilson  Wallace  405 Peachtree St.     Atlanta      GA3207499April
Swenson  Sven     6457 Capitol Ave. N.  St. Paul     MN5545596May
```

Table 5-3 Creating The Data File Procedure

STEP	PROCEDURE
1.	The TIPE-990 menu should be displayed on the screen. Key the command C and press RETURN. TIPE asks for the name of the document to be created.
2.	Key the assigned synonym, a period, and the name DATADOC (representing data document) and press RETURN. Press RETURN again in response to the Lines Per Page prompt (specifying 55 lines). The display screen changes to the text entry format.
3.	Press the RULER key. The cursor moves to the ruler line where tabs are to be entered. The margins also require changing for creation of the data file.
4.	Press the DELETE LINE key to delete the old margin and tab settings. Key an L (left margin setting) at position 1. Use the Right Arrow key to move the cursor and press the T key to set tabs on the ruler line at the following positions. (These positions are the starting column positions, as specified in the descriptor file, for the variables.) 16, 26, 51, 66, 68, 73, and 75
5.	Move the cursor to position 80 and key an R to set the right margin, then press the RETURN key. Press the

RETURN key again to stay in Adjust mode. The cursor returns to line 1, column 1 and the information in the data file can be keyed.

6. Starting in character position 1, key the name "Johnson", and press the TAB SKIP key to move the cursor to column 16. Key "Ruth" and press the TAB SKIP key (the cursor moves to position 26). Key the street information and press TAB SKIP to go to position 51. Key the city, "Nashville", and press TAB SKIP to go to position 66. Key the state abbreviation (TN), the zip code (66666), the Model number (99), and the month (April), and press RETURN.

7. All the lines of the data file are keyed in the same manner. Key the name of the variable, then press the TAB SKIP key to move to the next column, key that item, etc. When each line is complete, press the RETURN key.

8. After keying the data file, press the SHOW MENU key to redisplay the TIPE-990 menu. Key F and press RETURN twice to file the data file with the name (syn).DATADOC. The next step is to print (syn).DATADOC to a file. Follow the procedure in Table 5-4 to print the data document to a file, and then the procedure in Table 5-5 to print the form letters.

5.2.4 Printing the Descriptor And Data Documents To A File.

The procedure for printing the descriptor document and the data document to files is detailed in Table 5-4. This procedure is necessary before the descriptor and data files can be used in the preparation of form letters.

Table 5-4 Printing The Descriptor/Data Documents Procedure

STEP	PROCEDURE
1.	The TIPE-990 menu should be displayed on the screen. Key the command Q and press RETURN. The operating system menu is displayed.
2.	Key the command TIPP and press RETURN. The following is displayed on the screen:

```
PRINT TIPE-990 DOCUMENT

DOCUMENT FILE NAME:
CHANGE PRINT PARM (Y OR N): NO
ATTENDED PRINTER (Y OR N): YES
```

PRINT DESCRIPTOR DOCUMENT

3. Key the name of the descriptor document, (syn).DESDOC, and press RETURN. The cursor moves to the CHANGE PRINT PARM instruction.

4. Key a Y and press RETURN to specify that the print parameters are to be changed. Press RETURN again to accept the default of attended printer. The print parameters are displayed on the screen.

NOTE

The parameters marked with an asterisk (the asterisk is not displayed) require change in this procedure. The changes are included in the following list.

```
                TIPE-990 PRINT DOCUMENT

                          DOCUMENT NAME :  (syn).DESDOC
                 * PRINTER OR FILE NAME :  (syn).DESFILE
   * OUTPUT FORMAT (810, LQP OR TEXT) :  TEXT
REPLACE EXISTING OUTPUT FILE (Y OR N) :  N
               FORM LETTERS (Y OR N) :  N
                STARTING PAGE NUMBER :  1
                  ENDING PAGE NUMBER :  ALL
      * RIGHT JUSTIFICATION (Y OR N) :  N
* LEFT MARGIN DISPLACEMENT (0 TO 99) :  0
      LINE NUMBER TO BEGIN PRINTING :  1
           LINES PER PAGE (1 TO 99) :  55
                     NUMBER OF COPIES :  1
  SHEET FEED (SINGLE OR CONTINUOUS) :  C
              PAGE NUMBERS (Y OR N) :  N
                              PITCH :  12
          PAPER LENGTH (IN LINES) :  66
```

NOTE

The print parameters that require change are the PRINTER OR FILE NAME, OUTPUT FORMAT, RIGHT JUSTIFICATION and the LEFT MARGIN DISPLACEMENT parameters. All of the other parameters are acceptable for the printing operation.

5. The cursor is at the PRINTER OR FILE NAME parameter. Key the file name (syn).DESFILE (meaning descriptor file) and press RETURN. The cursor moves to OUTPUT FORMAT.

6. Key TEXT and press RETURN. This ensures that the descriptor file is printed as is with no control codes. The cursor moves to REPLACE EXISTING OUTPUT FILE.

7. Press RETURN until the cursor is at RIGHT JUSTIFICATION; key N and press RETURN to print the descriptor document just as it is created. The cursor moves to LEFT MARGIN DISPLACEMENT.

8. Key 0 (zero) for the displacement value, and press the ENTER key to accept the defaults for the remaining parameters. At this point the descriptor document is printed to the file. The "Print In Progress" message is displayed until the print operation is completed.

PRINT DATA DOCUMENT

9. The procedure for printing the data document is nearly the same as printing the descriptor document. The only differences are the name that is keyed for printing and the name of the output file.

10. Perform steps 2 through 8 again, but use the name (syn).DATADOC for step 3, and the name (syn).DATAFILE for step 5. The parameter changes are the same as they were for the descriptor document print operation. When the parameters are displayed, DOCUMENT NAME is the name of the data document.

11. After both documents are printed to their respective files, the form letters can be printed.

5.2.5 Printing The Form Letters.

The printing of form letters is similar to the printing of any other document created by TIPE, but there are some differences. There is an additional display that requests entry of the descriptor file name and the data file name. When form letters are printed, a letter is printed for each line in the data file. If the data file includes 500 lines of information, 500 letters are printed. The exercises just completed included three lines of information in the data file, so three form letters are to be printed.

The procedure to be followed for printing the form letters is detailed in Table 5-5. For the purpose of this exercise, the default values, except for the printer name, are accepted for the operation. Later, the print parameters can be changed as desired to determine what affect the changes have on the printing of form letters.

Table 5-5 Printing The Form Letters Procedure

STEP	PROCEDURE
1.	The operating system menu should be displayed. Key the command TIPP and press RETURN. The following is displayed on the screen: PRINT TIPE-990 DOCUMENT DOCUMENT FILE NAME: CHANGE PRINT PARM (Y OR N): NO ATTENDED PRINTER (Y OR N): YES
2.	Key the name of the form letter template, (syn).FORMLET, and press RETURN. The cursor moves to the CHANGE PRINT PARM instruction.
3.	Key a Y and press RETURN to specify that the print parameters are to be changed. Press RETURN again to accept the default of attended printer.
	NOTE The following is displayed on the screen. Those parameters marked with an asterisk (the

asterisk is not displayed) require change for this procedure. The changes are included in the following parameters.

TIPE-990 PRINT DOCUMENT

```
                          DOCUMENT NAME :  (syn).FORMLET
                 * PRINTER OR FILE NAME :  LP02
    * OUTPUT FORMAT (810,LQP OR TEXT) :  LQP
REPLACE EXISTING OUTPUT FILE (Y OR N) :  N
                 * FORM LETTERS (Y OR N) :  Y
                    STARTING PAGE NUMBER :  1
                      ENDING PAGE NUMBER :  ALL
       * RIGHT JUSTIFICATION (Y OR N) :  N
  LEFT MARGIN DISPLACEMENT (0 TO 99) :  10
       LINE NUMBER TO BEGIN PRINTING :  1
            LINES PER PAGE (1 TO 99) :  55
                        NUMBER OF COPIES :  1
 SHEET FEED (SINGLE OR CONTINUOUS) :  C
                 PAGE NUMBERS (Y OR N) :  N
                                 PITCH :  12
             PAPER LENGTH (IN LINES) :  66
```

NOTE

The print parameters that require change are the PRINTER OR FILE NAME, OUTPUT FORMAT, FORM LETTERS, and RIGHT JUSTIFICATION parameters. All of the other parameters are acceptable for the printing of form letters. After this exercise, feel free to print the form letters again, with different parameters to see the effect this can have on the letters.

4. The cursor is at PRINTER OR FILE NAME; key the name of the letter quality printer (probably LP02, but it may be different at your site), and press RETURN.

5. Key LQP for OUTPUT FORMAT and press RETURN twice to move to the FORM LETTERS parameter. Key a Y then press RETURN.

6. Press RETURN until the cursor is at RIGHT JUSTIFICATION; key N to print the form letters with a ragged-right margin (to appear hand-typed) and press

RETURN.

7. Press the ENTER key to accept the default values for the remaining parameters. The following is displayed on the screen:

```
TIPE-990 PRINT DOCUMENT WITH FORM LETTER

DESCRIPTOR FILE NAME: _____________________
     DATA FILE NAME: _____________________
```

8. Key the name (syn).DESFILE (the descriptor file to be used with the form letter) and press RETURN.

9. Key the name (syn).DATAFILE (the data file to be used with the form letter) and press RETURN. The Print In Progress message is displayed on the screen during the print operation. As soon as this message disappears, the print operation is complete. Check the printer for the completed form letters.

5.2.6 Printed Form Letters.

The following letters are the form letters that are produced when the form letter in Figure 5-1, the descriptor file in Figure 5-3, and the data file in Figure 5-4, are merged during the form letter printing operation.

FORM LETTER 1

Ruth Johnson
4567 Winding Rd.
Nashville, TN, 66666

Dear Ruth,

We are pleased that you had an opportunity to attend the product announcement where our new Model 99 was announced. We feel that the capabilities of the Model 99 provide answers to many of the problems that the modern office is facing.

In April we are conducting demonstrations of the Model 99 in your area. This is to introduce the product on a functional level and if you are interested in attending the demonstration, please give me a call at 512/999-9999. Again, thank you for your interest.

John Smith
Marketing Representative

FORM LETTER 2

Wallace Neilson
405 Peachtree St.
Atlanta, GA, 32074

Dear Wallace,

We are pleased that you had an opportunity to attend the product announcement where our new Model 99 was announced. We feel that the capabilities of the Model 99 provide answers to many of the problems that the modern office is facing.

In April we are conducting demonstrations of the Model 99 in your area. This is to introduce the product on a functional level and if you are interested in attending the demonstration, please give me a call at 512/999-9999. Again, thank you for your interest.

John Smith
Marketing Representative

FORM LETTER 3

Sven Swenson
6457 Capitol Ave N.
St. Paul, MN, 55455

Dear Sven,

We are pleased that you had an opportunity to attend the product announcement where our new Model 96 was announced. We feel that the capabilities of the Model 96 provide answers to many of the problems that the modern office is facing.

In May we are conducting demonstrations of the Model 96 in your area. This is to introduce the product on a functional level, and if you are interested in attending the demonstration, please give me a call at 512/999-9999. Again, thank you for your interest.

John Smith
Marketing Representative

5.3 ENVELOPE PREPARATION FOR FORM LETTERS

Envelopes can be prepared for form letter mailing by using the same methods as used for creating and printing the form letters. The descriptor file and the data file already exist. All that is necessary to print the envelopes is the creation of an envelope template.

If additional information is required for the envelope, the descriptor file or the data file may have to be edited. The information to be added could be a conventional title of courtesy (for example, Mr., Ms., Mrs., Dr.). Figure 5-5 is a sample envelope template that includes a return address and the variables for names and addresses.

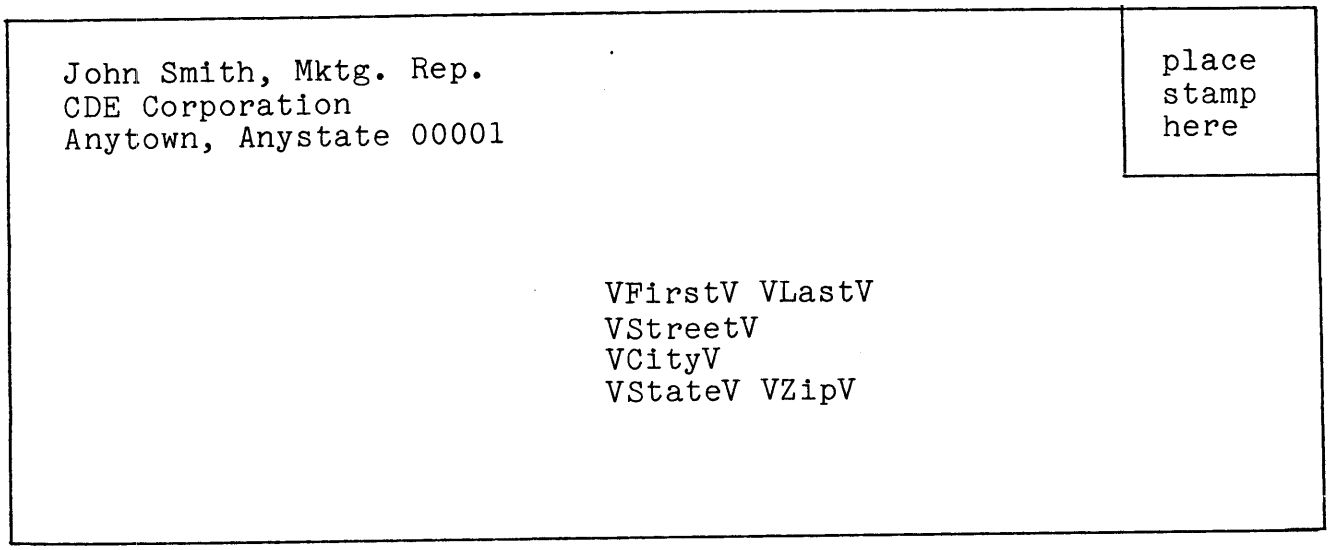


Figure 5-5. Envelope Template With Form Letter Variables

5.3.1 Creating The Envelope Template.

Creation of the envelope template or body is similar to creating the form letter body. The procedure in Table 5-6 details the steps to follow to create the envelope illustrated in Figure 5-4.

Table 5-6 Creating The Envelope Procedure

STEP	PROCEDURE
1.	Key the command TIPE and press RETURN. The TIPE-990 menu is displayed.
2.	Key C and press RETURN. TIPE asks for the name of the document to be created.
3.	Key the assigned synonym, a period, and the name ENVEL (representing envelope) and press RETURN. The LINES PER PAGE prompt (specifying 55 lines) is displayed.
4.	Key 20 and press RETURN. This means that no more than 20 lines of text are printed per page. The 20 lines includes any blank lines that are part of the document. The display screen changes to the text entry format.

5. Press the RULER key to move the cursor to the Ruler line (to enter a tab and change the right margin setting). Use the Right Arrow key to move the cursor to column 48 and key a T, then move to column 90, key an R, and press RETURN two times. The cursor moves back to line 1.

NOTE

Column 48 is approximately four inches from the left edge of a standard business envelope (at 12 pitch).

6. The first information to be keyed is the return address. Starting on line 1, column 1, key "John Smith, Mktg. Rep" and press RETURN. Key the next two lines, pressing the RETURN key after each line.

7. Press RETURN seven times then press the TAB SKIP key to move the cursor to column 48. This is where the name and address variables are to be keyed.

8. The address contains variables that when printed are replaced with the names and addresses of the persons to receive the letters. Variables are keyed by performing the following procedure. Press the ENTER key, key a V, type the variable "First", press the ENTER key again and then key another V. The Vs are displayed in reverse intensity. Press the space bar once to enter a space, then perform the same sequence to key the next variable (press ENTER, key V, key "Last", press ENTER, and key V). Press the RETURN key to move to the next line.

9. Press the TAB SKIP key to move to column 48, and Key "Street" in the same manner, enclosing the variable name within the variable markers (reverse itensity Vs) and press RETURN to move to the next line.

10. Again, press TAB SKIP, then key "City" in the same manner, enclosing it between variable markers. Press RETURN to move to the next line, and press TAB SKIP to move to column 48.

11. Enclose the State and Zip variables within the variable markers, keying the space where necessary, and press RETURN to terminate the line.

12. Press the SHOW MENU key and key F and press RETURN to initiate the filing operation. Press RETURN again to file the document with the name (syn).ENVEL. The envelopes can be printed by performing the procedure in Table 5-7.

Table 5-7 Printing The Envelopes Procedure

STEP	PROCEDURE
1.	The TIPE-990 menu should be displayed on the screen. Key the command Q and press RETURN. The operating system menu is displayed.
2.	Key the command TIPP and press RETURN. The following is displayed on the screen: PRINT TIPE-990 DOCUMENT DOCUMENT FILE NAME: CHANGE PRINT PARM (Y OR N): NO ATTENDED PRINTER (Y OR N): YES
3.	Key the name of the envelope template, (syn).ENVEL, and press RETURN. The cursor moves to the CHANGE PRINT PARM instruction.
4.	Key a Y and press RETURN to specify that the print parameters are to be changed. Press RETURN again to accept the default of attended printer.
	NOTE The following is displayed on the screen. Those parameters marked with an asterisk (the asterisk is not displayed), require change in this procedure. The changes are included in the following.

TIPE-990 PRINT DOCUMENT

```
                          DOCUMENT NAME :  (syn).ENVEL
                 * PRINTER OR FILE NAME :  LP02
    * OUTPUT FORMAT (810,LQP OR TEXT) :  LQP
REPLACE EXISTING OUTPUT FILE (Y OR N) :  N
                * FORM LETTERS (Y OR N) :  Y
                   STARTING PAGE NUMBER :  1
                     ENDING PAGE NUMBER :  ALL
       * RIGHT JUSTIFICATION (Y OR N) :  N
 * LEFT MARGIN DISPLACEMENT (0 TO 99) :  2
       LINE NUMBER TO BEGIN PRINTING :  1
            LINES PER PAGE (1 TO 99) :  20
                     NUMBER OF COPIES :  1
  * SHEET FEED (SINGLE OR CONTINUOUS) :  S
                PAGE NUMBERS (Y OR N) :  N
                                PITCH :  12
            * PAPER LENGTH (IN LINES) :  25
```

NOTE

The print parameters that require change are the PRINTER OR FILE NAME, FORM LETTERS, RIGHT JUSTIFICATION, LEFT MARGIN DISPLACEMENT, SHEET FEED, and PAPER LENGTH parameters. All the other parameters are acceptable for the printing of envelopes. After this exercise, feel free to print the envelopes again, with different parameters to see the effect the changes can have.

5. The cursor is at PRINTER OR FILE NAME; key the name of the letter quality printer (probably LP02, but it may be different at your site), and press RETURN.

NOTE

In some cases it may be desirable to print the envelopes to a file to make sure that all the the information is aligned properly before printing the envelopes.

6. Key LQP in response to OUTPUT FORMAT and press RETURN two times.

7. Key a Y for FORM LETTERS and press the RETURN key again.

8. Press RETURN until the cursor is at RIGHT JUSTIFICATION; key N to print the envelopes with a ragged-right margin and press RETURN.

9. Key 2 for the LEFT MARGIN DISPLACEMENT and press TAB SKIP to delete the 0 and move the cursor to the next parameter.

10. Press RETURN three times then change the SHEET FEED parameter to S and press RETURN three times to move the cursor to the PAPER LENGTH parameter and change it to 25.

11. Press the ENTER key. The following is displayed on the screen:

    TIPE-990 PRINT DOCUMENT WITH FORM LETTER

    DESCRIPTOR FILE NAME: _____
    DATA FILE NAME: _____

12. Make sure the printer is ready with an envelope inserted (the top edge of the envelope should be slightly above the printhead/ribbon). Key the name (syn).DESFILE and press RETURN.

13. Key the name (syn).DATAFILE and press RETURN. The "Print In Progress" message is displayed on the screen during the print operation. After the first envelope is printed, a message is displayed, asking that the printer be readied and stating "press RETURN to continue".

14. Insert another envelope, and press RETURN. This step is required for each envelope, and when the three envelopes have been printed, the Print In Progress message is replaced by the operating system menu.

This completes the reference material and the exercises for Section 5. Based on the information is this section, you should now be familiar with the use of variables in form letters, and the steps required to produce form letters. Proceed to the next section to learn about some special application and formatting features of TIPE.

6

Special Applications

6.1 GENERAL INFORMATION

This section describes features of TIPE that are used to affect the appearance or format of the document when it is printed. Some of the key sequences that affect the format are described in Section 2 (automatic underscoring, variable line spacing, etc.). The features described in this section include the following:

* Display Screen Appearance
* Subscripts and Superscripts
* Block Protect
* Emphasis (Bold Printing)
* Forced Page Break
* Required Spaces and Hyphens
* Document Assembly

6.2 DISPLAY SCREEN APPEARANCE

The features that require the ENTER key and another key to be used in sequence result in changes to how items are displayed on the screen. All the codes, representing formatting changes, are entered by pressing the ENTER key and another key; some of these codes were described in earlier sections of this manual. When a code is entered, it is displayed in reverse intensity (low intensity if the other characters are high intensity) where it is entered. Characters to the right of the entered code are shifted to the right. During some operations, especially during Fixed mode entry, it is difficult to determine how the text will look when it is printed. The PRINT key can be used in these situations to temporarily remove all the code and graphic characters from the display screen. The PRINT or RETURN key is

pressed to redisplay those characters and resume create or edit operations.

Another function key that can be used to change the appearance of the displayed text and code characters is the CHANGE INT (Change Intensity) key. When this key is pressed, all low intensity characters change to high intensity (except for the graphic Return symbol and tabs, which are always displayed in low intensity), and vice versa. This feature makes it easier to locate code characters within the text. The user can choose to key text in either high or low intensity, the entered code characters are always displayed in reverse intensity.

Although the codes and graphics occupy character positions on the display screen, they are not printed when the document is printed. However, because they do occupy a character position, the right margin setting cannot exceed position 132; this allows room for entry of codes on the 140 character line.

6.3 SUBSCRIPTS AND SUPERSCRIPTS

Subscripts and superscripts are characters that are either slightly lower or slightly higher than the preceding character. Generally, subscripts and superscripts are used with chemical symbols or mathematical equations; however, they are also useful for footnote designation. Subscripts and superscripts are ignored when the document is printed by the 810 printer.

A subscript code is entered by pressing the ENTER key then pressing the L key. The next character keyed is regarded as the character to be lowered when the document is printed. The subscript code (upper case L) is displayed in reverse intensity prior to the character to be lowered when the document is printed. A subscript code must be keyed for each character that is to be lowered.

A superscript code is entered by pressing the ENTER key then pressing the U key. The next character keyed is regarded as the character to be raised when the document is printed. As with the subscript code, a superscript code (upper case U) is displayed in reverse intensity in front of the character to be raised when the document is printed. A superscript code must be keyed for each character that is to be raised.

6.4 BLOCK PROTECT

Block protection is used to ensure that a block of text is printed as a block on the same page. If there are portions of text that should not be printed with part on one page and part on another page, block protect codes are used to mark the text as a protected block. If the entire protected block does not fit on the page being printed, the block is printed on the next page. The number of lines in the protected block cannot exceed the number of lines on the page.

Block protect codes are used in pairs to mark the beginning and ending of the block. A block protect code is entered by pressing the ENTER key then pressing the B key when the cursor is on the first character of the block. To mark the end of the protected block, the cursor is positioned just after the last character of the block and the ENTER B sequence is keyed. The block protect code (an upper case B) is displayed in reverse intensity in front of the first character and behind the last character (or graphic) symbol of the block.

6.5 EMPHASIS (BOLD PRINTING)

TIPE provides the capability to emphasize portions of the text. There are instances, when producing reports, memos, documentation, etc. where it is desirable to print items with a typeface that is heavier (darker, thicker) than the typeface used for the rest of the text. This function is often used for captions, column headings and titles.

Emphasis codes are used in pairs to mark the beginning and ending of the text that is to be bold printed. An emphasis code (an upper case reverse intensity E) is entered by pressing the ENTER key then the E key when the cursor is on the first character and following the last character of the text to be emphasized.

6.6 FORCED PAGE BREAK

The user has the ability to force a page break (e.g., for section headings) and start a new page with a specified line of text. When a page break code is used, the line that is keyed following the code is the first line of the next page, regardless of how many lines are on the previous page.

A page break code is entered by pressing the ENTER key, then pressing the P key when the cursor is at the start of the line

that is to be the first line of the next page. When a page break sequence is keyed (ENTER P), an upper case P is displayed in reverse intensity at the point of entry and any other characters on the line are shifted to the right.

Remember that TIPE generates page break codes automatically during creation and repaginates automatically during printing (if material has been added or page line lengths are changed). The visible difference between the forced page break and the automatic page break is that a forced break is designated by a capital P, and a TIPE generated break is designated by a lower case P. Forced page breaks are not modified during the automatic repagination process.

6.7 REQUIRED SPACES/HYPHENS

A code is available to designate either a space or a hyphen as a required character that cannot be separated from the preceding or following character. This means that a phrase connected by required spaces or hyphens is to be printed entirely on the same line (not broken between lines). The required code functions like a block protect but on a smaller scale. One example of where required hyphens can be used is the term mother-in-law. Using required hyphens ensures that the words are printed on the same line.

A required code (displayed as a reverse intensity R) is entered by pressing the ENTER key then pressing the R key just prior to keying the required character (the space or hyphen). The code must be entered for each space or hyphen that is a required space or hyphen.

6.8 DOCUMENT ASSEMBLY

Document assembly is the process of using one or more existing blocks of text or entire documents to assemble new blocks of text or documents. TIPE-990 provides a comprehensive set of functions with the SELECT BLOCK and RECALL BLOCK function keys. The use of these function keys to perform document assembly operations is similar to the usage described in Section 4 (Text Editing). The Recall Block function is used to recall words, sentences, paragraphs, or entire documents to the display screen to assemble a different document.

Document assembly is sometimes called paragraph assembly or boilerplate. Specifically, document assembly is the process of

creating several paragraphs, each filed with a unique name, that can be recalled to the display screen to assemble a document, letter, memo, report, etc. Because of the versatility provided by TIPE in the naming of documents, a very logical naming convention can be adopted to make it easier for document assembly.

6.8.1 Suggested Document Assembly Techniques.

The one thing that all the methods of document assembly have in common is that the RECALL BLOCK key is used to recall text to the display screen. The text that is recalled may be text that was created and filed or may be text that was copied from another document by performing a select block store function (SELECT BLOCK, S, and file name).

If form letters, memos, contracts, or other documents tend to consist of a combination of standard paragraphs or paragraphs that differ only slightly, then the create and file method is very useful for document assembly. A document or paragraph assembly sheet can be produced to provide a tool for the entry of the material (see Figure 6-1 for an example of a paragraph assembly sheet).

DOCUMENT TYPE: MEMO

FILE NAME	MARGINS		PARAGRAPH
MEMO.HEAD	1	66	ROUTE TO: J. Adams B. Norris B. Carlson F. Olson A. Franklin G. Patrick D. Johnson T. Ramsey M. Kelly J. Smith
MEMO.AJJ	1	66	FROM: Alan J. Jones, Chairman
MEMO.RST	1	66	FROM: Raymond S. Thompson, President
MEMO.LJH	1	66	FROM: Loretta J. Hill, Director
MEMO.SUBJ1	1	66	SUBJ: Weekly Status Meeting
MEMO.SUBJ2	1	66	SUBJ: Monthly Program Review
MEMO.P1	1	66	The weekly status meeting is scheduled for Friday at 2:00 P.M. in Conference Room S3. Could you please attend? Be prepared to discuss projects relevant to your area.
MEMO.P2	1	66	The monthly program review meeting is scheduled for this Friday at 1:00 P.M. in Conference Room 4. Please advise all members of your staff and prepare the standard report form for distribution at the meeting.

Figure 6-1. Example Paragraph Assembly Sheet

Another method that is used for document assembly is to change an existing document to create a new document. The Create operation can be selected and then the document to be revised can be displayed on the screen by performing the recall block function. If desired, the Edit operation can be used instead of a Create operation. If this method is used, the file name must be changed when the document is filed. Regardless of the method used, both the original document (with the original name) and the new document (a revision of the original) exist in storage.

6.8.2 Document Assembly With Variables.

The paragraphs that are used for document assembly can also contain variables, similar to form letters. The same requirements that apply to form letters apply to anything that uses variables. A descriptor file and a data file are required, and the operator must specify that form letter printing is desired.

Appendix A

Quick Reference Summary

A.1 GENERAL INFORMATION

This appendix consists of a quick reference summary of functions available with TIPE-990, and includes a description of the keyboard function keys and formatting codes used with TIPE. This section of the manual can be removed for quick reference, if desired.

A.2 TIPE-990 FORMATTING FUNCTIONS USING ENTER KEY

The following key sequences are used to enable many of the formatting functions of TIPE.

BLOCK PROTECT

ENTER B - This sequence is used in pairs to protect a block of text and ensures that a block of text is not broken when an automatic page break is sensed. The ENTER B sequence is performed when the cursor is at the left margin of the beginning line and again when the cursor is anywhere on the ending line of the block to be protected.

CENTER

ENTER C - This sequence is used to center text on a line; the centering occurs after the cursor is moved to the next line. The line must end with a Return code.

DOUBLE SPACE

ENTER D - This key sequence is used to specify that the following text is to be double spaced when printed. All the following text is double spaced until the spacing is changed by entry of another spacing command.

BOLD OR EMPHASIS PRINTING

ENTER E - This key sequence is used in pairs to mark the beginning and end of a block of text for emphasis (i.e., bold printing).

LINE AND A HALF SPACING

ENTER H - This key sequence is used to specify that the following text is to be spaced at one and a half lines when printed. When the text (containing the ENTER H code) is printed on the Model 810 printer, it is printed single spaced, rather than space and a half.

SUBSCRIPTS

ENTER L - This key sequence is used to designate the following character as a subscript character. When the character is printed, it is printed slightly below the preceding character. Subscript codes are ignored when the document is printed by the Model 810 printer. The character is printed on the same line as the preceding character.

PAGE BREAK

ENTER P - This key sequence is used as a page break command. The line with the ENTER P sequence becomes the first line of the next page.

REQUIRED SPACES OR HYPHENS

ENTER R - This key sequence is used before a space or a hyphen to mark it as a required space or hyphen. The presence of a required code ensures that the characters preceding and following the required code are printed on the same line. For example, the name of this package is TIPE-990. To prevent TIPE- from being printed on one line and 990 on the other line, an ENTER R sequence would be used before keying the hyphen.

SINGLE SPACING

ENTER S - This key sequence is used to mark the following text for single spacing. Single spacing continues until the spacing is changed with another spacing command.

TRIPLE SPACING

ENTER T - This key sequence is used to mark the following text for triple spacing. Triple spacing continues until the spacing is changed with another spacing command.

SUPERSCRIPTS

ENTER U - This key sequence is used to mark the following character as a superscript character. The character keyed after the ENTER U sequence is raised slightly above the preceding character during printing. Superscript codes are ignored when the document is printed by the Model 810 printer. The character is printed on the same line as the preceding character.

VARIABLE

ENTER V - This key sequence is used in pairs to mark the enclosed item as the name of a variable for form letter printing.

SINGLE UNDERSCORING

ENTER _ - This key sequence is used in pairs to mark the enclosed text as text that is to be single underscored when the text is printed.

DOUBLE UNDERSCORING

ENTER = - This key sequence is used in pairs to mark the enclosed text as text that is to be double underscored when the text is printed. When the text with the double underscore code is printed by the Model 810 printer, the underscore code is ignored and double underscoring does not occur.

A.3 TIPE KEYBOARD

The keyboard of the 911 Video Display Terminal contains the controls necessary for operation of TIPE. Figure A-1 shows the keyboard, and Table A-1 is a description of the function keys (the grey keys on the keyboard). Table A-2 is a description of the cursor movement keys.

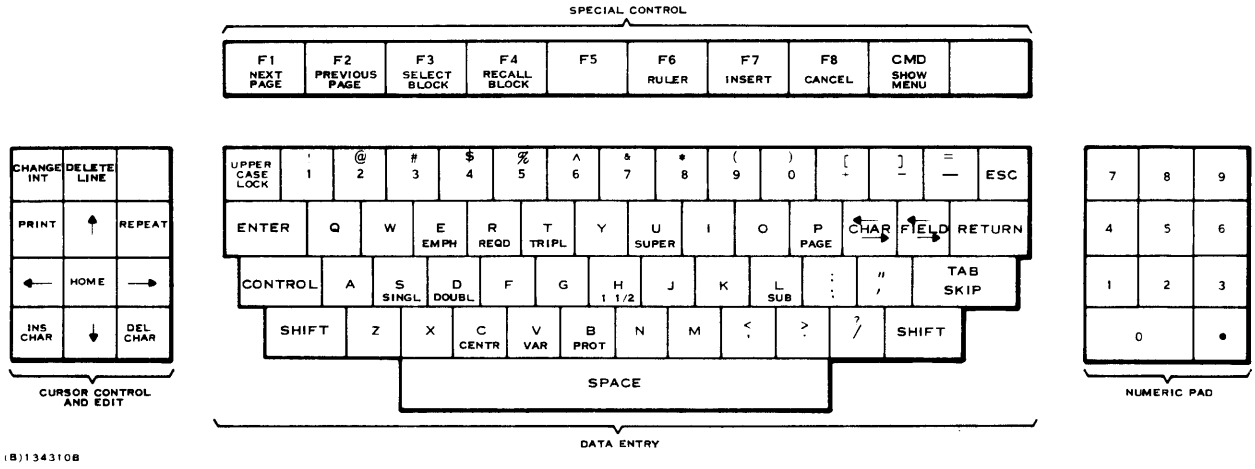


Figure A-1. TIPE Keyboard

Table A-1. TIPE-990 Function Key Description

KEY	DESCRIPTION
NEXT PAGE (F1)	The NEXT PAGE key is pressed during create or edit operations to display the next page in the document. The amount of text on a page is dependent on the lines per page specified when the document is created or printed. Another way to scroll text is to use the cursor movement keys.
PREVIOUS PAGE (F2)	The PREVIOUS PAGE key is pressed during create or edit operations to display the previous page in the document.
SELECT BLOCK (F3)	The SELECT BLOCK key is pressed during create or edit (normally edit) operations to mark a block of text for one of four subsequent functions. Text can be deleted, moved, stored, or reformatted. SELECT BLOCK must be pressed twice to mark a block; the position of the cursor when the key is pressed marks the beginning (first press) and the ending (second press) of the block. Graphic characters enclose the marked block, and the block is displayed in reverse intensity.
RECALL BLOCK (F4)	The RECALL BLOCK key is pressed to recall a block of text to the display screen. The block may be a block that has been moved or stored via a select block function or may be any TIPE-990 document that has been filed. When RECALL BLOCK is pressed, the operator is requested to enter the file name of the block. A name must be entered for the recall of stored blocks; no name is necessary for the recall of moved blocks. The RETURN key is pressed to recall the named block, or the SKIP key is pressed to recall the moved block. If a block is recalled within existing text (if the cursor is within a paragraph when RECALL BLOCK is pressed), the recalled text conforms to the margins of the displayed paragraph.

RULER (F6)	The RULER key is pressed to move the cursor to the Ruler line (line 23 of the screen) to allow modification of the margins for new text, tabs, or the mode of entry (Adjust or Fixed mode).
INSERT (F7)	The INSERT key is pressed during editing of a document to create additional space for text entry. If the text is Adjust mode text, the text to the right of the cursor and all lines following the line with the cursor are moved down one line. The material to be inserted is keyed, and the INSERT key is pressed a second time to end the insert function. If the text is Fixed mode text, and the cursor is on the first character position when the INSERT key is pressed, the line containing the cursor and all following lines are moved down one line. If the cursor is is on a character position other than the first position, the following line is moved down one line. Lines can be inserted, and when the insert is complete, the INSERT key is pressed again to end the insert function.
CANCEL (F8)	The CANCEL key is pressed to cancel the intended operation. The CANCEL key can be used to cancel a select block function (if CANCEL is pressed before pressing RETURN after the D, M, S, or R), a recall block function, an attended printer print operation, and any menu selection (before pressing RETURN). CANCEL does not cancel a print operation before the printing starts or if printing in the background. The SHOW MENU key can be pressed during the display of the print parameters to, in effect, cancel a print operation before it starts.
SHOW MENU (CMD)	The SHOW MENU key is pressed to display a menu so that the operator can specify a different operation. If SHOW MENU is pressed during any of the TIPE-990 creation/editing functions, the TIPE-990 Create/Editing menu is displayed. If the SHOW MENU key is pressed during a print function, the operating system menu is displayed.

CHANGE INT (ERASE FIELD)	The CHANGE INT (Change Intensity) key is pressed to change the intensity of displayed characters. Characters of low intensity change to high and high intensity characters change to low. The graphic symbol for a return code does not change intensity, that character is always displayed in low intensity.
DELETE LINE (ERASE INPUT)	The DELETE LINE key is pressed to delete the line where the cursor is positioned. The cursor stays at the same position, and all the following lines are moved up one line.
PRINT	The PRINT key is pressed during document creation or text editing to temporarily remove all control graphics (return codes, varaiable codes, etc.) from the display screen. This allows the operator to view the text much as it will look like when it is printed. The PRINT key or the RETURN key is pressed to redisplay the control graphics.
REPEAT	The REPEAT key when held and followed by the pressing of another key, causes the function or character represented by the second key to be repeated until the REPEAT key is released.
INS CHAR	The INS CHAR (Insert Character) key is pressed to allow the insertion of one or more characters in an existing string of characters. Each time that the INS CHAR key is pressed, a blank is inserted to the right of the cursor (the cursor does not move). If the text is Adjust mode text, and blanks cause a non-blank character to reach the right margin, an automatic word wrap is performed. If the text is Fixed mode text, insertion of the blanks continues only until a tab or a return graphic is reached.
DEL CHAR	The DEL CHAR (Delete Character) key is pressed to delete the character at the cursor position. Characters to the right of the cursor are moved to the left. The cursor position does not change and if the character deletion continues it may cause words to wrap up from the following line.

---> CHAR <---	The CHAR right and left arrow key is the same as the left and right arrow cursor movement keys. When the SHIFT key is held and the CHAR key is pressed, the cursor moves one character to the right. When the CHAR key is pressed without the SHIFT key, the cursor moves one character to the left.
---> FIELD <---	The FIELD key is used to move the cursor from one tab setting to another. If used with the SHIFT key, the cursor moves to the right to the next tab stop. If the FIELD key is pressed without using the SHIFT key, the cursor moves to the left to the nearest tab stop.
TAB SKIP	The TAB SKIP key performs two functions. When pressed during create or edit operations, the cursor is advanced to the next tab setting. When the SHIFT key is held and the TAB SKIP key is pressed, the cursor moves left (backspaces) to the last previous tab setting. The TAB SKIP key can also be used as a response to a prompt or request from the program (e.g., a request to enter a file name for a recall block function can be answered by pressing the TAB SKIP key). When the TAB SKIP key is used in these cases, the character under the cursor and all characters to the right are skipped and a return is automatically provided.

Table A-2. Cursor Movement Key Descriptions

KEY	DESCRIPTION
Arrow Keys	Each of the arrow keys (up, down, right, left), when pressed, causes the cursor to move either one character position or one row in the desired direction.

HOME	The HOME key is used in combination with one of the arrow keys to move the cursor very quickly in the direction specified by the arrow key. This type of cursor movement is called block scrolling.
HOME & Left Arrow	When the HOME key is pressed, followed by the pressing of the Left Arrow key, the cursor moves to the left margin setting. If the cursor is located beyond character position 80, HOME and Left Arrow must be pressed twice to move the cursor to the left margin.
HOME & Right Arrow	When the HOME key is pressed, followed by the Right Arrow key, the cursor moves to the end of text on the line or to position 80 whichever occurs first. If HOME and Right Arrow are pressed repeatedly, the cursor moves to position 80, position 100, then position 140, successively.
HOME & Up Arrow	Pressing the HOME key, then pressing the Up Arrow key causes the cursor to move to the first line of the display screen. If the cursor is on line 1 when the keys are pressed, the cursor remains on the line 1, and the preceding 22 lines (the total number of lines that can be displayed at a time) are scrolled to the screen. Each time that HOME and Up Arrow are pressed, the previous 22 lines are displayed, or the cursor moves to the first line of the document (if there are less than 22 lines to the first line).
HOME & Down Arrow	The combination of the HOME key and the Down Arrow key cause the cursor to move to the last line (line 22) of text on the display screen. If the cursor is on line 22 when the keys are pressed, the cursor remains on line 22 and the following 22 lines of text are scrolled to the display screen, or the cursor moves to the last line of the document (whichever occurs first).
HOME & HOME	Pressing the HOME key twice moves the cursor to the beginning (line 1, character 1) of the document. If the cursor is at the beginning of

the document when the sequence is performed, the text is scrolled to the end of the document (the cursor is on the first character of the last line).

Appendix B

DX10 Operating System Considerations

B.1 DX10 GENERAL INFORMATION

There are a number of DX10 operating system commands that can be used to perform non-TIPE operations as the need arises. These commands allow the user to look at TIPE files that are printed to a file, queue files for printing, list the directory of all the file names, and other operations. The information in this appendix describes several of the commands and also describes the utility program that can be used to convert text editor documents to TIPE documents.

The following items are described in this appendix:

* Show File (SF) command
* Print File (PF) command
* Delete File (DF) command
* List Directory (LD) command
* List Synonym (LS) command
* Kill Output (KO) command
* Resume Output (RO) command
* Show Output Status (SOS) command
* TIPE conversion program (TIPECNV) command

B.2 SHOW FILE (SF) COMMAND

The Show File command is used to display a file on the display screen. This command cannot be used to display TIPE documents, but is used to display documents that have been printed to a file by using the TIPP command.

After keying the command SF and pressing RETURN (when the operating system menu is displayed) the user is requested to key the name of the file to be displayed. The file is then displayed on the screen and the NEXT PAGE key can be used to display the file, screen by screen. The NEXT PAGE key does not function quite the same as it does in TIPE operations. When used during a show file operation, each press causes the display of the next 24 lines of text, or exactly one screen's worth of material. The PREVIOUS PAGE key can be used to display previous material.

B.3 PRINT FILE (PF) COMMAND

The Print File command is used to print a file, or to queue files for subsequent printing, by a designated printer. The PF command is not used to queue TIPE documents for subsequent printing, but if the TIPE document has been printed to a file, then this works. After the PF command is keyed and the RETURN key is pressed, the following request is displayed:

```
PRINT FILE
        FILE PATHNAME(S) :
            ANSI FORMAT? : NO
          LISTING DEVICE : LP01
  DELETE AFTER PRINTING? : NO
    NUMBER OF LINES/PAGE :
```

The preceding menu is displayed each time the PF command is keyed. The user must key the name or names of the file(s) to be printed then press the RETURN key to move the cursor to the next selection. If more than one file name is to be keyed, each name must be separated by a comma with no intervening spaces. The ANSI FORMAT question is answered YES (keying a Y is sufficient) if the text includes ANSI characters for top of form, bold printing, auto underscoring, etc. Generally, all TIPE files that have been printed to a file and are now being printed via the PF command are ANSI format files. The exceptions to this are descriptor and data files which must be printed, via TIPP, in a TEXT output format. The listing device in most cases defaults to the printer designated as LP01, but this can vary depending on site requirements. The designation of the letter quality printer can be keyed to enable the document(s) to be printed by that printer. The DELETE AFTER PRINTING parameter is normally answered NO, but if for some reason the document should be deleted after printing, a Y is keyed. The NUMBER OF LINES/PAGE parameter allows the user to match the same number that was used when the document was originally created with TIPE. If this parameter is left blank, then the document is printed with a system supplied default value. When ANSI FORMAT is answered YES

the NUMBER OF LINES/PAGE parameter can be left blank. The ANSI form feed codes serve as page markers.

B.4 DELETE FILE (DF) COMMAND

The Delete File command is used to delete one or more files that are no longer necessary. After the DF command is keyed and the RETURN key is pressed, the following is displayed:

```
DELETE FILE
      PATHNAME(S):
```

The user then keys the name or names of the files to be deleted. The same name that is used to create the document is the name that is used when deleting the document. Synonyms can be used. If more than one name is to be keyed, then each document name must be separated from the other by a comma. When the delete operation is complete, the operating system menu is redisplayed; if the delete is not successful (e.g., if the name does not exist) an error message is displayed.

B.5 LIST DIRECTORY (LD) COMMAND

The List Directory command is used to display the names of the sub-directories (if any) and files that are contained in the specified directory. This is the command that is keyed to display the names of all the documents that have been created with a particular synonym that represents a directory. After the LD command is keyed and the RETURN key is pressed, the following is displayed:

```
LIST DIRECTORY
            PATHNAME:  <synonym>
LISTING ACCESS NAME:
```

The user then keys the name (synonym) of the directory to be listed. The RETURN key is pressed to move the cursor to LISTING ACCESS NAME. The default for LISTING ACCESS NAME is the video display terminal (VDT); press RETURN to list the directory on the VDT. If desired, the user can list the directory on any of the attached printers by keying the printer name and pressing RETURN.

Figure B-1 is an illustration of a directory listing.

```
DIRECTORY LISTING OF:  S1.UID.DWR009.USER
  MAX # OF ENTRIES: 53    # OF ENTRIES AVAILABLE: 2

FILE       ALIAS OF  RECORDS    LAST UPDATE        FMT  TYPE    BLK PROTECT
 DATADOC      *          4    06/26/80  17:26:49   NBS  N REL   NO
 DATAFIL      *          1    06/04/80  16:39:25   BS   N SEQ   YES
 DATAFILE     *          4    06/26/80  17:26:48   BS   N SEQ   YES
 DESDOC       *          8    06/04/80  17:26:06   NBS  N REL   NO
 DESFILE      *         12    06/04/80  16:50:58   BS   N SEQ   YES
 DOC          *          4    05/12/80  14:48:48   NBS  N REL   NO
 ENVEL        *          4    08/11/80  13:28:46   NBS  N REL   NO
 EX1          *          4    06/20/80  15:28:11   NBS  N REL   NO
 EX2          *          5    06/13/80  10:41:00   NBS  N REL   NO
 EX3          *          4    08/06/80  16:15:04   NBS  N REL   NO
 EX4          *          4    06/13/80  10:42:26   NBS  N REL   NO
 EX5          *          4    05/16/80  10:24:51   NBS  N REL   NO
 EX6          *          4    06/04/80  08:22:29   NBS  N REL   NO
 EX7          *          8    06/04/80  16:18:54   NBS  N REL   NO
 FUTURE3      *         10    07/18/80  13:52:01   NBS  N REL   NO
```

Figure B-1. DX10 Example Directory Listing

B.6 LIST SYNONYM (LS) COMMAND

The List Synonym command is used to list the synonyms that are in use by or have been assigned to a specific user. When the LS command is keyed and the RETURN key is pressed, the following is displayed:

```
LIST SYNONYMS
     LISTING ACCESS NAME :
```

The user can either press the RETURN key again to display the synonym list on the VDT, or can key the name of the printer to print the synonyms. Figure B-2 is an example listing generated by the LS command.

```
LIST SYNONYM
SYNONYM              VALUE

 $$12                  Y
 $$CC                  00000
 $$DA                  N
 $$EA                  N
 $$MO                  OF
 $$S                   RAM.SIPW
 $$ST                  14
 $WP                   DR.ENVEL
 $WPDATA               DR.DATA
 $WPDESC               DR.DES
 $WPDOC                DR.ENVEL
 $WPT                  DR.STAMPS
 $XE$                  RAM.SIPW
 BETA                  S1.TIPE.DOC.TI.BETA
 BIO1                  1406
 DISK                  PUBUTL
 DR                    S1.UID.DWR009.USER
 DWR                   S1.UID.DWR009
```

Figure B-2. DX10 Example Synonym Listing

B.7 KILL OUTPUT (KO) COMMAND

The Kill Output command is used to stop the printing of either the document that is currently being printed (by the PF command) or to stop the printing of all documents that are on the print queue for a particular printer. The Show Output Status command can be used to determine what is on a print queue for a printer. The KO command is not specifically for terminating print operations that are initiated by using the TIPP command to print a TIPE-990 document. This command is for terminating print operations that are initiated by the PF (Print File) command. When the KO command is keyed and the RETURN key is pressed, the following is displayed:

```
KILL OUTPUT AT DEVICE
                DEVICE NAME: LP01
  KILL CURRENT FILE ONLY?: YES
```

The user can accept the defaults by pressing RETURN twice. This means that the file that is currently active (being printed) on LP01 is terminated. Output at another printer can be terminated by keying the name of that printer and pressing RETURN. If N (NO) is keyed as the answer to the KILL CURRENT FILE ONLY?

prompt, then all the files that are queued for printing are terminated. If the last file in a queue is terminated or if all the files in the queue are terminated, then the Resume Output command must be issued before anything else can be printed by that printer.

B.8 RESUME OUTPUT (RO) COMMAND

The Resume Output command is used to resume output at the printer where output was terminated with the Kill Output command. This command must be issued before any printing can occur at the printer designated by the KO command. When the RO command is keyed and the RETURN key is pressed, the following is displayed:

```
RESUME OUTPUT AT DEVICE
        DEVICE NAME: LP01
```

Press the RETURN key to accept the default (LP01), or key the desired device name and press RETURN. At this point the operating system menu is redisplayed and queued output operations can continue.

B.9 SHOW OUTPUT STATUS (SOS) COMMAND

The Show Output Status command is used to display the status of queued print operations that were initiated with one or more PF commands. When the SOS command is keyed, the following is displayed:

```
SHOW OUTPUT STATUS
          USER ID:
      DEVICE NAME:
```

The user can display the status of all files queued for printing by pressing the RETURN key twice.

B.10 TIPE CONVERSION PROGRAM (TIPECNV COMMAND)

The TIPE conversion program can be used to convert DX10 files into TIPE documents. When a file is converted into a TIPE document, the editing features of the TIPE package can then be used to make changes to the document.

After the TIPECNV command is keyed (during display of the operating system menu) and the RETURN key is pressed, the following is displayed.

```
CONVERT TEXT FILE TO TIPE-990 DOCUMENT
 INPUT SEQUENTIAL FILE:
  OUTPUT DOCUMENT NAME:
```

The INPUT SEQUENTIAL FILE prompt is asking for the name of the file that is to be converted into a TIPE document. The OUTPUT DOCUMENT NAME prompt is asking for the name that is to be assigned to the document after it is converted. The appropriate names should be keyed followed by pressing the RETURN key. A "FOREGROUND COMMAND EXECUTING" message is displayed during the convert operation, and when the operation is complete, the operating system menu is redisplayed.

As the text file is converted, the program checks each line and sets the right margin equal to the longest line that is found. Any lines that are longer than 132 characters are truncated. In other words, any characters past position 132 are deleted. After the conversion is complete, the operating system menu is redisplayed. The user can then key the TIPE command and select the edit operation to display the converted document. It may be necessary to use the HOME and Right Arrow key to display an entire line.

Each line of the converted document includes a return code and these return codes may have to be deleted before editing or printing the document. The word wrapping feature of TIPE does not function on a line with a return code. Also, right justification during printing is not possible when each line contains a return code.

Another operation that is not necessary, but can be performed if desired, is to reformat the document. This is accomplished very quickly by keying TIPE, then E for edit, and keying the document name. When the document is displayed on the screen, press the SELECT BLOCK key, followed by HOME and HOME again. This moves the cursor to the last line of the document. If necessary, press HOME and the Right Arrow key to move the cursor to the end of the line. Again press SELECT BLOCK, key R for reformat, set the right margin (e.g., at position 66) and press RETURN twice. At this point, additional edit operations can be performed as desired. Reformatting to a smaller right margin may produce undesirable results if the return codes are not deleted first.

Appendix C

Messages

C.1 GENERAL INFORMATION

This appendix lists the error messages and related error recovery information for conditions that can occur during TIPE operations. The messages are separated into two categories, the messages displayed during create or edit operations and the messages displayed during printing operations. The messages are listed in alphabetical order and include a description and any applicable error recovery procedures.

C.2 CREATE/EDIT MESSAGES

Cannot access requested file. The RECALL BLOCK key has been used to recall a file to the display screen but the file cannot be accessed.

Cannot center a fixed mode line. TIPE has detected a center code (ENTER C) on a line of fixed mode material and cannot center the line. Reformat the line to adjust mode to center it or delete the center code.

Cannot center a line without a carriage return. TIPE has detected a center code on a line that does not include a Return symbol. Move the cursor to the line with the center code and key a Return.

Cannot create document. This message indicates that the user has keyed an incorrect name in response to the document name prompt. The synonym may not represent the correct directory, the period may be missing from the name, etc. Rekey the document name or key another document name.

Cannot create file. A TIPE Store operation (SELECT BLOCK, S) has been attempted, but the specified file cannot be created. Reattempt the store operation but use a different name for the stored block; ensure that the name is keyed properly.

Cannot delete file. A TIPE Store operation has been attempted, and the user answered "YES" to the "Should this file be replaced if it already exists?" message, but the existing file could not be deleted. Reattempt the store operation using a different name for the stored block.

Cannot create temp file. A TIPE Move operation has failed because the .WPTEMPnn (nn represents the station number) file could not be created. Notify the person who installed TIPE. Use the Store operation instead of the Move operation to move the text to another location. The block can be deleted (SELECT BLOCK, D) after it is stored.

Cannot delete temp file. A TIPE Move operation has failed because the .WPTEMPnn file that already exists could not be deleted. Follow the same error recovery procedure as for the "Cannot create temp file" message.

Cannot open document. The document specified for the edit operation is already being used for some other operation (e.g., a print operation or another edit operation may be in progress) or the document name may be incorrect. Attempt the operation at a later time or key the correct name.

Cannot open file. TIPE has detected a problem in accessing a file other than the document itself and the file cannot be opened. Notify the person responsible for installing the TIPE package.

Cannot write record to temporary file. TIPE has detected a problem when attempting to write to a file other than the document itself. Notify the person responsible for installing TIPE, or someone familiar with the operating system.

Directory Full. Press RETURN to specify a different directory. The user has keyed the name of a directory that does not have enough room for another file. A different directory name (synonym) must be keyed.

Document already exists. A document name has been keyed that already exists. Key another document name or quit the create operaton.

Document does not exist. The name entered for the Edit operation does not exist. The specified document has not been created. Verify that you are using the correct name, or key the correct name.

Editing session terminated. This informational message is displayed briefly after keying the Q command to quit the

create/edit operations.

End of field. This message is displayed when creating or editing in Fixed mode and the field is full. Press the TAB key to move the cursor to the next field.

Enter new margins and tabs and then press the RETURN key. This message is displayed when the cursor is on the ruler line after pressing the RULER key or specifying the SELECT BLOCK R (Reformat sequence). This message does not denote an error condition.

Error trying to replace document. This message is displayed when the user answers no to the "should this document be replaced if it already exists?" message and the document does exist. Change the name, or answer yes to the prompt.

File already exists. A file name has been keyed for a SELECT BLOCK operation that already exists. Key another name.

Insert mode terminated. This is an informational message that is displayed when the INSERT key is pressed to terminate the Insert function.

Invalid index info in record 0 of document. This error message is displayed when the file containing the specified document has been changed. Notify the person responsible for installing TIPE.

Invalid command. The valid letters are C,E,F,D,Q. A letter, other than those listed as valid for TIPE operations, has been keyed. Key a valid command and press the RETURN key.

Invalid control character. Valid characters are = VEULSDTCPRBH. An invalid character has been keyed after pressing the ENTER key. One of the listed keys must be used after ENTER to perform the desired operation.

Invalid name. The document name is entered improperly, the synonym is not assigned, or the directory does not exist. Check the name for proper placement of the period, and make sure that the first character after the period is not a number. Check the synonym listing to make sure the synonym is assigned (refer to Appendix B). If necessary, perform a List Directory operation to see if the directory exists and what it includes (refer to Appendix B).

Line is Full. This message is displayed when all 140 character positions are occupied by characters and Enter codes and the user presses the ENTER key for the entry of additional Enter codes. The RETURN key can be used to move the cursor to the next line or characters can be keyed to automatically go into Insert mode.

L must be to the left of R. An L (for the left margin setting) is to the right of the R on the Ruler line. Key an L to the left of the R.

Moved to file. You may now reposition cursor and use RECALL. This informational message is displayed after a SELECT BLOCK Move operation. The block can be recalled immediately, or at any future point before another block is moved.

Move R to left or reduce number of tabs. This message is displayed when the user has attempted to set the right margin at an invalid position based on the number of tabs being used. Key an R to the left of the present setting or reduce number of tabs and press the RETURN key. If the message recurs, continue to reduce tabs or move the R to the left until it is accepted.

No document is active. Use the "C" or "E" command first. A "D" or "F" command has been keyed before specifying a create or edit operation. Perform a create or edit operation or press the Q key to quit the TIPE-990 create/edit operations.

No need to use INSERT here. Just type text. This message is displayed when the INSERT key is pressed while the cursor is on a blank line (normally the last line of a document).

Not allowed in insert mode. Use INSERT to end inserting. The user has attempted a function (e.g., select block, recall block) or a cursor movement operation that is not allowed in the Insert mode. When everything to be inserted is keyed, press the INSERT key to terminate the Insert function.

Not allowed with document active. Use the "F" or "D" command first. This message is displayed when the user tries to quit create/edit operations (by pressing the Q key and RETURN) or tries to edit another document before pressing the "D" or "F" key. Press RETURN to return to the document in question, or press the D (to disregard changes) or the F (to file the document) key, then RETURN, followed by Q and RETURN to quit.

Not legal here. Cursor must be on top of a character. This message is displayed when the INSERT key is pressed while the cursor is not on top of a character. Position the cursor over the proper character, and press the INSERT key.

Not legal in a fixed mode line. This message is displayed when the user attempts to enter a centering code (ENTER C) or a variable code (ENTER V) on a Fixed mode line. If the code must be entered on that line, reformat the line to Adjust mode and then key the desired code.

Period must be preceded by a D. This message indicates that a period has been keyed on the Ruler line, but is not preceded by a decimal tab. Use the Left Arrow key to move the cursor and key a D preceding the period, or delete the period by keying a space.

Please mark a position after the first marked position or CANCEL. This message is displayed when SELECT BLOCK is pressed the second time and the position being marked precedes the first marked position. The second time that the SELECT BLOCK key is pressed must follow the first position.

Please type a number between 4 and 99. This message is displayed when something other than 4 through 99 is keyed in response to the LINES PER PAGE prompt for a create operation.

Position cursor to end of block and press SELECT BLOCK. This message is displayed during a Select Block operation. Use the arrow keys (or the HOME and arrow keys) to move the cursor to the end of the selected block and press SELECT BLOCK a second time.

Press PRINT or RETURN to resume editing. This message is displayed when the PRINT key has been used to remove the graphic characters from the display screen. Create or editing operations cannot be resumed until the PRINT key or the RETURN key is pressed.

Program error. Check integrity of document. TIPE has attempted to remove a mark character (inserted by a SELECT BLOCK command) but the character cannot be located. Check the displayed document to ensure that no text has been deleted. Perform the operation again. If this message recurs, notify the person responsible for installing TIPE.

Reformatting from adjust to fixed requires a CR in the line. This message is displayed when reformatting from Adjust mode text to Fixed mode text and one or more lines do not contain a Return at the end of the line. The lines that include a Return are reformatted to Fixed mode; the lines that do not contain a Return remain as Adjust mode lines. Add Returns to the lines and perform another Reformat operation.

Removed excess number of characters from field. This message is displayed during Fixed mode operations when more characters are keyed than can fit within a field. Either the field or fields must be made larger, or the number of characters being keyed per field must be decreased.

R must be to the left of 133. This message is displayed when the user attempts to set the right margin beyond position 132 on the ruler line. Position 132 is the maximum so that there is room on

the line for the entry of code characters.

Ruler may have only one L. This message is displayed when two Ls are detected on the Ruler line. Delete the L that is not representative of the left margin setting by spacing over it.

Ruler may have only one R. This message is displayed when two Rs are detected on the Ruler line. Delete the R that is not representative of the right margin setting by spacing over it.

Ruler must contain one L and one R. This message is displayed when the cursor is on the Ruler line and the RETURN key is pressed while either the L (left margin) or R (right margin) or both are not displayed.

Start editing text. This message is displayed when the document to be edited is displayed on the screen. As soon as a cursor movement key, function key, or character key is pressed, the message disappears.

Start typing text. This message is displayed when the display screen changes to the text entry format for a create operation. As soon as text is keyed the message disappears.

Tab types do not match. This message is displayed if a document is being reformatted and new tabs have been keyed that do not correspond to the existing tab types (normal or decimal) of the document. The new tab types on the Ruler line are ignored and the document is reformatted.

The requested file does not exist. This message is displayed when a non-existent document name is keyed for a Recall Block operation. Either cancel the Recall Block operation or key the correct document name.

The requested file is not a TIPE-990 document. The file name keyed in response to a TIPE prompt is not the name of a TIPE document. Key the correct name or use the List Directory (LD) command to display a list of the document names. Refer to Appendix B for information on the LD command.

The volume is too full to write to a temporary file. This message is displayed in response to a Move or Store operation when the disk is too full to accept additional material. Notify the person responsible for installing TIPE.

TIPE-990 document is in use. This message is displayed when the TIPE-990 document is being edited or printed by another user. Wait until the other operation is complete then reattempt the operation.

Type A (adjust mode) or F (fixed mode for tabular data): This message is displayed immediately after accepting the margin settings on the Ruler line. Either accept the displayed mode by pressing RETURN or change by keying the appropriate character and pressing RETURN.

Type D (Delete), M (Move), S (Store), R (Reformat): This message is displayed as part of a Select Block operation. The block has been marked and this message is a request for the user to key one of the listed commands to complete the Select Block operation.

Type text to be inserted and finish by pressing INSERT. This message is displayed when the Insert function, activated either by pressing the INSERT key or overstriking text at the right margin to cause a word wrap, is enabled. Continue to key new text and press the INSERT key to automatically adjust the following text when the insert is complete.

Use only cursor positioning functions or SELECT BLOCK or CANCEL. This message is displayed when the user attempts to perform another function prior to completion of the first function.

You are at beginning of document. This message is displayed when the Up Arrow key and/or the HOME and Up Arrow key are pressed while the cursor is on the first line of the document.

You are at end of document. This message is displayed when the Down Arrow key and/or the HOME and Down Arrow key are pressed while the cursor is on the last line of the document.

You are at left margin. This message is displayed when the user presses the Left Arrow key and/or the HOME and Left Arrow key while the cursor is at the left margin of the document.

You are at rightmost position. This message is displayed when the Right Arrow key and/or the HOME and Right Arrow keys are pressed while the cursor is in character position 140.

You have asked to delete any changes that have been made to the document currently being edited. If you are sure press RETURN or SKIP, otherwise press CANCEL. This message is displayed when SHOW MENU then the D key (disregard changes) are pressed during an Edit operation. Press the RETURN or SKIP key to disregard the changes, or press CANCEL to redisplay the TIPE menu (at which point you can press RETURN to return to the document).

You have asked to delete the document that is currently being created. If you are sure press RETURN or SKIP, otherwise press CANCEL. This message is displayed when the SHOW MENU then the D key are pressed during a Create operation. Press the RETURN or

SKIP key to delete the document currently being created, or press the CANCEL key to redisplay the TIPE menu.

You must be on the first line of a paragraph to change the ruler. This message is displayed when the RULER key is pressed while the cursor is on a line other than the first line of a paragraph. Move the cursor to the first line of the paragraph and press the Ruler key again.

C.3 PRINT MESSAGES

A FILE WITH THE SPECIFIED NAME ALREADY EXISTS. This message is displayed when attempting to print to a file that already exists after answering NO to the REPLACE EXISTING OUTPUT FILE parameter. Reattempt the print (TIPP) operation and either change the name of the output file or answer YES to the replace parameter.

ATTENDED PRINTER MUST BE "YES" FOR SINGLE SHEET FEED. This message is displayed after initiating a print operation with both background printing and single sheet feed specified. Any time that single sheet feed is specified, an attended printer operation must be enabled. Press the SHOW MENU key, key TIPP and answer Y to Attended Printer.

BLANK VARIABLE NAME. This message is displayed when the specified descriptor file (for form letters) contains a blank variable name. The message also includes the line number of the variable name that is in error. Perform an edit operation and correct the descriptor document. Then print that document to the file to be used for form letter generation.

CANNOT FIND THE SYNONYM "TB". The synonym $TB is assigned a value depending on the response to the ATTENDED PRINTER prompt. This message is displayed if the synonym is lost somewhere between assigning it at the SCI level, and checking it in the print program. Notify the person responsible for installing TIPE if this condition recurs.

CANNOT OPEN ME. The print program cannot open the video display terminal for input/output.

CANNOT OPEN TIPE-990 DOCUMENT. This message is displayed when an error occurs on the open of a TIPE-990 document. This is not the same error condition that results in the "TIPE-990 DOCUMENT DOES NOT EXIST" or "TIPE-990 DOCUMENT IS IN USE" messages.

DATA FILE DOES NOT EXIST. This message is displayed during a form letter operation when the specified data file does not

exist. Check to make sure that the name of the data file is keyed correctly, rekey the name, or key another name.

DATA FILE HAS ZERO RECORDS IN IT. This message is displayed during a form letter print operation when the specified data file does not have any records. Key the name of another data file.

DATA FILE IS IN USE. This message is displayed when the specified data file is already being used for form letter printing. Wait until the present operation is complete, then start your form letter print operation.

DATA FILE IS NOT A RANDOM OR SEQUENTIAL FILE. The specified data file is neither a random nor a sequential file and cannot be used as a form letter data file.

DESCRIPTOR FILE DOES NOT EXIST. The name keyed for the descriptor file does not exist. Check to ensure that the name was keyed without any errors. Rekey that name or key another name.

DESCRIPTOR FILE HAS ZERO RECORDS IN IT. The specified descriptor file does not contain any records. Use another descriptor file or perform an edit operation and add information to the descriptor file.

DESCRIPTOR FILE IS IN USE. This message is displayed when the specified descriptor file is already being used for form letter printing. Wait until the present operation is complete, then start your own form letter print operation.

DESCRIPTOR FILE IS NOT A RANDOM OR SEQUENTIAL FILE. The specified descriptor file is neither a random nor a sequential file and cannot not be used as a form letter descriptor file.

ERROR: CANNOT CREATE TEMPORARY DOCUMENT. This message is displayed when the print program cannot create a system temporary file to store the newly paginated document. The error code is displayed in hexadecimal. Notify the person responsible for installing TIPE.

ERROR: CANNOT OPEN DATA FILE. This message is displayed when the print program cannot open the data file for form letter printing. The error code is displayed in hexadecimal. Notify the person responsible for installing TIPE.

ERROR: CANNOT OPEN DESCRIPTOR FILE. This message is displayed when the print program cannot open the descriptor file for form letter printing. The error code is displayed in hexadecimal. Notify the person responsible for installing TIPE.

ERROR: CANNOT OPEN FILE. This message is displayed when an error occurs on the opening of an output file other than the file in use. Notify the person responsible for installing TIPE.

ERROR: CANNOT OPEN PRINTER. This message is displayed when an error is detected on the opening of a printer other than the printer in use. Notify the person responsible for installing TIPE.

ERROR: CANNOT OPEN PRINTER OR FILE NAME. This message is displayed when the print program cannot open the printer or the file name that has been keyed by the user. The error code is displayed in hexadecimal. Notify the person responsible for installing TIPE.

ERROR: CANNOT READ DOCUMENT INDEX FOR RENAME. This message is displayed when the print program cannot read the document index in preparation for the renaming of the document(s). Notify the person responsible for installing TIPE.

ERROR: CANNOT RENAME TEMPORARY FILE. This message is displayed when the print program cannot rename the system temporary file to the name of the TIPE-990 document. No new pagination has occured. This condition can occur when the TIPE document is "delete protected". Notify the person responsible for installing TIPE.

ERROR: CANNOT WRITE INDEX RECORD TO TEMPORARY DOCUMENT. This message is displayed when the print program cannot write the index record to the temporary document. Notify the person responsible for installing TIPE.

ERROR: END POSITION ERROR. This message is displayed when the end position column in the descriptor file is in error. The line number that contains the error is also displayed. Correct the descriptor file.

ERROR: END POSITION IS LESS THAN START POSITION. This message is displayed when an incorrect entry in the descriptor file is detected. The end position is less than the start position; the line number that contains the error is also displayed. Correct the descriptor file.

ERROR: NO SEGMENTS IN DOCUMENT. This message is displayed when there are no logical records in the existing TIPE-990 document. Notify the person responsible for installing TIPE.

ERROR: NUMBER OF SEGMENTS EXCEEDS MAXIMUM. This message is displayed when the integer containing the number of segments in the TIPE-990 document is in error. Notify the person responsible

for installing TIPE.

ERROR: NUMBER OF VARIABLE NAMES EXCEEDED 100. This message is displayed when the descriptor file contains more than 100 variable names for form letter printing. No more than 100 variables are allowed.

ERROR: READING DESCRIPTOR FILE. his message is displayed when an error occurs while reading the descriptor file. Reattempt the form letter printing operation.

ERROR: READING INDEX RECORD OF DOCUMENT. This message is displayed when reading the index record of a document. The error code is displayed in hexadecimal. Notify the person responsible for installing TIPE.

FIRST PAGE MUST BE GREATER THAN ZERO. This message is displayed when the STARTING PAGE NUMBER parameter is answered with a zero. Rekey the correct starting page number.

FIRST PAGE TO PRINT IS GREATER THAN LAST PAGE TO PRINT. This message is displayed if the response to the ENDING PAGE NUMBER parameter is less than the STARTING PAGE NUMBER parameter. ENDING PAGE NUMBER must be a higher number than STARTING PAGE NUMBER or must be the word ALL.

FIRST PRINTED PAGE NUMBER CANNOT BE ZERO. This message is displayed if the user has keyed zero as the FIRST PRINT PAGE NUMBER in the page numbering specification menu. The first page number to be printed must be a number other than zero in the range of 1 through 9999.

FORM LENGTH CANNOT BE ZERO. This message is displayed if the user enters zero as the paper length The paper length is stated in lines and anything in the range of 4 through 99 is valid.

FOR TEXT FORMAT, LEFT MARGIN DISPLACEMENT MUST BE ZERO. This message is displayed when TEXT is the OUTPUT FORMAT and something other than zero is keyed as the LEFT MARGIN DISPLACEMENT.

FOR TEXT FORMAT, LINE TO BEGIN PRINTING MUST BE ONE. This message is displayed when TEXT is the OUTPUT FORMAT and something other than 1 is the response to the LINE NUMBER TO BEGIN PRINTING parameter. Change the number to 1.

FOR TEXT FORMAT, PAGE NUMBERS MUST BE NO. This message is displayed when TEXT is the OUTPUT FORMAT and the PAGE NUMBERS parameter is answered Y(ES). Press RETURN and change the answer to N (NO).

FOR TEXT FORMAT, RIGHT JUSTIFICATION MUST BE NO. This message is displayed when TEXT is the OUTPUT FORMAT and the RIGHT JUSTIFICATION parameter is answered with a Y(ES). Press RETURN and change the answer to N (NO).

ILLEGAL DATA FILE NAME. This message is displayed when an illegal character is keyed for a data file name. Key a valid name with the proper characters.

ILLEGAL DESCRIPTOR FILE NAME. This message is displayed when an illegal character is keyed for the descriptor file name. Key a valid name with the proper characters.

ILLEGAL DOCUMENT NAME. This message is displayed when the name keyed as a TIPE-990 document includes one or more illegal characters. Rekey the document name with the correct characters.

ILLEGAL PRINTER OR FILE NAME. This message is displayed when the user has keyed an illegal name for a printer or a file. Rekey the correct printer or file name.

INTERNAL ERROR--PLEASE RECORD THE FOLLOWING NUMBER XX. Notify the person responsible for installing TIPE.

INVALID CHARACTER IN FIELD. This message is displayed when the user keys a response to a print parameter that is not valid. Key a correct response to complete parameter selections.

LAST PAGE MUST EITHER BE A NUMBER OR THE WORD "ALL". This message is displayed when the ENDING PAGE NUMBER parameter is answered with something other than a number or the word ALL. Key the page number of the last page to be printed or key the word ALL and press RETURN.

LINE NUMBER ON WHICH TO PRINT CANNOT BE ZERO. This message is displayed when the LINE NUMBER ON WHICH TO PRINT page numbering parameter is answered with 0 (zero). Change the parameter to a valid entry.

LINE NUMBER TOO SMALL. This message is displayed when the user has keyed a line number on which to print the page number, but the number is less than or equal to the number of lines of text that are to be printed on the page (specified with the LINES PER PAGE parameter). Change the line number on which the page number is to be printed.

NUMBER OF LINES HAS EXCEEDED PAPER LENGTH. This message is displayed when the sum of the number of lines per page and the starting line number has exceeded the specified length of the paper.

OUTPUT FORMAT MUST BE EITHER LQP, 810, OR TEXT. This message is displayed when something other than the available choices is keyed for the OUTPUT FORMAT parameter. Key the desired OUTPUT FORMAT.

PITCH CANNOT BE ZERO. This message is displayed when the user specifies zero as the pitch of the document. Pitch is the horizontal character spacing when the document is printed and valid entries are 6 through 24.

PRESS RETURN TO CONTINUE PRINTING. This message is displayed during attended printing when 1) the user has temporarily halted the print operation by pressing the NEXT PAGE key, or 2) single sheet feed is specified and the print operation halts to allow the operator to insert more paper. Press RETURN to continue printing.

PUT A NEW PAGE IN THE PRINTER AND PRESS RETURN. This message is displayed during attended printing operations when single sheet feed is specified and more paper is needed. Insert another sheet of paper and press RETURN to continue printing.

REQUIRED FIELD. This message is displayed when the user deletes an answer to one of the print parameter requests. A valid entry is required before the print operation can be started.

START POSITION ERROR. This message is displayed when the start position column in the descriptor file is in error. The line number of the line containing the error is also displayed. The descriptor file has to be corrected, then printed to a file so the file can be used for form letter generation.

START POSITION IS EQUAL TO ZERO. This message is displayed when zero is specified as the starting column position. The line number of the line that is in error is also displayed.

THE SPECIFIED DATA FILE IS A TIPE-990 DOCUMENT. This message is displayed if the specified data file is a TIPE-990 document. The TIPE-990 document must be printed to a file and then that file can be specified as the data file for form letter printing.

THE SPECIFIED DESCRIPTOR FILE IS A TIPE-990 DOCUMENT. This message is displayed if the specified descriptor file is a TIPE-990 document. The TIPE-990 document must be printed to a file and then that file can be specified as the descriptor file for form letter printing.

THE SPECIFIED FILE IS ALREADY IN USE. This message is displayed when the output file specified as the destination for this print operation is already in use. Wait until the other print

operation is complete, then reattempt your print operation.

THE SPECIFIED FILE IS NOT A TIPE-990 DOCUMENT. This message is displayed when the document name is not the name of a TIPE-990 document. Key the correct document name.

THE SPECIFIED PRINTER IS ALREADY IN USE. This message is displayed if the printer specified in the print parameters is busy when the print operation is attempted. Wait until the other print operation is complete, then reattempt your print operation.

THE SPECIFIED TIPE-990 DOCUMENT DOES NOT EXIST. This message is displayed when the name of the document to be printed does not exist. Make sure that the correct name was keyed. Rekey that name or key another name.

THE SPECIFIED TIPE-990 DOCUMENT IS IN USE. This message is displayed when the TIPE-990 document is currently being edited or printed by another user and is therefore unavailable for printing. Wait until the other operation is complete then reattempt the print operation.

THE SPECIFIED TIPE-990 DOCUMENT NAME CONTAINS ILLEGAL CHARACTERS. This message is displayed when the TIPE-990 document name contains one or more illegal characters. Key the document name again, making sure that illegal characters are not part of the document name.

TIPE-990 DOCUMENT DOES NOT EXIST. This message is displayed when the document name keyed by the user does not exist. Make sure that the name is spelled correctly and rekey that name or key another name.

UNATTENDED PRINT IN PROGRESS. This message is displayed when a print operation is requested and a background print operation is already in progress. Wait until the print operation is complete and reattempt the request.

Appendix D

DNOS Operating System Considerations

D.1 DNOS GENERAL INFORMATION

There are a number of DNOS operating system commands that can be used to perform non-TIPE operations as the need arises. These commands allow the user to look at TIPE files that are printed to a file, queue files for printing, list the directory of all the file names, and other operations. The information in this appendix describes several of the commands and also describes the utility program that can be used to convert text editor documents to TIPE documents.

The following items are described in this appendix:

* Show File (SF) command
* Print File (PF) command
* Delete File (DF) command
* List Directory (LD) command
* List Synonym (LS) command
* Kill Output (KO) command
* Resume Output (RO) command
* Show Output Status (SOS) command
* Modify Output (MO) command
* Modify Spooler Device (MSD) command
* TIPE conversion program (TIPECNV) command
* Special considerations using TIPP

D.2 SHOW FILE (SF) COMMAND

The Show File command is used to display a file on the display screen. This command cannot be used to display TIPE documents, but it is used to display documents that are printed to a file by using the TIPP command.

After keying the command SF and pressing RETURN (when the operating system menu is displayed), the user is requested to key the name of the file to be displayed. The file is then displayed on the screen and the NEXT PAGE key can be used to display the file, screen by screen. The NEXT PAGE key does not function quite the same as it does in TIPE operations. When used during a show file operation, each press causes the display of the next 24 lines of text, or exactly one screen of material. The PREVIOUS PAGE key can be used to display previous material.

D.3 PRINT FILE (PF) COMMAND

The Print File command is used to print a file, or place files in a waiting line (output queue) for subsequent printing by a designated printer or class of printer. Placing files in an output queue for subsequent printing does not apply to TIPE documents that have not been previously printed to a file. After the PF command is keyed and the RETURN key is pressed, the following request is displayed:

```
PRINT FILE
          FILE PATHNAME(S):
              ANSI FORMAT?:
   LISTING DEVICE OR CLASS:
    DELETE AFTER PRINTING?:
      NUMBER OF LINES/PAGE:
                     FORM:
         NUMBER OF COPIES:
            BANNER SHEET?:
```

The preceding menu is displayed every time the PF command is keyed. The user must key the name or names of the files to be printed and press the RETURN key to move the cursor to the next selection. If more than one file name is to be keyed, each name must be separated by a comma with no intervening spaces.

The ANSI FORMAT question is answered YES (keying a Y is sufficient) if the text contains ANSI characters for top of form, bold printing, auto underscoring, etc. Generally, all TIPE files that have been printed to a file and are now being printed via the PF command are ANSI format files. The exceptions to this are descriptor and data files that must be printed, via TIPP, in a TEXT output format.

The LISTING DEVICE OR CLASS in most cases defaults to the printer (usually designated as LP01), but this can vary depending upon site requirements. The designation of the letter quality printer can be keyed to enable the document(s) to be printed by that printer.

The DELETE AFTER PRINTING parameter is usually answered NO. If for some reason the file containing the printer output is to be deleted after printing, enter a Y.

The NUMBER OF LINES/PAGE parameter allows the user to designate the number of lines per page. The default is 62. When ANSI FORMAT is answered YES, the NUMBER OF LINES/PAGE parameter can be left blank. The ANSI form feed codes serve as page markers.

The FORM parameter is answered with the name of the form that is to be used on the output device. If a form is requested that is not currently mounted, a message is sent to the system operator requesting a change of form. If the request is ignored, the current form is used for printing. The default form is STANDARD.

The NUMBER OF COPIES parameter is answered with the number of copies to be printed. The maximum number of copies is 255. This value should be 1 if the number of copies to print in the TIPP print parameters was a value other than 1.

The BANNER SHEET parameter is answered YES if an identifier sheet is to be printed as the first page of the output. The default value is YES.

D.4 DELETE FILE (DF) COMMAND

The Delete File command is used to delete one or more files that are no longer necessary. After the DF command is keyed and the RETURN key is pressed, the following is displayed:

```
DELETE FILE
  PATHNAME(S):
```

The user then keys the name or names of the files to be deleted. The same name that is used to create the document is the name that is used when deleting the document. Synonyms can be used. If more than one name is to be keyed, then each document name must be separated from the other by a comma. When the delete operation is complete, the operating system menu is redisplayed; if the delete is not successful (e.g., if the name does not exist) an error message is displayed.

D.5 LIST DIRECTORY (LD) COMMAND

The List Directory command is used to display the names of the subdirectories (if any) and files that are contained in the specified directory. This is the command that is keyed to display the names of all the documents created with a particular synonym that represents a directory.

After the LD command is keyed and the RETURN key is pressed, the following is displayed:

```
    LIST DIRECTORY
                PATHNAME:  <synonym>
      LISTING ACCESS NAME:
```

The user then keys the name (synonym) of the directory to be listed. The RETURN key is pressed to move the cursor to LISTING ACCESS NAME. The default for LISTING ACCESS NAME is the video display terminal (VDT); press RETURN to list the directory on the VDT.

Figure D-1 is an illustration of a DNOS directory listing.

```
DIRECTORY LISTING OF: S1.UID.DWR009.USER
  MAX# OF ENTRIES:53      # OF ENTRIES AVAILABLE:  25


FILE       ALIAS OF RECORDS     LAST UPDATE          CREATION
 DATAFILE     *        29     07/09/81 07:49:25    06/30/81 23:55:46
 DESDOC       *        29     06/30/81 23:55:45    06/30/81 23:55:22
 DESFILE      *        23     07/13/81 08:49:34    06/30/81 23:56:10
```

Figure D-1. DNOS Example Directory Listing

D.6 LIST SYNONYM (LS) COMMAND

The List Synonym command is used to list the synonyms that are in use by or have been assigned to a specific user. When the LS command is keyed and the RETURN key is pressed, the following is displayed:

```
    LIST SYNONYMS
      LISTING ACCESS NAME:
```

The user can press the RETURN key again to display the synonym list on the VDT. Figure D-2 is an example listing generated by the LS command.

```
LIST SYNONYMS
SYNONYM              VALUE
 $$12                  Y
 $$CC                  00000
 $$DA                  N
 $$EA                  N
 $$MO                  OF
 $$S                   RAM.SIPW
 $$ST                  14
 $WP                   DR.ENVEL
 $WPDATA               DR.DATA
 $SPDESC               DR.DES
 $WPDOC                DR.ENVEL
 $WPT                  DR.STAMPS
 $XE$                  RAM.SIPW
 BETA                  S1.TIPE.DOC.TI.BETA
 BIO1                  1406
 DISK                  PUBUTL
 DR                    S1.UID.DWR009.USER
 DWR                   S1.UID.DWR009
```

Figure D-2. DNOS Example Synonym Listing

D.7 KILL OUTPUT (KO) COMMAND

The Kill Output command allows the owner of the print request to terminate queued output at a given device. The Show Output Status (SOS) command can be used to determine what is on a print queue for a printer. The KO command is used for terminating print operations initiated by the PF command. When the KO command is keyed and the RETURN key is pressed, the following is displayed:

```
KILL OUTPUT AT DEVICE
            DEVICE NAME:
               SPOOL ID:
```

The DEVICE NAME is the name of the device at which output is to be terminated.

The SPOOL ID is the unique six-character ID assigned to the print request. The spool ID can be determined through the Show Output Status (SOS) command. To terminate all print requests by user, enter ALL in response to this prompt. Only the print requests owned by a user can be terminated by this command.

If the last file is terminated, or if all the files are terminated, the Resume Output (RO) command must be issued before any printing is continued.

D.8 RESUME OUTPUT (RO) COMMAND

The Resume Output (RO) command continues printing that has been halted, or continues printing of subsequent jobs where output was terminated with the KO command. When the RO is keyed and the RETURN key is pressed, the following is displayed:

```
RESUME OUTPUT AT DEVICE
              DEVICE NAME:
  PAGE SKIP (-255...255):
```

The DEVICE NAME is the name of the device at which the output is to continue.

The PAGE SKIP (-255...255) parameter allows the continuation of output by specifying the number of pages to skip backwards or forwards before printing is resumed. If the parameter is left blank, printing continues at the point where it was halted. To begin printing from the first page, enter -255 for this prompt.

D.9 SHOW OUTPUT STATUS (SOS) COMMAND

The Show Output Status (SOS) command is used to show the following types of status for spooler output:

* The status of files (identified by user ID) in the output queue
* The status of all files (identified by all user IDs) in the output queue
* The status of files waiting for output at a particular device
* The status of files waiting for output at all devices

When the SOS command is keyed, the following is displayed:

```
SHOW OUTPUT STATUS
            USER ID:
  DEVICE/CLASS NAME:
```

The USER ID is the ID associated with the files for which status information is to be displayed. If this parameter is left blank, all files in the output queue will be displayed.

The DEVICE/CLASS NAME is the name of the device on which the output is printed. If this parameter is left blank, the status of files on all devices is listed. Further information on CLASS NAME is contained in the explanation of the MSD command.

The SOS command does not display device status information. Device status information is written to the system log.

D.10 MODIFY OUTPUT (MO) COMMAND

The Modify Output (MO) command allows the owner of the print request to change the output device or the priority of a file on the print queue. The MO command is particularly useful in the event that a listing device fails while printing a file. The MO command is used to continue printing the file at another device. When the MO command is keyed and the RETURN key is pressed, the following is displayed:

```
MODIFY OUTPUT AT DEVICE
     SPOOL ID:
  DEVICE NAME:
         FORM:
    PRIORITY:
```

The SPOOL ID is the ID assigned to the file by the Spooler Subsystem. The ID can be obtained through the Show Output Status (SOS) command.

The DEVICE NAME is the name of the device where the file will be printed.

The FORM parameter is the name specifying the form type to be used for the printed output. If a blank is entered for this parameter the form type will not change.

The PRIORITY parameter is the value associated with the file to be printed.

D.11 MODIFY SPOOLER DEVICE (MSD) COMMAND

The Modify Spooler Device (MSD) command modifies, updates, or deletes the attributes of a device used by the Spooler Subsystem. When the MSD command is keyed and the RETURN key is pressed, the following screen is displayed:

```
MODIFY SPOOLER DEVICE
            DEVICE NAME:
  AVAILABLE TO SPOOLER?:
                  FORM:
         CLASS NAME(S):
               DELETE?:
```

The DEVICE NAME is the name of the device to be modified, added, or deleted.

The AVAILABLE TO SPOOLER parameter can be answered Y if the device is available for use by the Spooler Subsystem. In order to print directly to a printer, answer N to this prompt. The printer is then removed from the spooler subsystem; this allows the TIPE print task to print directly to the line printer.

The FORM parameter specifies the form type on which the output will be printed. The default is STANDARD.

The CLASS NAME(S) parameter is the name associated with a specific device. Up to six class names can be specified, separated by commas. More than one class name can be assigned to a device, and more than one device can have the same class name. A null response indicates that there is no change in the class name associated with the device.

If Y is answered for the DELETE parameter, the device is deleted from the Spooler Device Table (SDT). If N is entered, the device remains on the SDT with the attributes entered in response to the preceding prompts. The default is N.

D.12 TIPE CONVERSION PROGRAM (TIPECNV) COMMAND

The TIPE conversion program can be used to convert DNOS files into TIPE documents. When a file is converted into a TIPE document, the editing features of the TIPE package can then be used to make changes to the document.

After the TIPECNV command is keyed (during display of the operating system menu) and the RETURN key is pressed, the following is displayed:

```
CONVERT TEXT FILE TO TIPE-990 DOCUMENT
  INPUT SEQUENTIAL FILE:
   OUTPUT DOCUMENT NAME:
```

The INPUT SEQUENTIAL FILE prompt is asking for the name of the file that is to be converted into a TIPE document. The OUTPUT DOCUMENT NAME prompt is asking for the name that is to be assigned to the document after it is converted. The appropriate names should be keyed followed by pressing the RETURN key. A "FOREGROUND COMMAND EXECUTING" message is displayed during the convert operation, and when the operation is complete, the operating system menu is redisplayed.

As the text file is converted, the program checks each line and sets the right margin equal to the longest line that is found. Any lines that are longer than 132 characters are truncated. In other words, any characters past position 132 are deleted. After the conversion is complete, the operating system menu is redisplayed. The user can then key the TIPE command and select the edit operation to display the converted document. It may be necessary to use the HOME and Right Arrow key to display an entire line.

Each line of the converted document includes a return code and these return codes may have to be deleted before editing or printing the document. The word wrapping feature of TIPE does not function on a line with a return code. Also, right justification during printing is not possible when each line contains a return code.

Another operation that is not necessary, but can be performed if desired, is to reformat the document. This is accomplished very quickly by keying TIPE, then E for edit, and keying the document name. When the document is displayed on the screen, press the SELECT BLOCK key, followed by HOME and HOME again. This moves the cursor to the last line of the document. If necessary, press HOME and the Right Arrow key to move the cursor to the end of the line. Again press SELECT BLOCK, key R for reformat, set the right margin (e.g., at position 66) and press RETURN twice. At this point, additional edit operations can be performed as desired. Reformatting to a smaller right margin may produce undesirable results if the return codes are not deleted first.

D.13 TIPP SPOOLER CONSIDERATIONS

Using TIPP with or without the spooler to print documents requires special considerations. These considerations are discussed in the remainder of this section.

TIPP can print documents directly to a printer device in either attended or unattended mode. However, the spooler cannot control the printer device when TIPP prints documents directly to a printer device. The device name cannot be assigned as a logical name of any other device. You can check for these conditions using the following procedures:

* Use the List Device Configuration (LDC) command to determine whether the printer device is controlled by the spooler. If so, use the Modify Spooler Device (MSD) command to release the printer device from the spooler control.

* Use the List Logical Names (LLN) command to determine whether the printer device name is assigned as a logical name for any other device. If so, use the Release Logical Name (RLN) command to release the logical name from the printer device.

When you are printing documents in attended mode, the spooler control of the printer device must be released to allow the Next Page key to function correctly. This applies whether or not single sheet feed is selected.

When you use TIPP to print documents to a printer device controlled by the spooler, you must assign a spooler logical name to the printer device. Enter this logical name in response to the PRINT or FILE NAME prompt in the TIPP print parameter menu. To determine whether a logical name is assigned to a printer device, use the List Logical Names (LLN) command and examine the DEVICE/CLASS NAME field of all spooler entries. If the name of the desired printer device appears in any of these entries, you can use the corresponding logical name to reference that printer. If the device name does not appear in any of the entries, you can assign a logical name to the printer device by using the Assign Logical Name (ALN) command.

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USER'S RESPONSE SHEET

Manual Title: Model 990 Computer TIPE-990 User's Guide (2270549-9701)

Manual Date: 15 September 1981 **Date of This Letter:** _____

User's Name: _____ **Telephone:** _____

Company: _____ **Office/Department:** _____

Street Address: _____

City/State/Zip Code: _____

Please list any discrepancy found in this manual by page, paragraph, figure, or table number in the following space. If there are any other suggestions that you wish to make, feel free to include them. Thank you.

CUT ALONG LINE

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