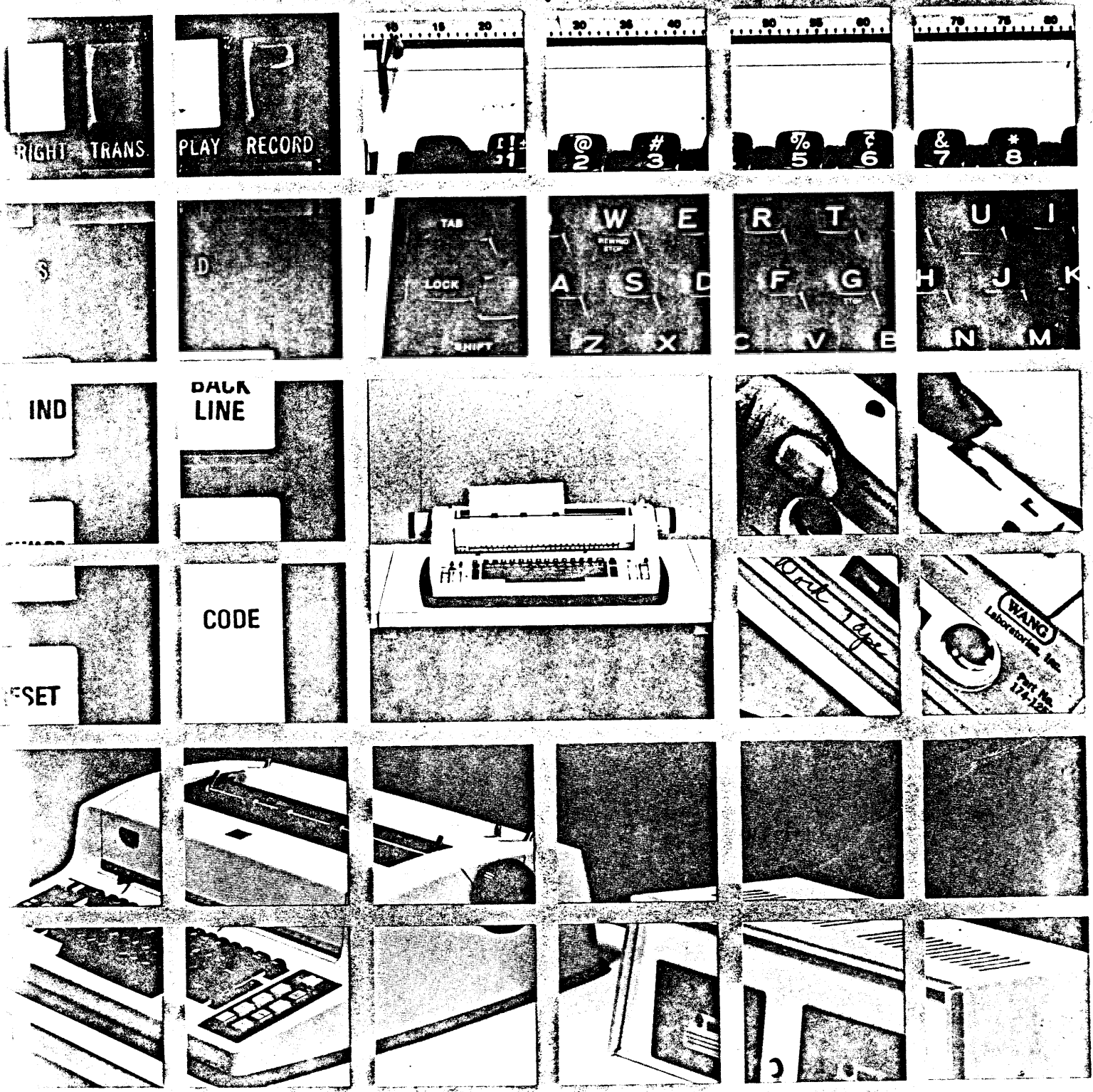# WANG

Wang Word Processing
Operator's Guide

Wang
Word Processing
Operator's Guide

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WANG LABORATORIES, INC.

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HOW TO USE THIS MANUAL

Chapter 1 of the System 1200 Word Processing Manual is a general overview of the System. Do not try to remember all the information presented in Chapter 1 – each function is explained in detail later in the manual. Chapters 1 through 5 contain information and instructions for basic operation of the System. Chapters 6 through 10 explain all the recording and playback features which make the System 1200 truly automatic. Chapters 11 through 15 teach you the simple procedures for many special applications which were tedious and time consuming on a standard electric typewriter.

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AND MASKED SEARCH

Chapter 1
Overview

The Basic System

Chapter 1
Overview of the System 1200

INTRODUCTION

   The System 1200 Dual Cassette Typewriter line has two major models: the System 1220 and the System 1222.

   The System 1220 consists of a modified IBM Selectric® typewriter and two cassette holders, supported on a single table which houses the electronic memory. A storage table and acoustical hood are optional accessories. The MAIN ON/OFF switch is located under the table top, beneath the right tape holder.

Left Cassette Holder   Right Cassette Holder

MAIN ON/OFF Switch

Electronic Memory
The System 1220

1
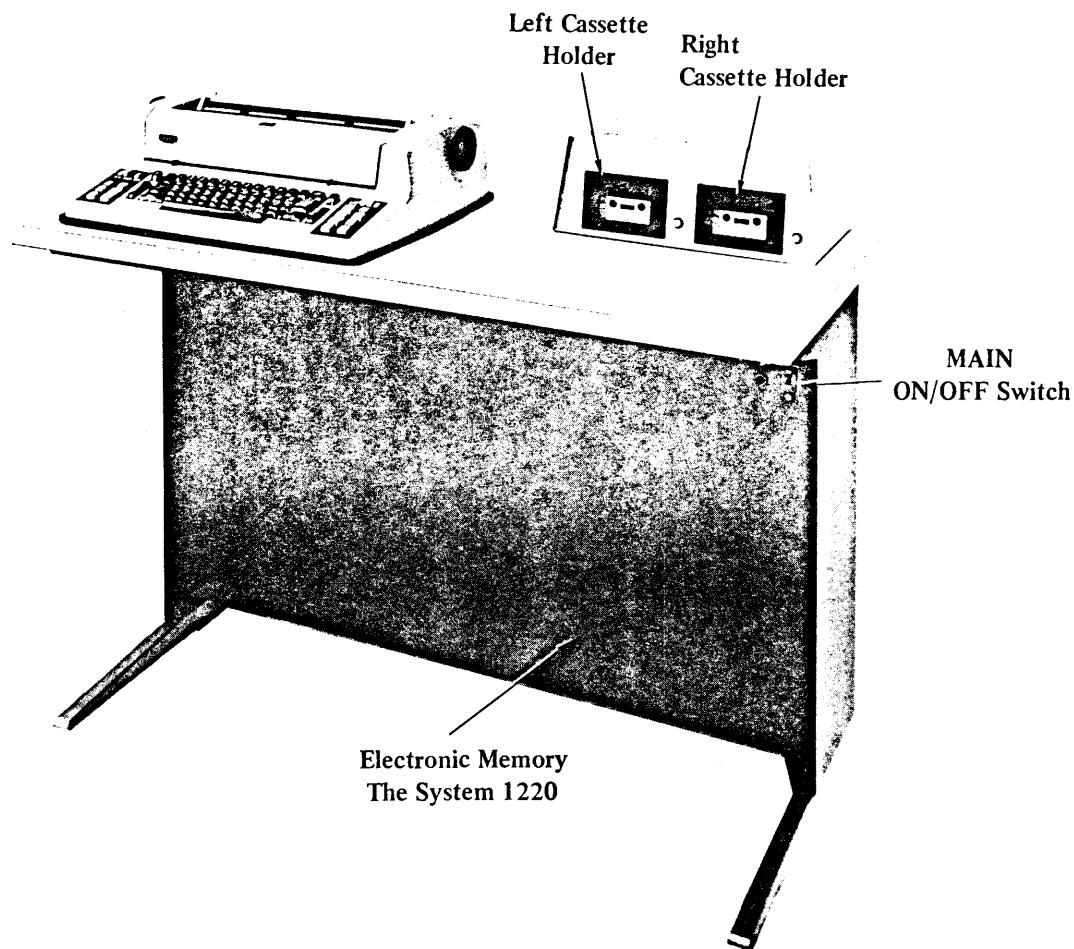
CHAPTER 1
OVERVIEW OF THE SYSTEM 1200

The System 1222 consists of a Typewriter Station, which holds a modified IBM Selectric II® typewriter and a custom designed acoustical hood; a Cassette Station, which houses the electronic memory and supports the two tape holders; an optional Work/Storage Station; and optional Console Extensions. The MAIN ON/OFF switch is located at the front right side of the Cassette Station, under the table top. The standard warning bell has been replaced by a pleasant, electronic tone with adjustable volume. The volume control dial is located on the center of the front of the Cassette Station, below the tape holders.
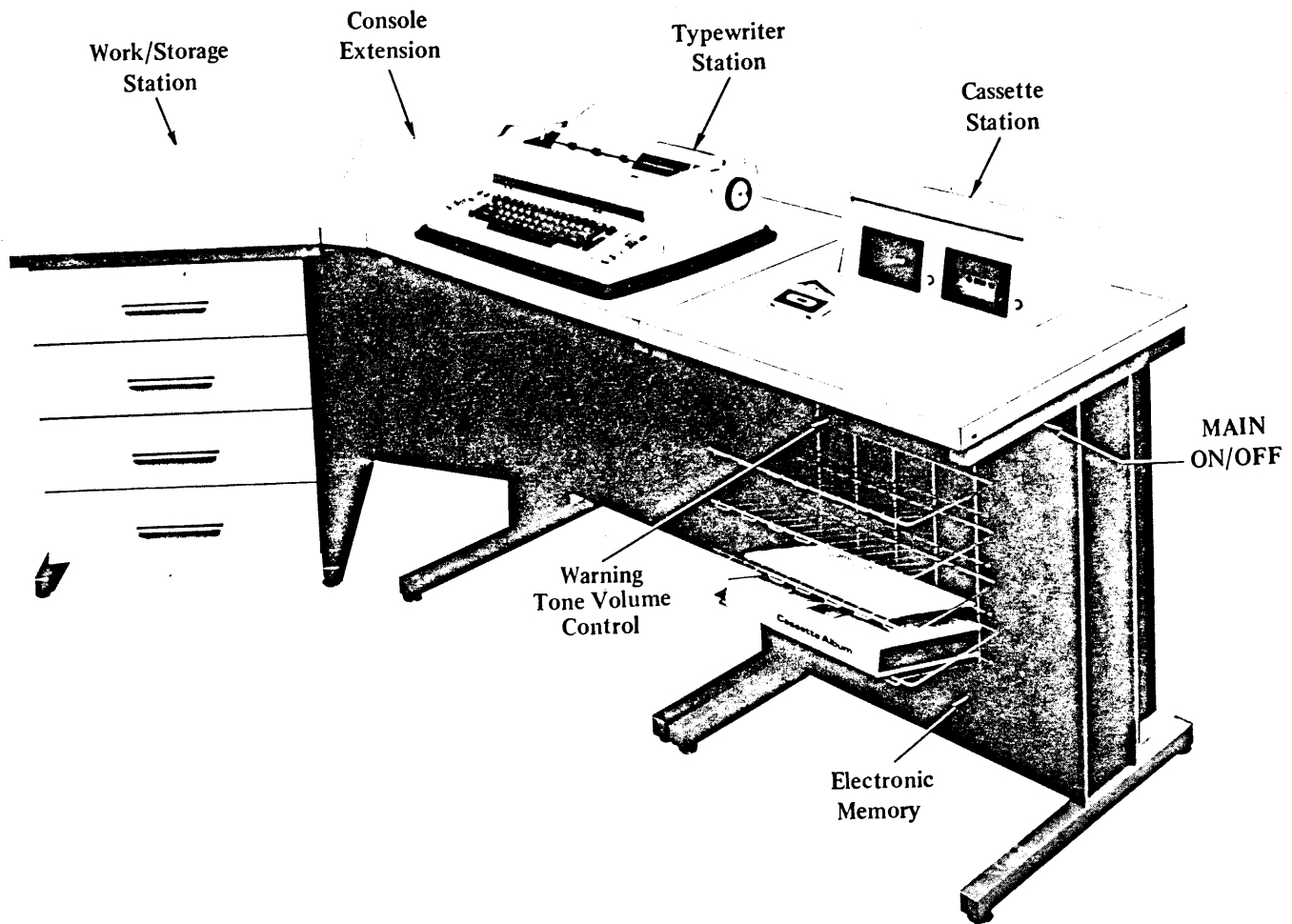
The two models are similar in operation. This manual serves as an instructional guide for both. Appendix C contains instructions on all operational differences of the System 1222.

CHAPTER 1
OVERVIEW OF THE SYSTEM 1200

THE TYPEWRITER

Turn to page 7 and fold out the photograph of the System 1222 keyboard. Beside the normal typewriter keys, the keyboard contains all the necessary control buttons, keys and indicator lights. You will learn about each button, key and light as you go through the manual. Briefly, they are:

1. Typewriter ON/OFF Switch

Controls only the typewriter, while the **MAIN ON/OFF** switch controls the entire System. Turn **ON** both the Main and Typewriter switches. You can turn **OFF** the Typewriter switch without losing any information in memory, but if you turn **OFF** the **MAIN** switch, any information in the memory is lost. It is a good practice to have the **MAIN** switch **ON** all day and to turn **OFF** the Typewriter switch with not in use.

2. Blocking Switch

When the switch is on the S (single) position, all your material is recorded once on tape. When in the D (double) position, all material is recorded twice – a line followed by the same line -- but is played back only once. Double blocking decreases the possibility of losing lines due to dirt, damaged tapes or humidity.

3. Pitch Selection Switch

Not present on the System 1220. See Appendix C. for operational instructions.

4. Left Margin Controls

Not present on the System 1220. See Appendix C.

5. Tape Control Buttons and Indicator Lights

6. Recording and Editing Control Keys

7. Playback Control Buttons and Indicator Lights

Explained in the manual text.

8. Playback Control Keys

9. Special Command Keys

0. Express Line Feed Key

Not present on the System 1220. See Appendix C.

1. Automatic Vertical Halfspacing Key

Standard on the System 1222, optional on the System 1220. Explained in the manual.

Procedural Errors

Any time you make a procedural error, all the indicator lights flash and the warning bell/tone sounds. To turn off the lights and the bell/tone, touch the **RESET** key.

Using the System 1200 as a Standard Electric Typewriter

Find and depress the **PLAY** button. Whenever the **PLAY** button is depressed, you can use the System as standard electric typewriter. Each time you touch the **RETURN** Key, the warning bell/tone sounds to let you know the System in not in **RECORD**.

THE MEMORY

The typewriter and cassette tape holders are familiar components to most people. It is the electronic memory which is unfamiliar and makes the System automatic. The memory links the typewriter and tape holders together. The memory remembers what and where something is typed on a page and acts as a holding station for typed information to be passed back and forth between the typewriter and tape.
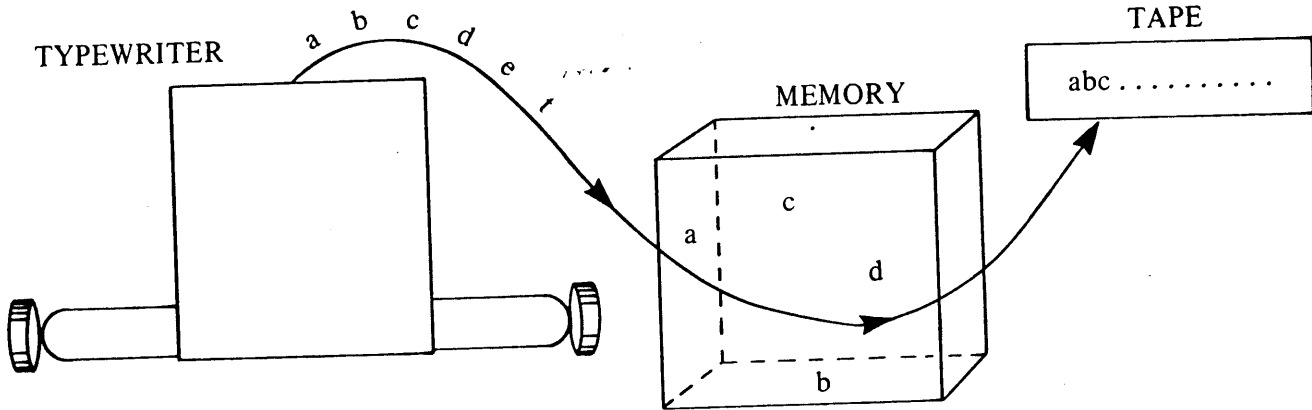
The operator acts like a switchman controlling what, how much and in what direction the information flows. All the switches are conveniently located on one master board, the typewriter keyboard. All the information is entered via the typewriter keyboard (what). The information then goes to memory. Once in memory, there are four main controls which control the direction of information flow – RECORD, PLAY, TRANSFER and EDIT.
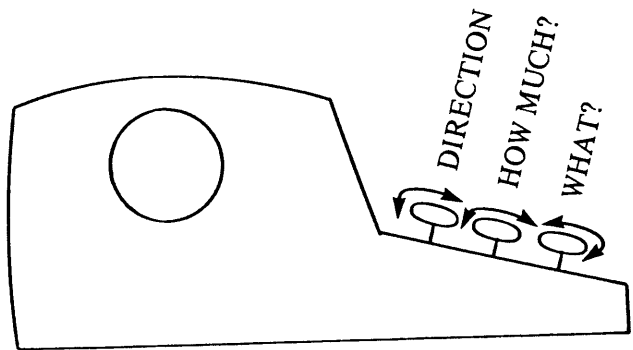
In RECORD, all the information goes to the memory, then to the tape.
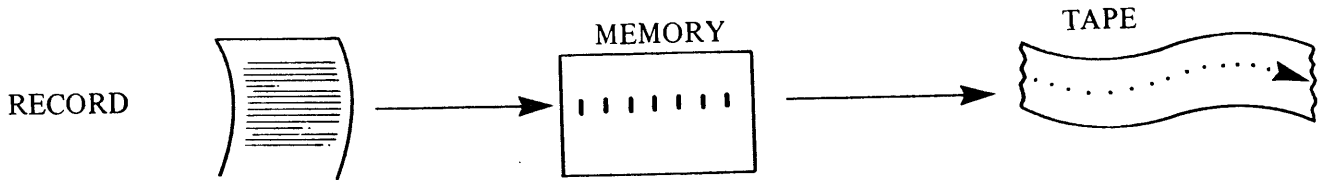
The information is recorded on the tape in blocks which can hold 100 characters. Therefore, the typing line is limited to 100 characters. If the typing line does not contain 100 characters, the remaining spaces after the RETURN are left blank.
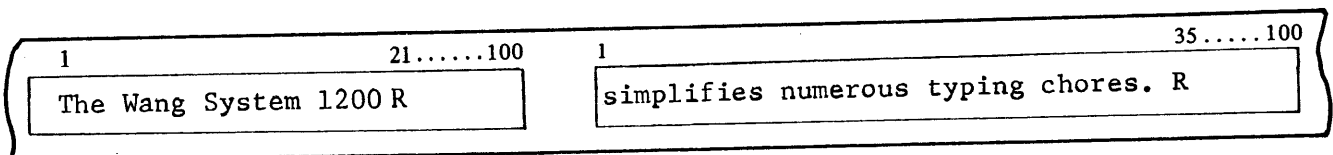
CHAPTER 1
OVERVIEW OF THE SYSTEM 1200

In **PLAY**, information from the tape goes to the memory, then to the typewriter.
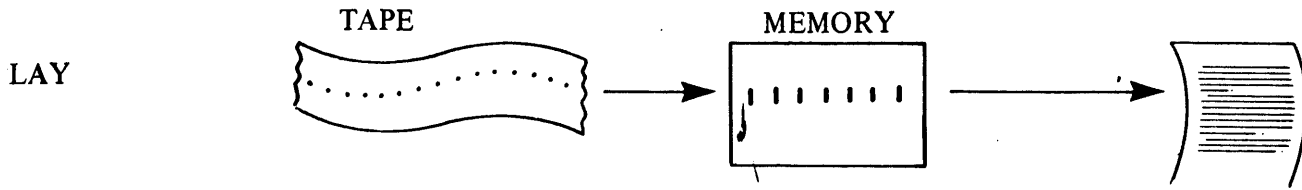
PLAY

TAPE → MEMORY →

In **TRANSFER**, information goes from the right tape to the memory to the left tape and/or to the typewriter.

TRANSFER

RIGHT TAPE → MEMORY → LEFT TAPE →
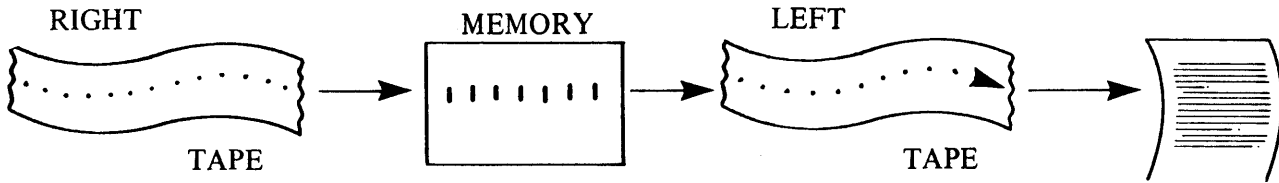
In **EDIT**, the information goes to the memory then back to the same tape.

EDIT

TAPE → MEMORY → BACK TO SAME TAPE
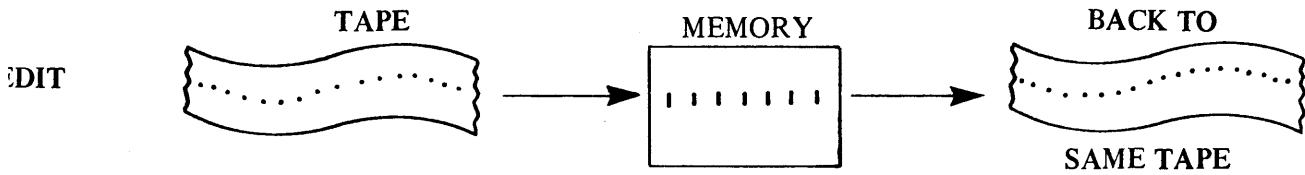
The operator, through these four controls (**RECORD, PLAY, TRANSFER** and **EDIT**), controls the direction in which information flows through the System.

The operator also controls HOW MUCH information at a time flows through the System.

In **RECORD**, the **RETURN** key causes information in the memory to be recorded on the tape.

RECORD → → MEMORY —RETURN KEY→

In **PLAY,** five keys control how much information is played out from the memory.

PLAY   TAPE   →   MEMORY   CHAR WORD LINE PARA AUTO →
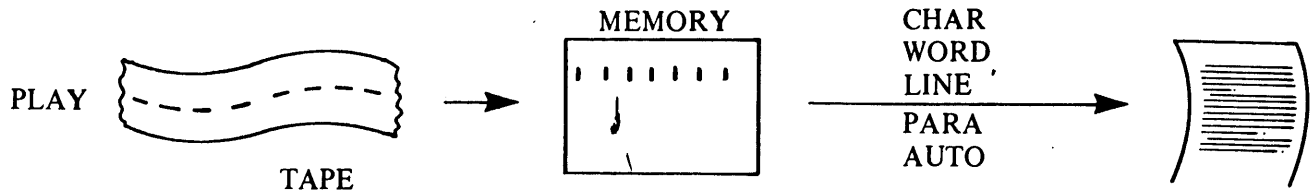
In **TRANSFER,** several keys control how much is transferred at a time from the memory to the left tape.

TRANSFER

RIGHT TAPE   —SEARCH→   MEMORY   →   LEFT TAPE

OR

RIGHT TAPE   →   MEMORY   →   CHAR WORD LINE PARA AUTO   →   LEFT TAPE
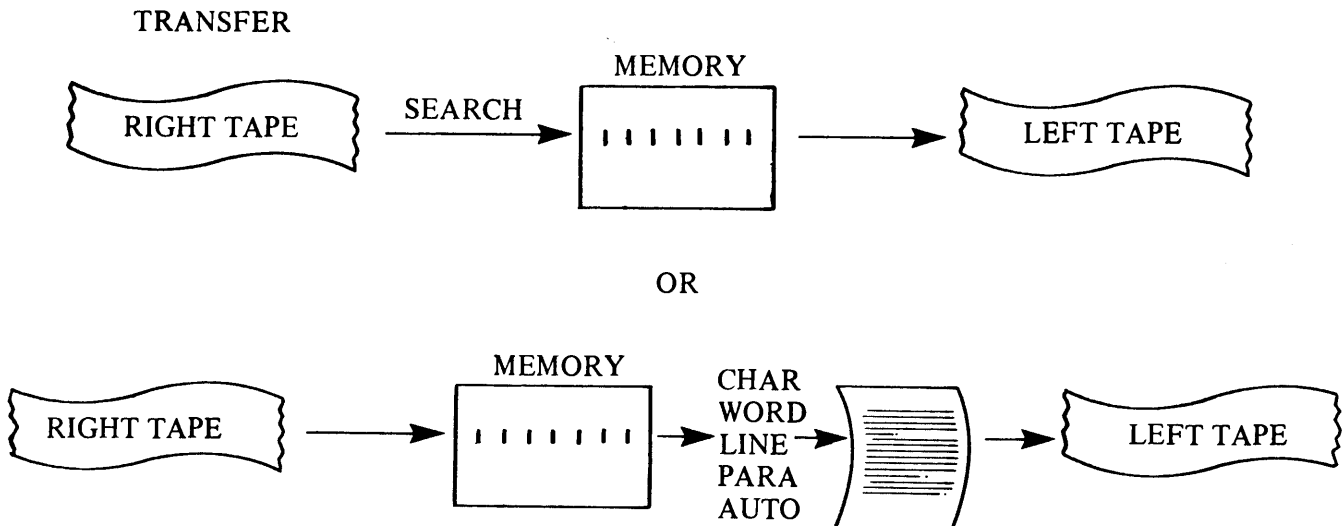
In **EDIT,** three keys control how much information is played out.

EDIT   TAPE   →   MEMORY   →   CHAR WORD LINE   →   SAME TAPE
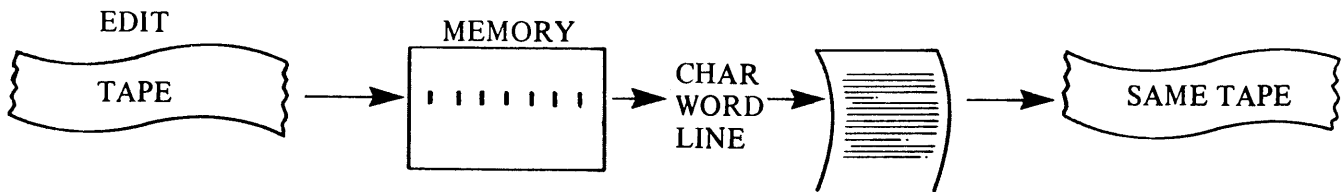
Therefore, if you want to record a tape, the **RECORD** button is down; to play back a recorded tape, the **PLAY** button is down; to create a duplicate tape and correct a tape, the **TRANSFER** button is down; or to correct or **EDIT** the original tape, the **RECORD** and **PLAY** buttons are down. Whenever the System is used, one of these four conditions must exist.

Go on now, and learn in detail how to operate the System.

CHAPTER 1
OVERVIEW OF THE SYSTEM 1200

CHAPTER REVIEW CHECKLIST

- The **RECORD, RIGHT*** and **SAME** buttons are down in order to record on tape.
  *LEFT if the left holder is being used.

- The **MAIN ON/OFF** switch is left **ON** during the business day because when the switch is turned **OFF**, the memory is erased.

- The Typewriter **ON/OFF** switch can be turned off without affecting the memory.

Chapter 2
Simple Recording
and Playback

RECORDING AND PLAYING
DOCUMENTS ON TAPE

SIMPLE RECORDING
AND PLAYBACK

CONTROLLING WHILE
RECORDING
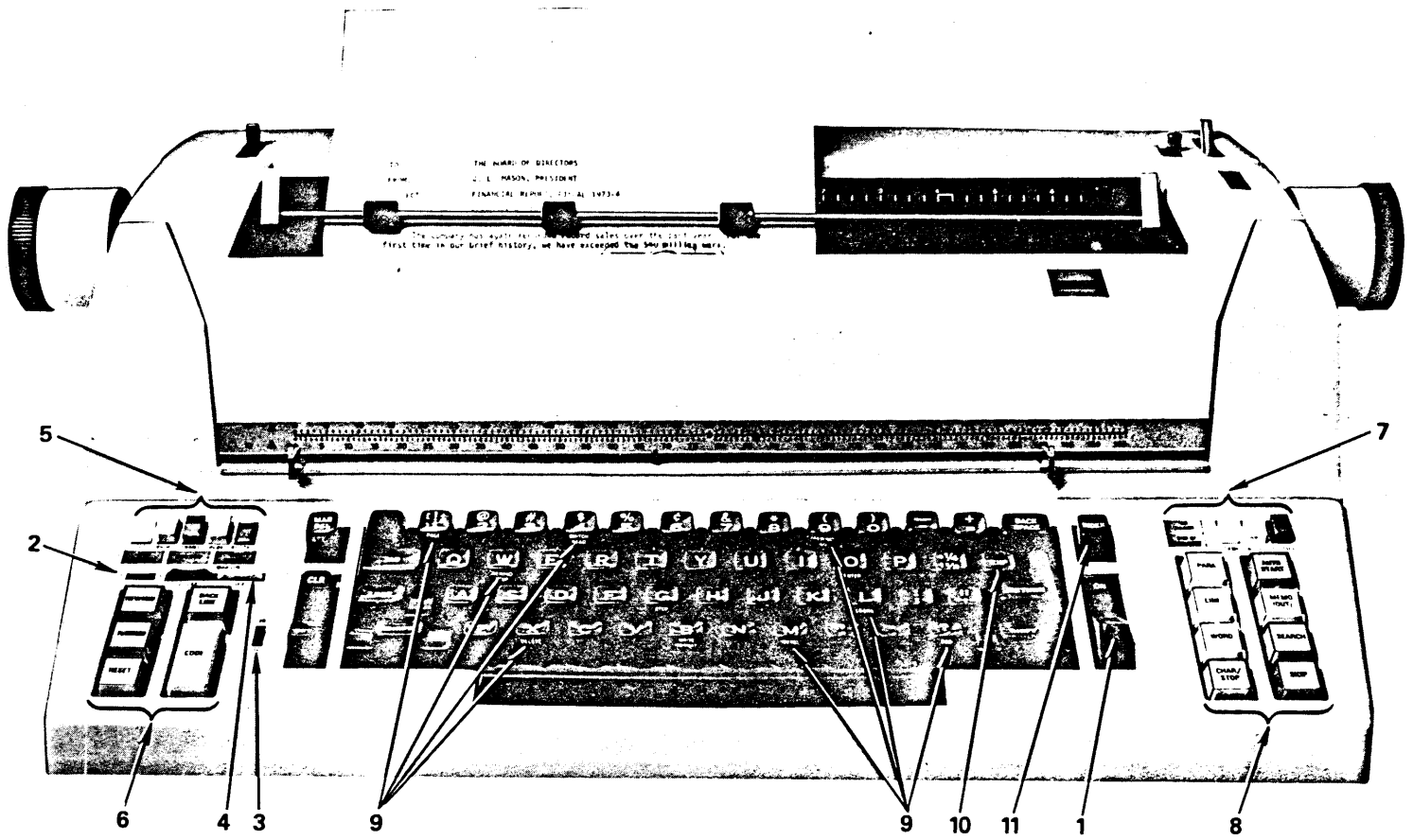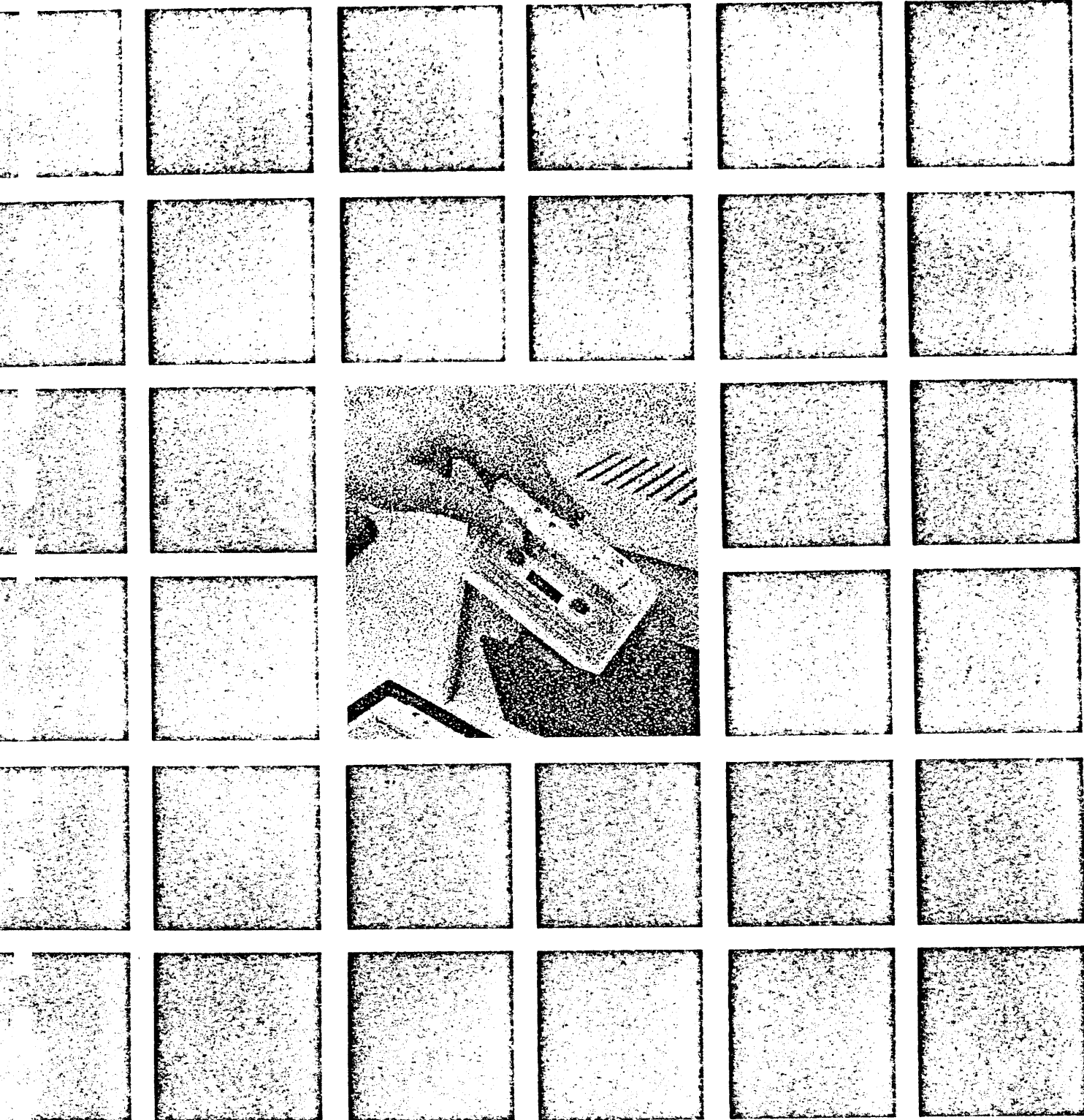
RECORDING

Chapter 2
Simple Recording
and Playback

In this chapter you are to **RECORD** a simple document on a tape cassette, ignoring any typing errors you may make, and then play back the document exactly as you recorded it.

TASK: RECORD A DOCUMENT ON TAPE

STARTING STEPS:
a. WORK TAPE IN
   RIGHT HOLDER
b. RIGHT
c. RECORD
 . SAME
 .. REWIND

The Wang Dual Cassette Typewriter simplifies all typing chores. The keyboard is similar to a standard electric typewriter. All additional control keys are located directly on the keyboard and are easily incorporated into your touch typing technique. With the PLAY button depressed, the System 1200 functions as a standard electric typewriter. But depress the RECORD button and everything you type is recorded on a tape cassette, ready for playback at any time.

HOW TO DO:

1. There is a right and left tape cassette holder. You can record in either holder.

   Press the white button of the right tape cassette holder.

TAPE CASSETTE HOLDER

CHAPTER 2
SIMPLE RECORDING AND PLAYBACK

2. Place a tape cassette in the right tape cassette holder with the label facing you. You can record on only one side of the tape. Close the door.

TAPE WOUND ON RIGHT REEL

KEYBOARD

RIGHT   RECORD   SAME
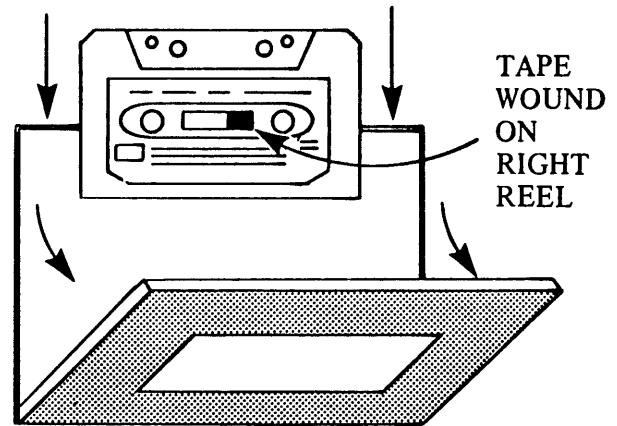
3. Depress the **RECORD** (red) button. Notice the **PLAY** button comes up when **RECORD** is depressed, and the **RECORD** indicator light illuminates.

   Depress the **RIGHT** (white) button which controls the right tape holder. (Depress the **LEFT** button when you record in the left holder.)

   Depress the **SAME** button.

   Touch the **REWIND** key.

   These three buttons (RECORD, RIGHT, SAME) must be depressed to record on the tape in the right holder.
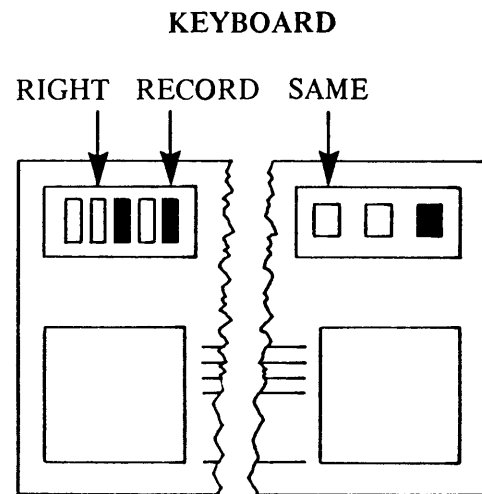
RECORD, RIGHT, SAME

4. Type the first line as shown.

   The line is now in the memory of the System. Touch RETURN.

   THREE THINGS HAPPEN when you touch the RETURN key.

   a. The carrier returns.
   b. The line you just typed is recorded on tape. Until the **RETURN** key is touched, nothing is recorded on tape.
   c. The memory is erased.

a CARRIER RETURNS

RETURN

b The . . . . . . chores. -R . . . . .

c MEMORY ERASED
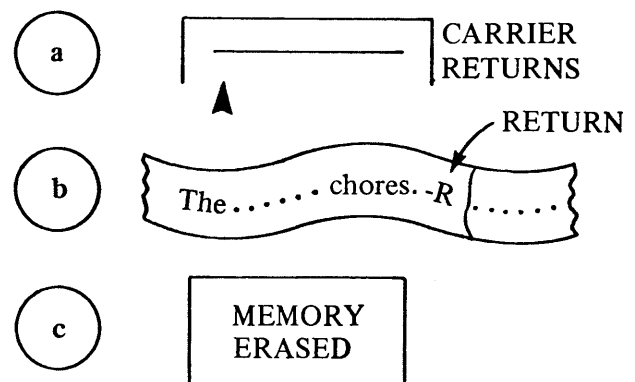
ONE LINE RECORDED ON TAPE AT A TIME

10

CHAPTER 2
IMPLE RECORDING AND PLAYBACK

> **NOTE:**
> *Each line recorded on tape can contain 100 characters. The warning bell/tone sounds at the 90th character. If you record less than 100 characters (including the RETURN), the System adds blank spaces at the end of the line to make a line 100 characters long. If you type the 100th character, the System backspaces to the 100th character, and sounds the warning tone/bell to tell you that you have reached the 100th character limit. Later you will learn how to record more than 100 characters on a line.*

5. Record the remainder of the document as shown. Ignore any typographical errors you may make.

(After recording the last line, including the **RETURN,** *you must tell the System the document is complete.* Find the slash (/) key, and notice that **EOD** is printed at the base. This stands for End Of Document. Touch the **CODE** key, and then the **SLASH** (/) key which records an **EOD** code on the tape. An End Of Document Code, when recorded, takes up a line on the tape. The carrier returns automatically.
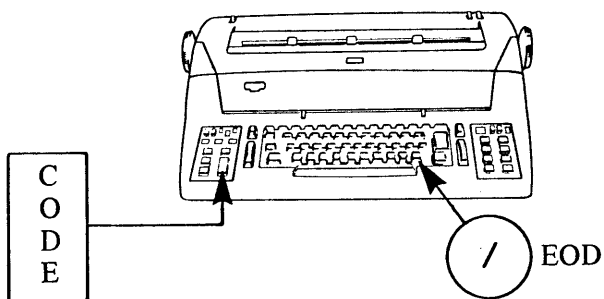
> **NOTE:**
> *If the* **CODE** *key is activated by mistake, simply touch it again and the light goes out, signifying that it is deactivated.*

TASK: PLAY BACK THE DOCUMENT EXACTLY AS RECORDED

STARTING STEPS:
a DOCUMENT TAPE IN RIGHT HOLDER
b. RIGHT
c PLAY
a. SAME
e. REWIND

The Wang Dual Cassette Typewriter simplifies all typing chores. The keyboard is similar to a standard electric typewriter. All additional control keys are located directly on the keyboard and are easily incorporated into your touch typing technique. With the PLAY button depressed, the System 1200 functions as a standard electric typewriter. But depress the RECORD button and everything you type is recorded on a tape cassette, ready for playback at any time.

11

HOW TO DO:

1. You depressed the **SAME** button to record in the previous lesson. With the **SAME** button depressed in **PLAY**, the document is played back exactly as it was recorded.

2. Find and depress the **PLAY** button. Notice the **RECORD** button comes up.
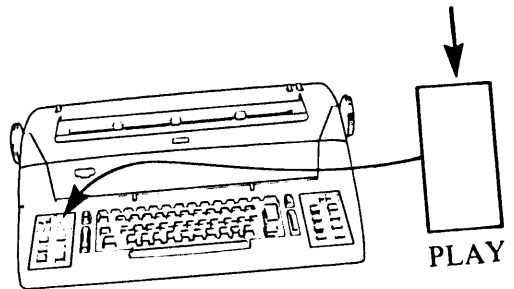
PLAY

3. Find and touch the illuminated **CHAR/STOP** key twice.

   Each time the **CHAR/STOP** key is touched, one character at a time is played back. A character is any letter, symbol or space; any key on the keyboard is a character.

CHAR/STOP

Th
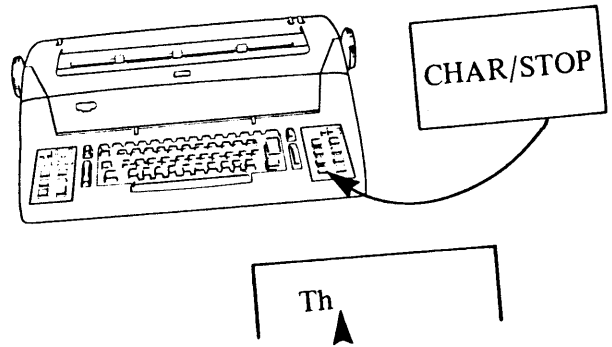
4. Find and touch **WORD** key. Notice the System played back the remainder of the word (The) plus the space after it. When part of a word has been played back, the System only plays the rest of the word when the **WORD** key is used.

WORD

The
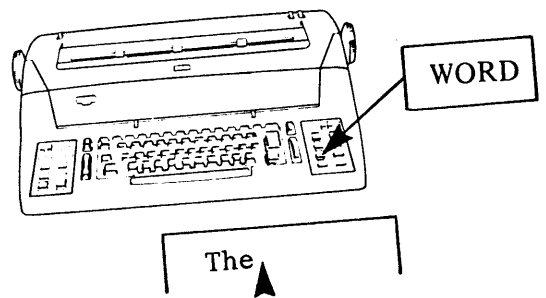
5. Touch **WORD** again.

   The System played back the entire word plus the space after it. A word, according to the System, is a word plus a space, a word plus a punctuation mark and a space, or a word plus a carrier return or tab.

The Wang
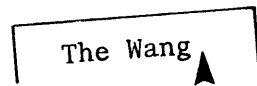
CHAPTER 2
SIMPLE RECORDING AND PLAYBACK

. Find and touch the **LINE** key once. Each time the **LINE** key is touched, one line is played back. A line is a complete line of type ended by a carrier return.

> **NOTE:**
> *While the System is playing back, the light in the* **CHAR/STOP** *key goes out; when the System stops, the light again illuminates.*

LINE
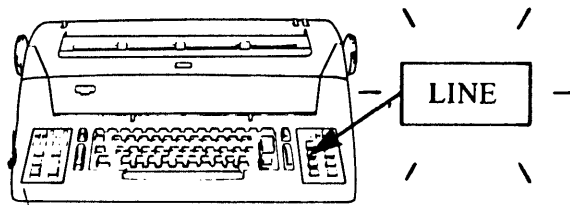
The Wang Dual Cassette .... chores.

7. Find and touch the **AUTO/START** key. When the **AUTO/START** key is touched, the remainder of the document, or the entire document, is played back. The End Of Document light illuminates to show you when the end is reached.

END OF DOCUMENT

AUTO/START
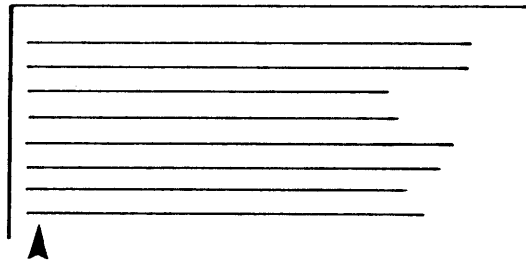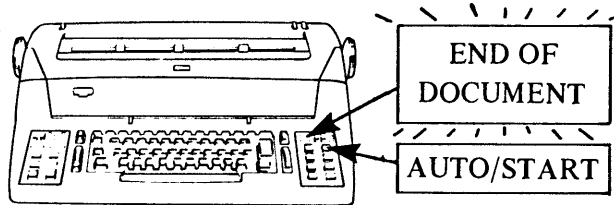
8. Find the **PARA** key.

When the **PARA** key is touched, the System plays back one paragraph. A paragraph is defined as ending with a double carrier return, a carrier return and a tab at the beginning of the next line, a carrier return and a space at the beginning of the next line, or a coded carrier return.

PARA
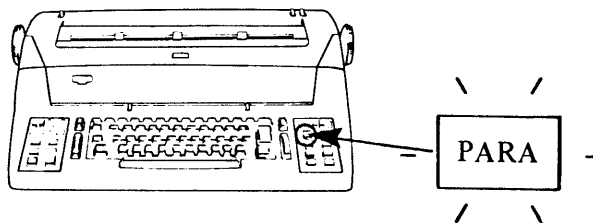
TASK: STOPPING PLAYBACK

STARTING STEPS:
a. DOCUMENT TAPE
   IN RIGHT HOLDER
b. RIGHT
c. PLAY
d. SAME
e. REWIND

CHAPTER 2
SIMPLE RECORDING AND PLAYBACK

HOW TO DO:

When playing back a document, you can stop playback at a character, a line, a word, or a paragraph.

1. Touch **AUTO/START.**
2. Touch **CHAR/STOP.**

STOPS AT A CHARACTER

---
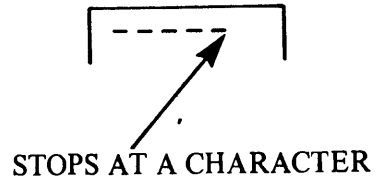
3. Touch **AUTO START.**
4. Touch **LINE.**

STOPS AT THE END OF A LINE

---
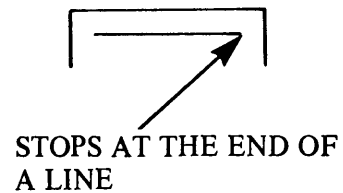
5. Touch **AUTO/START.**
6. Touch **WORD.**

— the

STOPS AFTER A WORD

---
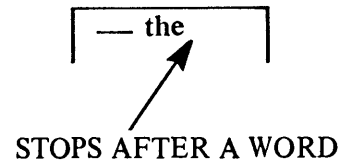
7. **REWIND** and practice playing out this document, stopping playback at a line, word, character, or paragraph.

REMOVING A TAPE

A tape must be rewound before you can remove it from the tape holder. If you attempt to remove an unwound tape, a double lock is activated on the tape recorder. If (When) this happens . . .

1. **REWIND.**

2. Press tape recorder door in slightly to release double lock.

3. Press release button.

CHAPTER 2
SIMPLE RECORDING AND PLAYBACK

CHAPTER REVIEW CHECK LIST

- A line is not recorded on tape until the **RETURN** key is touched. The line resides in the memory until the **RETURN** key is used. The System records on tape line by line, not character by character.

- You can play back a document a character at a time, a word at a time, a line at a time, a paragraph at a time or in entirety, by using the **CHAR, WORD, LINE, PARA** and **AUTO** keys respectively.

- You can stop playback at a character, a word, a line or a paragraph, by touching the **CHAR, WORD, LINE** and **PARA** keys respectively.

- A character is any letter, symbol or space.

- A word is any word plus the following space, a word plus a punctuation mark and a space, or a word plus a carrier return, or carrier return and tab.

- A line is a complete line of type ended by a carrier return.

- A paragraph ends with a double carrier return, a carrier return and a tab, a carrier return and a space, or a coded carrier return.

Chapter 3
Correcting While Recording

RECORDING SEVERAL
DOCUMENTS ON TAPE

ADJUST, VARIABLE ADJUST
AND JUSTIFY

RECORDING AIDS

CORRECTING AFTER
RECORDING
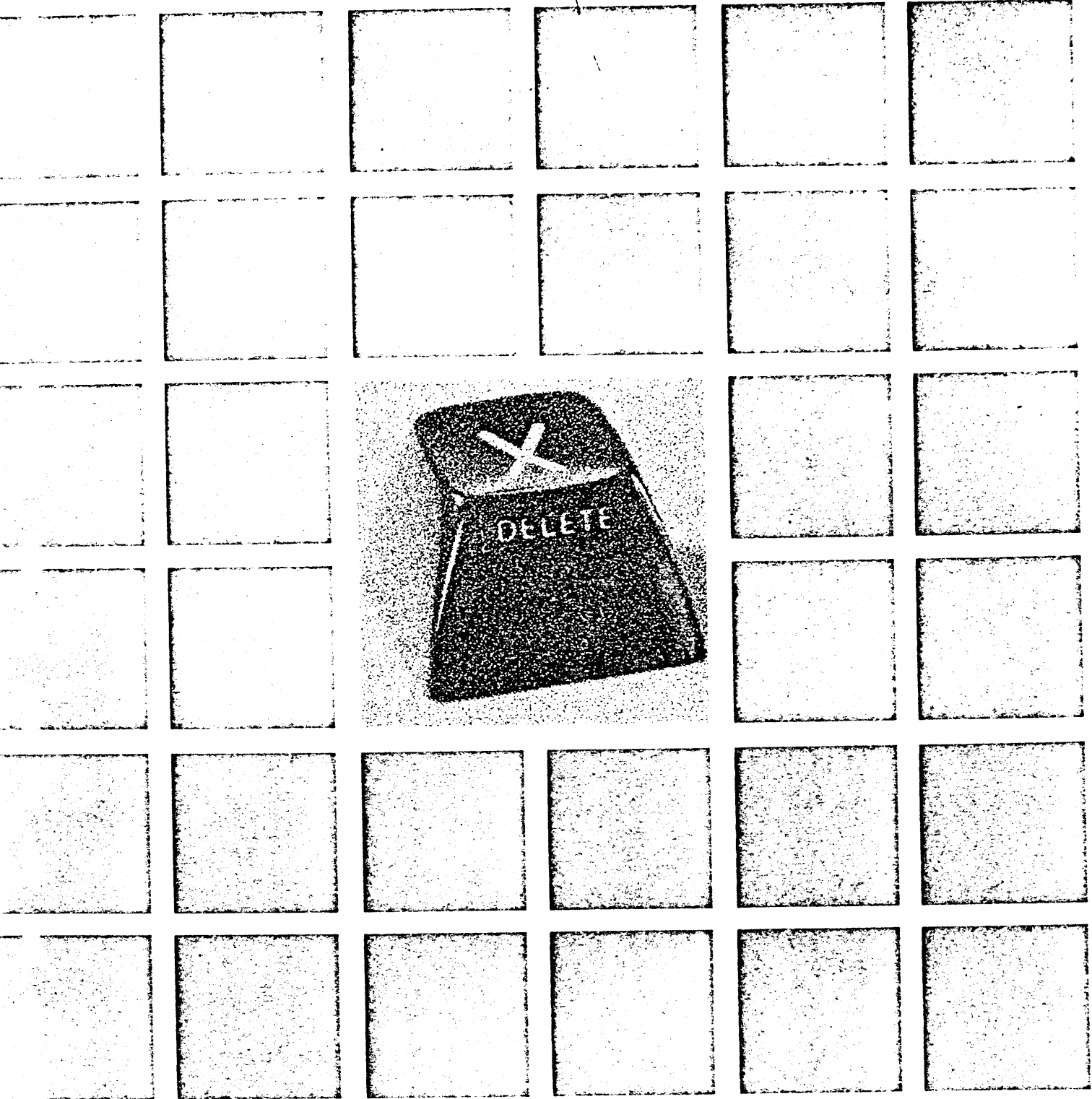
Chapter 3
Correcting While Recording

In this chapter you are going to RECORD a simple document, and make corrections as you RECORD. To correct while recording, you will learn now to use the BACKSPACE key and the BACK LINE key.

ASK: CORRECT A LINE BEFORE IT IS RECORDED

STARTING STEPS:
  WORK TAPE IN RIGHT HOLDER
b. RIGHT
c. RECORD
  . SAME
.. REWIND

Tha Wang Dual Cassette Typewriterr is the obly *R
#1   *2   *3
autometic typewriter whicc can make correctionsR*

without having to reetype the entire R*

line from the correction.*R

Even after a line is recorded on tape R

it is not necessary to retype an entire line. R

/ (EOD)

R = RETURN key
on Typewriter

OW TO DO:
.. Type the first line exactly as shown as far as the asterisk and STOP!

> **NOTE:**
> *The line is not yet recorded on tape, but is in the memory.*

PAPER   MEMORY

---
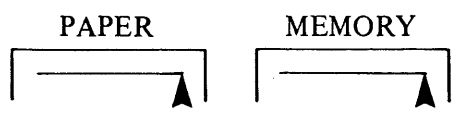
2. Backspace to error No. 1. Type over the "a" with the correct key. Backspacing does not erase the memory, it merely positions the memory pointer back to the character at the location of the typing element.
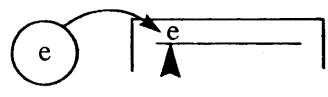
3. Forward space to error No. 2. You need to delete the extra "r".
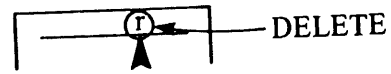
4. Observe the "x" key, and notice the word "delete" is written at the base.

   Ordinarily, when you touch the "x" key an "x" is typed on the paper, but if you first touch the **CODE** key, and then the "x" key, the System deletes the character where the typing element is positioned.
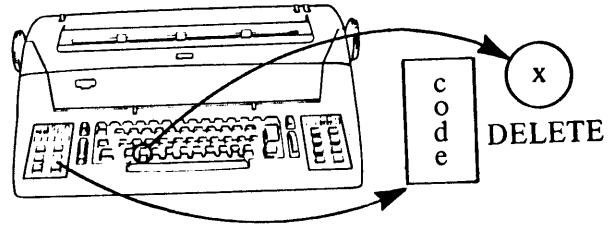
5. Touch **CODE**, and touch "x" (lower case).
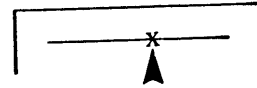
6. Forward space to error No. 3, and type over it with the correct key.

7. Forward space to the point where you stopped typing the line.
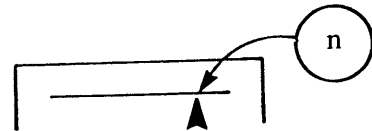
> **NOTE:**
> *You must space forward past the remainder of the line; otherwise, you will not record that portion of the line on tape.*

8. Touch the **RETURN** key. The line, as you corrected it, is recorded on the tape.

PAPER   TAPE

The ... only   R
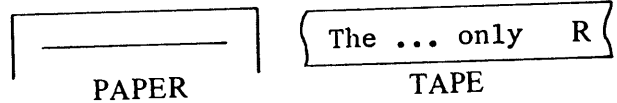
HOW TO DO: CORRECT A LINE AFTER IT IS RECORDED

autometic typewriter whicc can make corrections R*

PAPER   TAPE

HERE NOW

1. Type the second line as shown to the asterisk (including the **RETURN**).

R — R ....
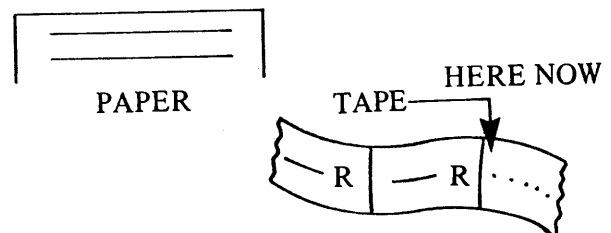
CHAPTER 3
CORRECTING WHILE RECORDING

2. Find the **BACK LINE** key.
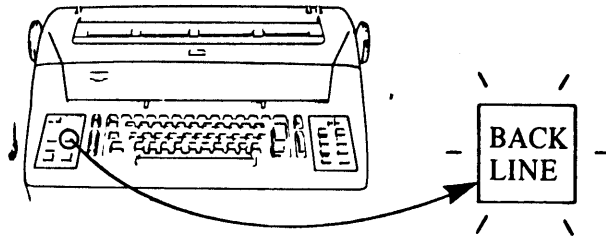
3. Touch the **BACK LINE** key. (Hear the click.)

NOTE:
When the **BACK LINE** *key is touched after a* **RETURN**, *the tape backs up one line, and makes the click sound.*

PAPER
| 1st line |
| 2nd line |

HERE NOW

TAPE
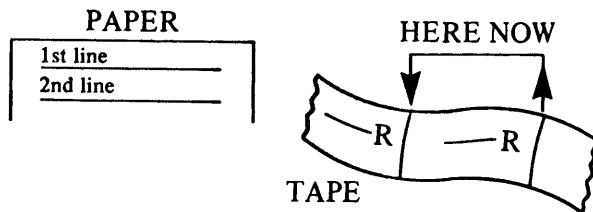
4. Retype the entire line correctly, and then touch **RETURN**.

| 1st line |
| 2nd line |
| 2nd line retyped |

HERE NOW

without having to type the entire R*
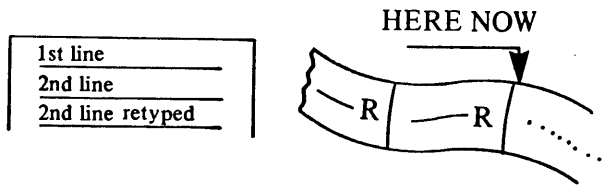
5. Type the third line as shown to the asterisk (including the **RETURN**).

| 1st line |
| 2nd line |
| 2nd line |
| 3rd line |

HERE NOW—

line from the correction. *R
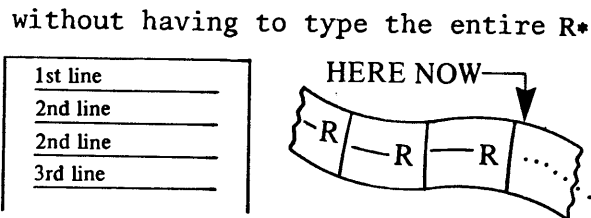
6. Type the fourth line to the asterisk, making many errors in the line. *Do not touch* **RETURN**.

NOTE:
When a line contains too many errors to correct by backspacing, it is quicker to use the **BACK LINE** *key, and retype the line.*

| 1st |
| 2nd |
| 2nd |
| 3rd |
| 4th |
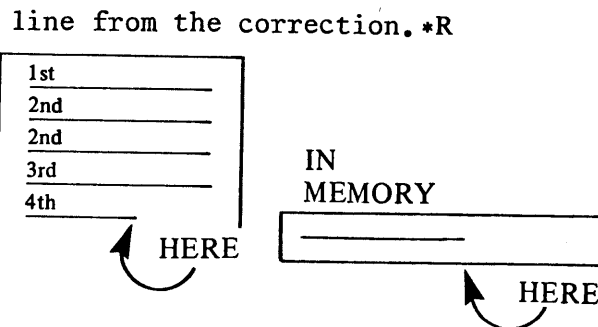
HERE

IN MEMORY

HERE

7. Touch **BACK LINE**. The fourth line is erased from the memory, but is not recorded on the tape.

> **NOTE:**
> *Because you did not touch the* **RETURN** *key, the fourth line was in the memory only. Touching* **BACK LINE** *erased the memory; the tape was unaffected. When you use the* **BACK LINE** *key before a* **RETURN***, that line being typed is erased from memory. Touching* **RESET** *in the middle of the line also erases that line from memory, but does not affect the tape.*

PAPER

1st	
2nd	
2nd	
3rd	
4th	

MEMORY

ERASED

TAPE

HERE NOW

−R −R −R ...
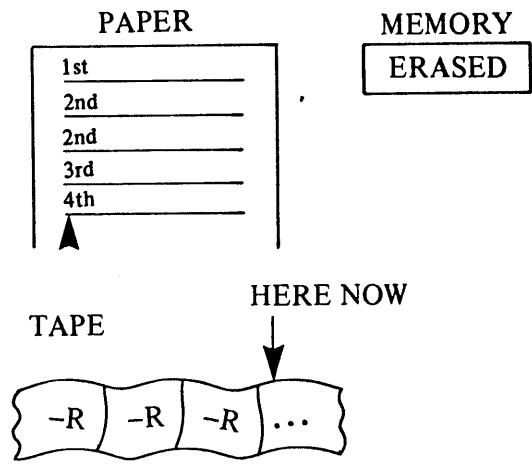
Even after a line is recorded on tape R

it is not necessary to retype an entire line. R

8. Type the fourth line correctly, and the remaining lines as shown, including the **RETURNS**.

HERE NOW

−R − R − R − R −R − R
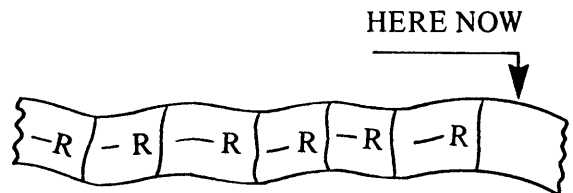
9. Touch **CODE** and type /.

HERE NOW

−R − R − R − R − R − R E.O.D.
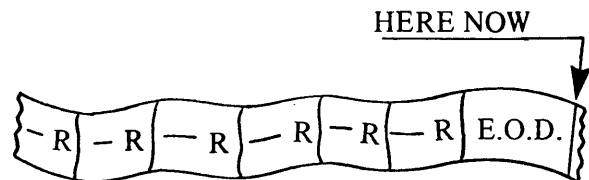
10. **REWIND** the tape.

11. Remove the tape from the **RIGHT** Cassette Holder.

IMPORTANT: SAVE WORK TAPE NO. 1; YOU WILL USE IT IN THE NEXT CHAPTER.

CHAPTER 3
CORRECTING WHILE RECORDING

PRACTICE PROBLEM:

While recording the following document on Work Tape No. 2, correct the errors using the three techniques just learned.

>   Plwase send the folllowing order
>
>   acknowledgments to our office, for
>
>   furt hur processing. We have had
>
>   several requests for these
>
>   information. In the future, please
>
>   submitt all acknowledgments throught us.

CHAPTER REVIEW CHECK LIST
- You now can record a document, and make corrections in three ways:
    - a. Backspace on a line to type over and delete.
    - b. After typing a **RETURN**, you can back up the tape one line at a time, using the **BACK LINE** key and then retype the line.
    - c. Before typing a **RETURN**, you can erase the line from memory by touching **BACK LINE** and then retype the line.
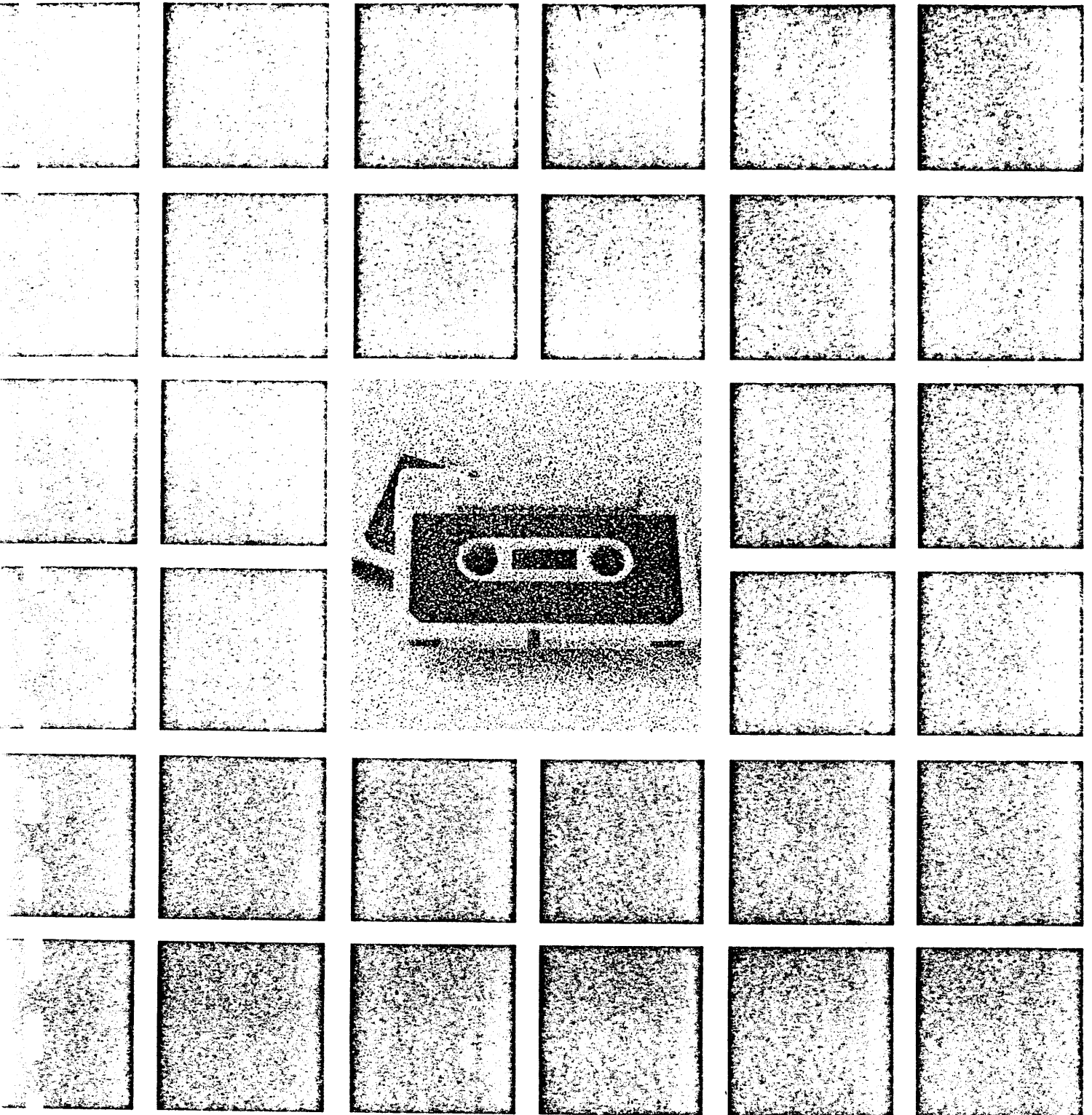
Chapter 4
Correcting After Recording

INTRODUCTION

Three methods are available for correcting a document after recording: paper corrections, tape corrections in **EDIT**, and tape corrections in **TRANSFER**.

PAPER CORRECTIONS

Often, you need to make only one good copy of a document. When you do not need numerous copies, you do not need to correct the tape. You can play back the correct portions of the tape, stop playback of the incorrect portions, and type in any corrections or changes.

TASK: MAKE THE FOLLOWING CORRECTIONS ON PAPER ONLY

STARTING STEPS:
1. WORK TAPE NO. 1 IN RIGHT HOLDER
2. PLAY RIGHT
4. SAME
5. REWIND

The Wang ^System 1200 Dual Cassette Typewriter is the only

automatic typewriter which can make corrections

without having to retyping the entire

line from the correction.

Even after a line is recorded on tape

it is not necessary to retype an entire line.

HOW TO DO:

1. Touch **WORD** twice.

> The Wang ▲

2. Type in *System 1200* followed by a space.

> The Wang System 1200 ▲

> **NOTE:**
> *Remember, to the System a word is a character or group of characters followed by a space. When a word is added, a space must follow the word, since the space is not on the tape.*

---

3. Touch **LINE**, since the remainder of the line is correct.

```
┌─ System 1200 ──────┐
│                    │
▲
```

---
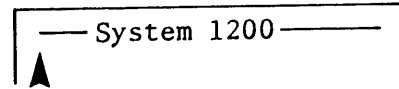
4. Touch **LINE** again, since the next line does not require corrections.

```
┌── System 1200 ────┐
│──────────────────│
▲
```

---
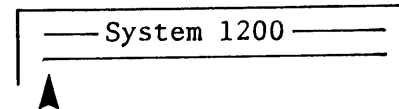
5. Touch **WORD**, since the first word of the next line is correct.

```
┌─────── System 1200 ────────┐
│────────────────────────────│
│ without                    │
         ▲
```

---
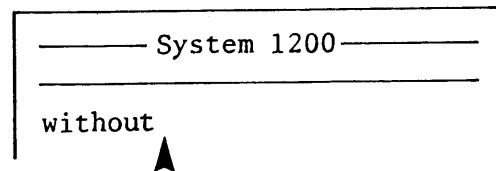
6. The next two words "having to" need to be deleted.

   Find and touch the **SKIP** key. The **SKIP** light illuminates to tell you the key is activated.

   \ /
   ── SKIP ──
   / \

---
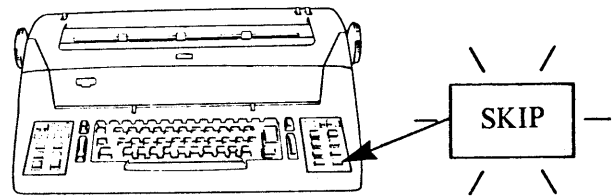
7. Touch **WORD** (skips over "having" on the tape, but does not erase it).

   \ /
   ─ SKIP ─ + WORD
   / \
   without (having) SKIPS WORD
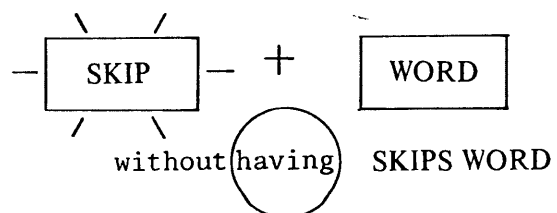
> **NOTE:**
> *When the SKIP key is touched, the System skips over what is designated by the key used after SKIP (CHAR, WORD, LINE or PARA).*

RECORDING SEVERAL
DOCUMENTS ON TAPE

ADJUST, VARIABLE ADJUST
AND JUSTIFY

RECORDING AIDS

DOCUMENTS WITH
SEVERAL FORMATS

8. Touch **SKIP** and **WORD** again (skips "to").

without (having to)

SKIPS SECOND WORD

9. Touch **CHAR/STOP** twice.

re

10. Touch **SKIP, CHAR/STOP** (skips "e").

re ⓔ **SKIPPED**

11. Touch **CHAR/STOP** three times.

retyp

12. Touch **SKIP, CHAR/STOP** (skips "e").

retyp ⓔ **SKIPPED**

13. Type *ing*

You do not have to type in the spaces after *re-vping* as the space is already on the tape for the word *retype*.

without retyping

14. Touch **LINE**.

15. Touch **AUTO/START**.

——— 1200 ———

without retyping ———

NOTE:
the **SKIP** *key is activated by mistake, simply touch it again, and the light goes out, signifying that it is deactivated.*

CORRECTING AFTER RECORDING

TAPE CORRECTIONS IN EDIT

When you need more than one final copy of a document, you can make your corrections on the tape rather than on the paper, or at the same time as the paper corrections. In EDIT (depress both **PLAY** and **RECORD**), you can delete characters, words and lines. You can add words to each line, as long as you do not exceed the 100 character line limit. You also can replace one complete line with another line. You cannot, however, add entire new lines or extra carrier returns. Corrections which make a line longer than 100 characters, or require adding lines, must be done in **TRANSFER** (explained in the next section).

To speed correcting a lengthy tape, the System 1200 offers a **SEARCH** feature, which allows you to search (locate) directly the line which needs correcting. **SEARCH** is used in **EDIT**, **TRANSFER** and **PLAY** to quickly locate any line on the tape.

TASK: CORRECT WORK TAPE NO. 1
IN EDIT

STARTING STEPS:
a. WORK TAPE NO. 1
   IN RIGHT HOLDER.
b. RIGHT
c. REWIND
d. SAME

System 1200
The Wang Dual Cassette Typewriter is the only
automatic typewriter which can make corrections
without having to reetype the entire
line from the correction.

Even after a line is recorded on tape

it is not necessary to retype an entire line.

NOTE:
The actual steps for making the corrections are the same as in the previous section, but now you are revising the tape.

HOW TO DO:
1. Depress both the **RECORD** and **PLAY** buttons
   at the same time.

NOTE:
In order to be in **EDIT**, both the **RECORD** and **PLAY** keys must be depressed together. Do not initially record a document in **EDIT**, or play back an entire document in **EDIT**.

RIGHT   PLAY RECORD

EDIT
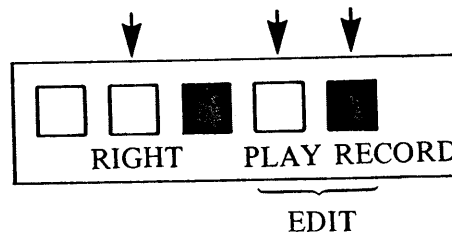
CHAPTER 4
CORRECTING AFTER RECORDING

2 Touch **WORD** twice.

3. Type in *System 1200* followed by a space. They
are now in the memory.

—System 1200—
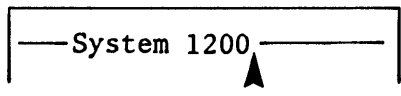
4. Touch **LINE**.

The original line, plus the additions typed in
EDIT, are recorded on that line of the tape.
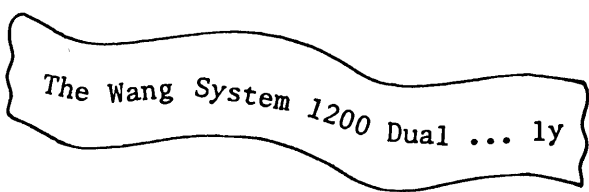
> **NOTE:**
> *If you make a mistake while typing in addi-
> tional words, simply backspace, and strike
> over as you would when recording.*

The Wang System 1200 Dual ... ly

5. Touch **LINE** (line 2 needs no correction).

6. Touch **WORD** (without).

7. Touch **SKIP**, touch **WORD** (skips "having").

8. Touch **SKIP**, touch **WORD** (skips "to").

9. Touch **CHAR/STOP** twice (re).

10. Touch **SKIP**, touch **CHAR/STOP** (skips "e").

11. Touch **CHAR/STOP** three times (typ).

12. Touch **SKIP**, touch **CHAR/STOP** (skips "e").

13. Type *ing*
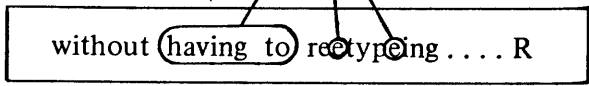
14. Touch **LINE**.
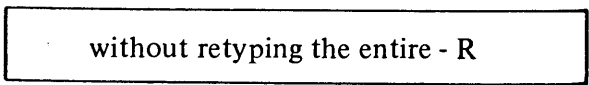
The rest of the document is correct; therefore,
there is no need to play it back.

IN MEMORY

DELETED

without (having to) retyping .... R

RECORDED ON TAPE

without retyping the entire - R

TASK: PLAY BACK THE EDITED TAPE

STARTING STEPS:
a. **RIGHT**
b. **PLAY**
c. **AME**
d. **REWIND**

The Wang System 1200 Dual Cassette Typewriter is the only

automatic typewriter which can make corrections

without retyping the entire

line from the correction.

Even after a line is recorded on tape

it is not necessary to retype an entire line.

1. Touch **AUTO/START**

TASK: SEARCHING AND EDITING

John Roberts of Boston, Massachusetts, (hereinafter called the "Donor") hereby transfers the sum of $234,000.00 to Lawrence Smith of Boston and Randolph Wolf of Cambridge (hereinafter with their successors in trust called the "Trustees") for the purposes and subject to the provisions hereinafter set forth.

The Trustees hereby acknowledge that they have received said sum in trust and declare that they will hold, manage and invest the same, together with the proceeds of any policies of insurance paid to them and any other property which may hereafter be transferred to the trust by gift, will, or otherwise from the Donor or anyone else and accepted by them as Trustees, and after paying or making provision for all expenses of the trust, including reasonable compensation for their services, will dispose of the trust property and the net income therefrom as hereinafter provided.

During the life of the Donor, the Trustees shall pay to him or as he may in writing direct such part or all of the net income and/or principal of the trust as the Donor may from time to

1. time request in writing, and in their uncontorlled discretion the Trustees may at any time or times and for any reason pay any part or all of the net income and/or principal of the trust to the Donor, even though he does not request such payment. Any net income not so paid shall be added to the principal of the trust at such times as the Trustees shall determine.

Upon the death of the Donor, the Trustees shall dispose of the remaining principal of the trust, including any property to which they are entitled as follows:

(a) The Trustees shall set aside from said remaining principal and hold as provided in Article FOURTH such amount (if any be required) as will equal fifty per cent (50%) of the value of the Donor's adjusted gross estate as defined in the Internal Revenue Code in force on the date of this indenture as finally determined by the aggregate value of all

2. interests in property (if any) whicc pass or have passed from the Donor to them under will or any codicil thereto or outside thereof other than under this subsection 1(a) and Article FOURTH, but only to the extent that such interests are included in the gross estate of the Donor as defined in said Code for federal estate tax purposes and are allowed as a marital deduction in computing such tax under said Code, provided, however, that this amount shall only be satisfied out of assets or the proceeds thereof with respect to which such a marital deduction is allowable under said Code, exclusive of assets also subject to inheritance, succession, estate or other death taxes imposed by a country other than the United States of America, and shall abate to the extent it cannot be so satisfied.

1. The Trustees shall pay the net income of the marital trust at least
as often as annually to the Donor's wife as long as she lives. The Trustees
shall also pay to such part or all of the principal

1. The Trustees shall pay the net income of the marital trust at least
as often as annually to the Donor's wife as long as she lives.
The Trustees shall also pay to such part or all of the principal
of the marital trust as she may from time to time request in writing;
and in their uncontrolled discretion the Trustees may at any time
or times and for any reason pay any part or all of the principal
of the marital trust to her, even though she does not request such payment.

2. Unless sooner terminated by payments of principal as hereinabove
provided, the marital trust shall terminate upon the death of the
Donor's wife, whereupon the Trustees shall distribute all remaining
principal of the trust as she shall appoint by will making
specific reference to this power, with the right in discretion
so to appoint to estate or any other appointee or appointees
without limitation, upon any terms, conditions, limitations and
trusts, including the right to create new powers of appointment,
but in default of such appointment or to the extent not effectively
appointed, the Trustees shall distribute said principal to the Trustees
of the trust under Article FIFTH to be added to the principal
of said trust and disposed of as a part thereof.

All property which is to be held by the Trustees as provided
in this Article shall be held by the Trustees as follows:

1. During the life of the Donor's wife the Trustees may in their
uncontrolled discretion at any time or times and for any reason
pay any part or all of the net income and/or principal of the trust
to any one or more of the following persons living from time to
time, payments to more than one person to be made in such proportions
among them as the Trustees see fit: the Donor's wife, each of the
issue of the Donor, and the spouse of each issue. Any net income
not so paid shall be added to the principal of the trust at such times
as the Trustees shall determine and in any event upon the death of his wife.

2. Upon the death of the survivor of the Donor and his wife, if the
trust has not sooner terminated by payments of principal as hereinabove
provided, and if any issue of the Donor is then living, the Trustees
shall divide the remaining principal of the trust into as many equal
shares as they shall be children of the Donor then living and children
of the Donor then deceased with any issue then living, one (1) share
to be set aside for each then living child of the Donor and one (1)
share to be set aside for the issue of each child of the Donor then
deceased with any issue than living, and shall dispose of such shares delete
as provided below.

CHAPTER 4
CORRECTING AFTER RECORDING

STARTING STEPS:
a. PRERECORDED TAPE
   IN RIGHT HOLDER
b. RIGHT
c. SAME
d. REWIND
e. EDIT (PLAY and
   RECORD)

HOW TO DO:
   When you have corrections to make in the middle of a lengthy document such as the partial trust record or the PRERECORDED TAPE used in this lesson, use the SEARCH key to locate the incorrect lines and then make the corrections.

You do not need to play back the document to the line containing the error.

1. Look at and find Error No. 1 in the document. In order to quickly advance the tape to this line, use the SEARCH key.

During the life of the Donor, the Trustees shall pay to him or as he
may in writing direct such part or all of the net income and/or
principal of the trust as the Donor may from time to
time request in writing, and in their uncontorlled discretion the
Trustees may at any time or times and for any reason pay any part or
all of the net income and/or principal of the trust to the Donor,
even though he does not request such payment. Any net income not so
paid shall be added to the principal of the trust at such times as the
Trustees shall determine.

Upon the death of the Donor, the Trustees shall dispose of the
remaining principal of the trust, including any property to which they
are entitled as follows:

SEARCHING

2. Find and touch the SEARCH key.
   Notice the light illuminates to tell you the key is activated, and you now can type in the SEARCH message.

SEARCH —
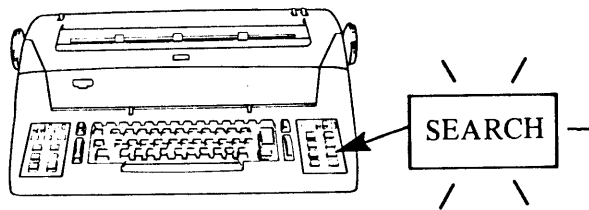
3. Type the first few words of the line you wish to locate.
   Type *time request*

time request

> **NOTE:**
> *Should you incorrectly type the words, you can backspace and type over the error, or touch RESET and start again.*

4. Touch **SEARCH** again.

Notice the light goes out to indicate that the SEARCH command has been initiated.
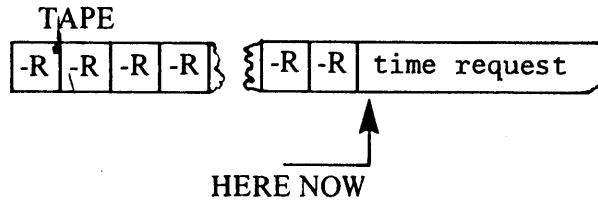
> **NOTE:**
> *If you touch the* **SEARCH** *key by mistake, touch* **RESET** *to deactivate it. If you touch* **SEARCH** *twice the System searches to an END code.*

SEARCH

TAPE

| -R | -R | -R | -R | { | { | -R | -R | time request | } |

HERE NOW

5. When the carrier returns, it indicates the System has located the line. Touch **WORD** *seven* times.
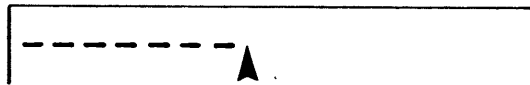
6. Touch **SKIP**, touch **WORD** (skips "uncontrolled").

7. Type *uncontrolled* with a space after it. You deleted the incorrect word from the memory, and put in its place the correct word. Again, if you type uncontrolled incorrectly, correct it by backspacing.

uncontrolled
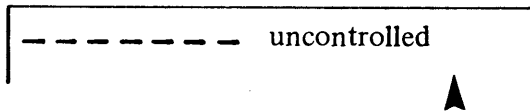
8. Touch **LINE**.

The correct line replaces the incorrect line on tape.

uncontrolled
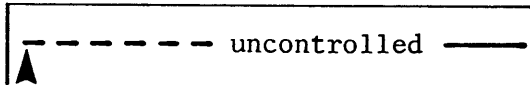
9. Look at and find error No. 2.

Search to the line containing this error.

> (a) The Trustees shall set aside from said remaining principal and hold as provided in Article FOURTH such amount (if any be required) as will equal fifty per cent (50%) of the value of the Donor's adjusted gross estate as defined in the Internal Revenue Code in force on the date of this indenture as finally determined by the aggregate value of all
> 2. interests in property (if any) which pass or have passed from the Donor to them under will or any codicil thereto or outside thereof other than under this subsection 1(a) and Article FOURTH, but only to the extent that such interests are included in the gross estate of the Donor as

10. Touch **SEARCH**.
    Type *interests*

11. Touch **SEARCH**.

> **NOTE:**
> *When searching, you need type in only enough words or characters to distinguish the line from any other line preceding the searched line. You can type as little as one character, or as much as the entire line to locate the line. But remember, the more you type, the greater the chance for making an error.*

| -R | -R | -R | -R | -R | -R | -R | interests ... |

HERE NOW ⟶
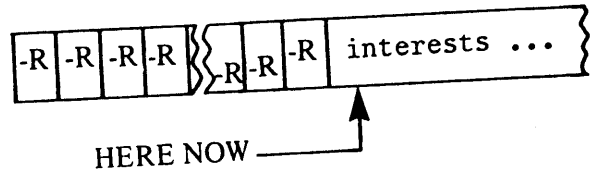
12. Touch **WORD** *five* times.

interests in property (if any)▲

13. Touch **CHAR/STOP** *four* times.

— — — — — whic ▲

14. Touch **SKIP**, touch **CHAR/STOP** (skips "c").

15. Type *h*

16. Touch **LINE**.

deleted
— — — — — — whic(c)h — — — — — ▲

17. Look and find error No. 3.
    Search to the line containing this error.

1. The Trustees shall pay the net income of the marital trust at least as often as annually to the Donor's wife as long as she lives. The Trustees shall also pay to such part or all of the principal

1. The Trustees shall pay the net income of the marital trust at least as often as annually to the Donor's wife as long as she lives. The Trustees shall also pay to such part or all of the principal of the marital trust as she may from time to time request in writing; and in their uncontrolled discretion the Trustees may at any time or times and for any reason pay any part or all of the principal
3. of the marital trust to her, even though she does ⌃ request such payment.
                                                    not

18. Touch **SEARCH**
    Type *of the marital trust to*
    Touch **SEARCH.**

    If you type only the word "of", the System advances the tape to the first line beginning with "of" – four lines before the one you want.

of the marital . . . . .

HERE NOW
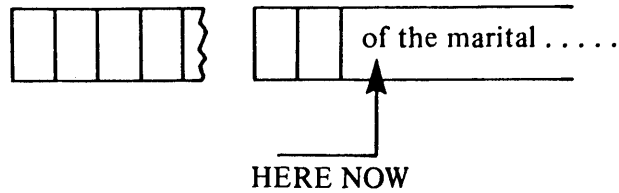
19. Touch **WORD** *ten* times.
    Type *not* with a space after it.
    Touch **LINE.**

    The rest of the line in the memory is moved over to make room for the addition.

not
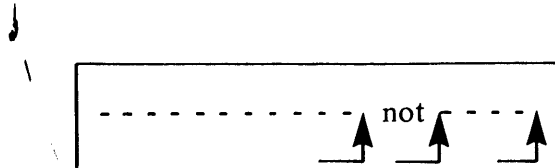
20. CORRECT Error No. 4.
    Touch **SEARCH.**
    Type *appointed*
    Touch **SEARCH.**
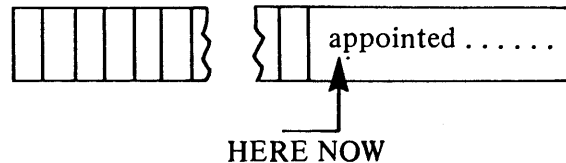
appointed . . . . . .

HERE NOW

```
       trusts, including the right to create new powers of appointment,
       but in default of such appointment or to the extent not effectively
  4.   appointed, the Trustees shall distribute said principal to the Trustees
       of the trust under Article FIFTH to be added to the principal
       of said trust and disposed of as a part thereof.
```

21. Touch **WORD** *twice.*
    Touch **CHAR/STOP** *six* times.
    Touch **SKIP**, touch **CHAR/STOP.**
    Type *e*
    Touch **LINE.**
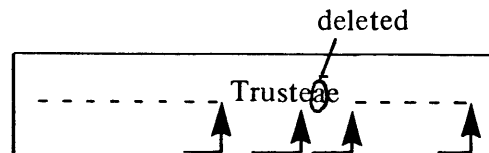
deleted

Trustee

2. Upon the death of the survivor of the Donor and his wife, if the trust has not sooner terminated by payments of principal as hereinabove provided, and if any issue of the Donor is then living, the Trustees shall divide the remaining principal of the trust into as many equal shares as they shall be children of the Donor then living and children of the Donor then deceased with any issue then living, one (1) share

22. CORRECT Error No. 5.
Touch SEARCH.
Type *shares*
Touch SEARCH.

HERE NOW
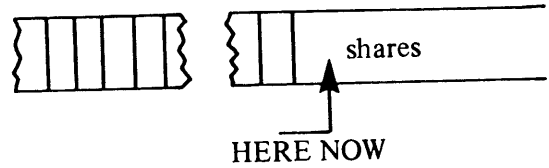
23. Touch WORD *twice.*
Touch CHAR/STOP *three* times.
Touch SKIP, touch CHAR/STOP.
Type *re* (there)
Touch LINE.
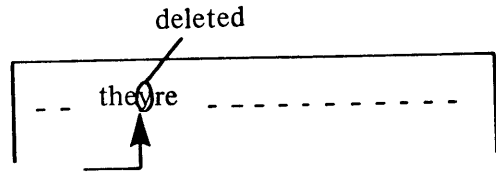
deleted

the〉re

to be set aside for each then living child of the Donor and one (1) share to be set aside for the issue of each child of the Donor then deceased with any issue than living, and shall dispose of such shares *delete* as provided below.

24. CORRECT Error No. 6, which involves deleting the entire line.
Touch SEARCH.
Type *deceased*
Touch SEARCH.

deceased

HERE NOW
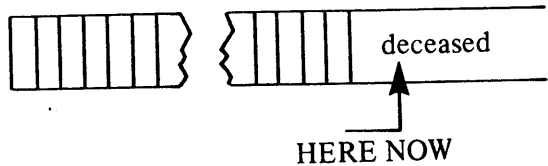
25. Touch CODE.
Touch BACK LINE.
The CODE BACKLINE (CBL) tells the System to ignore the line recorded on this block of the tape.

deceased . . . . . shares

deleted by
code BACK LINE

34

RECORDING SEVERAL
DOCUMENTS ON TAPE

ADJUST, VARIABLE ADJUST
AND JUSTIFY

RECORDING AIDS

DOCUMENTS WITH
SEVERAL FORMATS
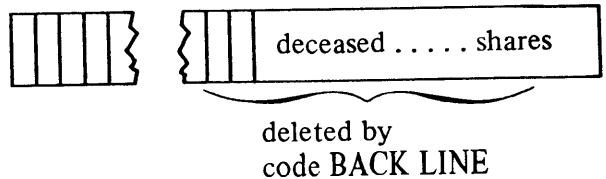
> **NOTE:**
> *You can use* **CODE BACK LINE** *to edit a line in the middle of a paragraph if playback of the document is to be in* **SAME**. *The use of* **CODE BACK LINE** *is not recommended if the document is to be played back in* **ADJUST** *or* **JUSTIFY**; *delete the line in* **TRANSFER** *(see next section).*

TASK: PLAY BACK THE TAPE TO VERIFY
THE CORRECTIONS

STARTING STEPS:
a. **RIGHT**
   PLAY.
c. **SAME**
d. **REWIND**

HOW TO DO:
1. Touch **AUTO/START**, or **SEARCH** (in **PLAY**)
   to the lines containing the corrections, and
   play back only the corrected lines.

TAPE CORRECTIONS IN TRANSFER

For tape corrections which cannot be done in **EDIT** (deleting a line for **JUSTIFIED** playback, deleting paragraphs, adding material that does not fit into the 100 character line limit, and adding new lines, paragraphs or sections), you must correct the tape in **TRANSFER**. A clean tape is inserted in the left tape holder, the correct portions of the original tape are transferred to the second tape, the incorrect portions are bypassed, and the new information and corrections are typed on the second tape. The second tape contains the completely corrected document. The original tape remains unchanged.

TRANSFER also is used to duplicate tapes (see Chapter 10, Tape Cassette Handling Procedures).

TASK: MAKE ADDITIONAL CORRECTIONS TO
THE WORK TAPE IN TRANSFER

```
John Roberts of Boston, Massachusetts, (hereinafter called the "Donor")
hereby transfers the sum of $234,000.00 to Lawrence Smith of Boston and
Randolph Wolf of Cambridge (hereinafter with their successors in trust
called the "Trustees") for the purposes and subject to the provisions
hereinafter set forth.

The Trustees hereby acknowledge that they have received said sum
in trust and declare that they will hold, manage and invest the same,
together with the proceeds of any policies of insurance paid to them
and any other property which may hereafter be transferred to the trust
by gift, will, or otherwise from the Donor or anyone else and accepted
by them as Trustees, and after paying or making provision for all
```

expenses of the trust, including reasonable compensation for their services, will dispose of the trust property and the net income therefrom as hereinafter provided.

During the life of the Donor, the Trustees shall pay to him or as he may in writing direct such part or all of the net income and/or principal of the trust as the Donor may from time to time request in writing, and in their uncontrolled discretion the Trustees may at any time or times and for any reason pay any part or all of the net income and/or principal of the trust to the Donor, even though he does not request such payment. Any net income not so

1. paid shall be added to the principal of the trust at such times as the Trustees shall determine.

Upon the death of the Donor, the Trustees shall dispose of the remaining principal of the trust, including any property to which they are entitled as follows:

(a) The Trustees shall set aside from said remaining principal and hold as provided in Article FOURTH such amount (if any be required) as will equal fifty per cent (50%) of the value of the Donor's adjusted gross estate as defined in the Internal Revenue Code in force on the date of this indenture as finally determined by the aggregate value of all interests in property (if any) which pass or have passed from the Donor to them under will or any codicil thereto or outside thereof other than under this subsection 1(a) and Article FOURTH, but only to the extent that such interests are included in the gross estate of the Donor as defined in said Code for federal estate tax purposes and are allowed as a marital deduction in computing such tax under said Code, provided, however, that this amount shall only be satisfied out of assets or the proceeds thereof with respect to which such a marital deduction is allowable under said Code, exclusive of assets also subject to inheritance, succession, estate or other death taxes imposed by a country other than the United States of America, and shall abate to the extent it cannot be so satisfied.

2. **1.** The Trustees shall pay the net income of the marital trust at least as often as annually to the Donor's wife as long as she lives. The Trustees shall also pay to such part or all of the principal

1. The Trustees shall pay the net income of the marital trust at least as often as annually to the Donor's wife as long as she lives. The Trustees shall also pay to such part or all of the principal of the marital trust as she may from time to time request in writing; and in their uncontrolled discretion the Trustees may at any time or times and for any reason pay any part or all of the principal of the marital trust to her, even though she does not request such payment.

2. Unless sooner terminated by payments of principal as hereinabove provided, the marital trust shall terminate upon the death of the Donor's wife, whereupon the Trustees shall distribute all remaining principal of the trust as she shall appoint by will making specific reference to this power, with the right in discretion

so to appoint to estate or any other appointee or appointees
without limitation, upon any terms, conditions, limitations and
trusts, including the right to create new powers of appointment,
but in default of such appointment or to the extent not effectively
appointed, the Trustees shall distribute said principal to the Trustees
of the trust under Article FIFTH to be added to the principal
of said trust and disposed of as a part thereof.

All property which is to be held by the Trustees as provided
in this Article shall be held by the Trustees as follows:

1. During the life of the Donor's wife the Trustees may in their
uncontrolled discretion at any time or times and for any reason
pay any part or all of the net income and/or principal of the trust
to any one or more of the following persons living from time to
time, payments to more than one person to be made in such proportions
among them as the Trustees see fit: the Donor's wife, each of the
issue of the Donor, and the spouse of each issue. Any net income
not so paid shall be added to the principal of the trust at such times
as the Trustees shall determine and in any event upon the death of his wife.

2. Upon the death of the survivor of the Donor and his wife, if the
trust has not sooner terminated by payments of principal as hereinabove
provided, and if any issue of the Donor is then living, the Trustees
shall divide the remaining principal of the trust into as many equal
shares as there shall be children of the Donor then living and children
of the Donor then deceased with any issue then living, one (1) share
to be set aside for each then living child of the Donor and one (1)
share to be set aside for the issue of each child of the Donor then
as provided below.

If The Donor's wife survives the children of The Donor, The principle of The remaining Trust shall be divided among The issue of said children. [DOUBLE RETURN]

STARTING STEPS:

a. PRE-RECORDED TAPE
   (CORRECTED IN
   PREVIOUS SECTION)
   IN RIGHT HOLDER
b. WORK TAPE IN LEFT
   HOLDER
c. TRANSFER
d. SAME
e. REWIND (BOTH TAPES
   SEPARATELY)

HOW TO DO:

1. Place the prerecorded tape in the right tape cassette holder.

2. Place the (blank) work tape in the left tape cassette holder.

3. Find the first correction to be made in transfer.

   Now you want to transfer all the correct material up to this point, but not including the line with the correction.

4. Touch SEARCH.
   Type *even*
   Touch SEARCH.

   Hear the clicks of the two tapes as this material is transferred a line at a time from the right to left tape. The tape stops when the system locates the search line. All lines *up to but not including* the one beginning with *even* are transferred to the left tape. As each line is transferred from the right tape to the left, the respective **TAPE MOVING** lights illuminate to indicate which tape is moving.

5. The last sentence in the paragraph needs to be deleted.

   Touch **WORD** *eight times*. The last eight words of the first sentence are transferred.

   Touch **SKIP** and **LINE**. The remainder of the searched line is bypassed on the original tape.

   Touch **SKIP** and **LINE** *two more times*. The remainder of the sentence is bypassed on the original tape.

   Touch **RETURN** once.

T R A N S F E R R E D

```
John_____ "Donor"
hereby_____and
Randolf_____Trust
called_____provisions
hereinafter__.
The_____
_____
_____
_____
_____
_____ .
_____
_____
```

S K I P P E D

```
even ...Any net ...so
paid ...        as the
Trustees_____ .
```

RECORDING SEVERAL
DOCUMENTS ON TAPE

ADJUST, VARIABLE ADJUST
AND JUSTIFY

RECORDING AIDS

DOCUMENTS WITH
SEVERAL FORMATS
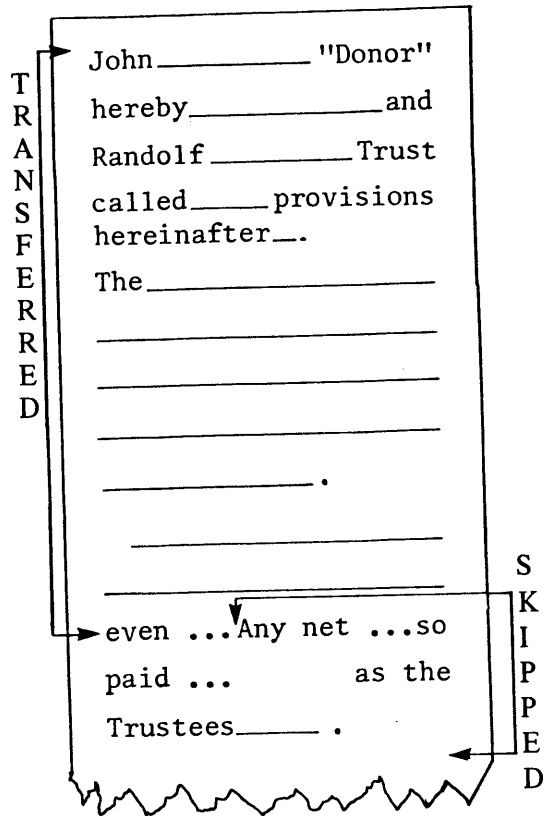
> **NOTE·**
> When skipping a line or a paragraph, the System bypasses everything up to and including a double carrier return, a coded carrier return, a carrier return plus a tab or a carrier return plus spaces. You must type in any necessary returns, tabs, or spaces bypassed on the original tape.

6. Transfer the next material that is correct.

   Touch **SEARCH**.
   Type 1.
   Touch **SEARCH**.

7. Bypass the next paragraph by touching the **SKIP** and **PARA** keys.

8. Transfer the material to error No. 3.

   Touch **SEARCH**.
   Type without
   Touch **SEARCH**.

TRANS-
FERRED

Upon _____

extent it _____ .

1. The Trustees _____

SKIPPED

1. The Trustees _____

2. Unless _____

without. . . . .
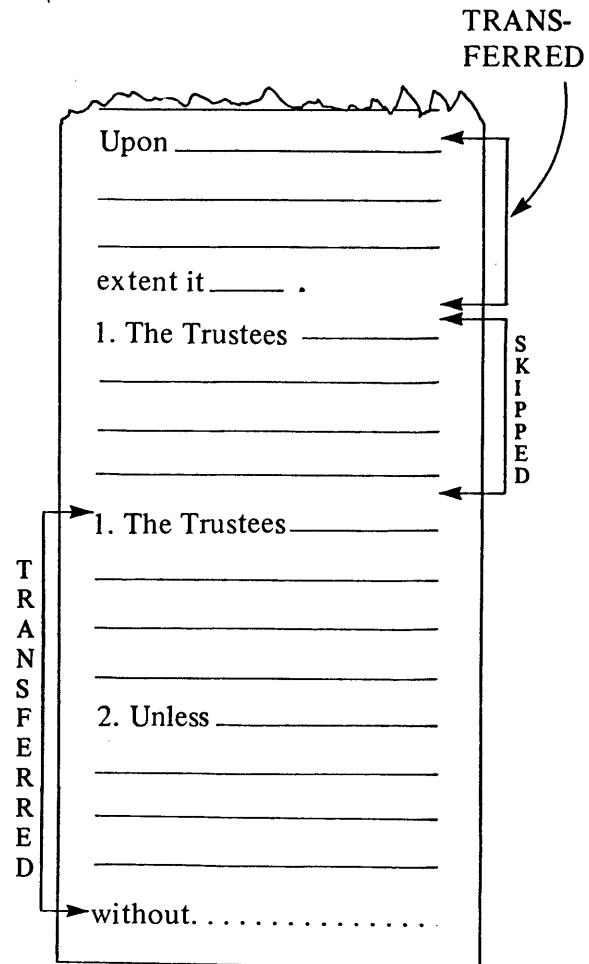
TRANSFERRED

9. Touch **WORD** *five times*.

   These five words are played out, and are waiting in the memory.

10. Touch **SKIP, WORD**.

    The word *conditions* is not transferred.

without limitations, upon any terms, conditions, limitations and

SKIPPED

11. Touch **LINE**.

The remainder of the line is typed out, and the corrected line (excluding *conditions*) is transferred.

12. Touch **SEARCH**, and type *in this*

13. Touch **SEARCH** and **WORD**.

14. Touch **SKIP** and **WORD** (*this*).

15. Touch **WORD**.

16. Type *FIFTH* and a space.

17. Touch **LINE**.

18. Transfer the material to error No. 5 by touching **SEARCH**, typing 2 and touching **SEARCH**.

19. Type in the new paragraph plus a double carrier return.

The new paragraph now is recorded on the left tape.

20. Touch **SEARCH** *twice* to transfer the remainder of the document. Touching **SEARCH** *twice* tells the system to automatically transfer until it sees an EOD code.

> **NOTE:**
> *The right tape (original) is not changed.* **TRANSFER** *plays from the right tape, and records on the left tape at the same time. In* **TRANSFER** *nothing is recorded on the original tape in the right holder.*
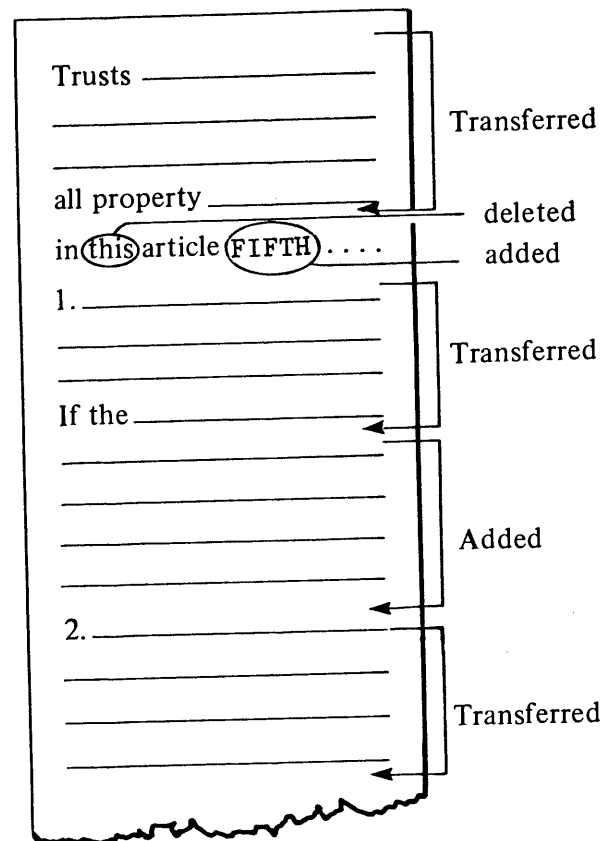
21. To verify that the document is corrected, **REWIND** the left tape and search to the corrections.

SAVE THE PRERECORDED TAPE

USING THE BACK LINE KEY IN TRANSFER

When you use the **BACK LINE** key in TRANSFER, only the LEFT tape, not the right, is backed up. If the **BACK LINE** key is touched when the carriage is at the left margin (after a **RETURN**), the left tape is backed up a line. If **BACK LINE** is touched in the middle of a line being transferred and played back, the portion of the line already played is erased from memory. The rest of the line is still in the memory. Retype the portion of the line erased, then play back the entire line from the memory.

Trusts ———————
——————— Transferred
———————
all property ——————— deleted
in (this) article (FIFTH) . . . . added
1. ———————
———————
——————— Transferred
If the ———————
———————
———————
———————
———————
——————— Added
2. ———————
———————
———————
——————— Transferred
———————

In Memory, the line being transferred

```
The 1200 Dual Cassette Typewriter is the only
```

1. ½ the line is played out

```
The 1200 Dual Cassette
```
Paper

```
The 1200 Dual Cassette Typewriter is the only
```
Memory

2. Touch BACK LINE

```
The 1200 Dual Cassette
```
Paper

Erased   Typewriter is the only
Memory

3. Retype beginning of line

```
The 1200 Dual Cassette
The Wang System 1200 Dual Cassette
```
Paper

```
The Wang System 1200 Dual Cassette Typewriter is the only
```
Memory

4. Playout rest of line

```
The 1200 Dual Cassette
The Wang System 1200 Dual Cassette Typewriter is the only
```
Paper

Erased
Memory

```
The Wang System 1200 Dual Cassette Typewriter is the only
```
Left tape

IF YOU MESS UP A TRANSFER –
HOW TO RETURN TO A COMMON POINT

If you make a mistake, search past a desired line, or just become confused during a **TRANSFER** operation, remember the right tape remains unchanged in **TRANSFER**.

To correct your mistake, first **REWIND** both the **LEFT** and **RIGHT** tape. Then decide up to what point on the **LEFT** tape the transfer operation is correct. In other words, find the last correctly transferred line. To resume the transfer:

a. Depress **PLAY.**
b. Depress **LEFT** and **SEARCH** to the last correct line.
c. Depress **RIGHT** and **SEARCH** to the same line.
d. Depress **TRANSFER.**

You are now at a common point on both tapes, and you can continue the **TRANSFER** operation.

CHAPTER REVIEW CHECK LIST
ON PAPER

- The perfect copy is obtained on paper only. The tape remains the same as originally recorded. This method of making corrections is used only when a single perfect copy is needed.

IN EDIT

- When the **SEARCH** key is activated (touched) by mistake or after activating it you incorrectly type in the word(s) you are searching, deactivate the **SEARCH** key by touching the **RESET** key. (Remember, when the **SEARCH** key is touched twice in a row, the System searches until it finds an EOD code.)

- When searching to a line, you must type in enough words to distinguish the line from any preceding line. Otherwise, the System will not find the line you need to locate. You can type as little as one character or as much as the entire line to distinguish the line, but each word must be typed exactly like the original.

- EDIT is used when the original tape needs to be corrected.

- When a word or a character is added to a line in EDIT, the System squeezes the additions in and readjusts the line in the memory to include additions. After the corrections are made, the line is re-recorded correctly on the original tape. You can add a word anywhere in the line, even at the beginning or end of the line.

now

The answer is correct

ORIGINAL

Squeezed in

The answer now is correct

AFTER EDITING

MOVED OVER
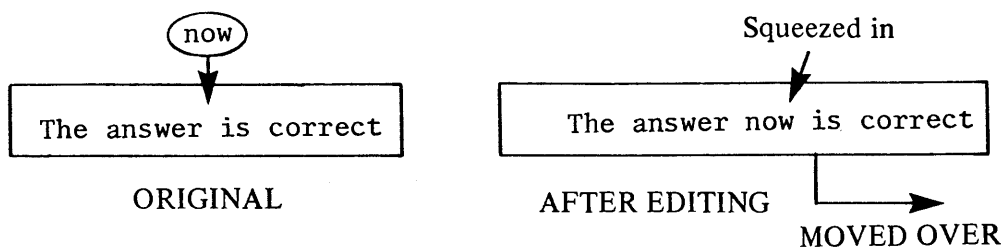
- Since the maximum length of a recorded line is 100 characters, each line contains enough spaces for 100 characters.

CHAPTER 4
CORRECTING AFTER RECORDING

- Because the System leaves room for 100 characters on each line, you can add in words. However, in EDIT, additions which make the line longer than 100 characters cannot be made, nor can entire new lines be added. The System warns you by backspacing and sounding the bell/tone when you are trying to record the 101st character. (These additions must be made in TRANSFER).

- Characters and words are deleted from a tape in EDIT by using the SKIP key and the CHAR/STOP or WORD key, respectively.

- Lines are deleted from a tape in EDIT by touching CODE and BACK LINE at the beginning of the line to be deleted. This procedure is not recommended for use in the middle of paragraphs to be played back in ADJUST or JUSTIFY.

- In EDIT you can delete only characters, words and lines.

- If you are making additions to a line in EDIT, and you make a typographical error, the error is corrected immediately by backspacing and typing over.

IN TRANSFER

- In TRANSFER you prepare a totally correct tape by making the changes on the second tape without changing the original tape.

- In TRANSFER you can make any type of correction — misspellings, deletions and/or additions.

- During TRANSFER the System takes each line from the right tape, and puts it into the memory. If the line is correct, the line is recorded immediately on the left tape. If the line in the memory contains errors, the corrections are made in the memory, and then the corrected line is recorded on the left tape. The original tape is not changed.

- As you play back or type material in TRANSFER, you can make the same corrections you make in RECORD. You can backspace and strike over, or backspace and CODE x.

EDIT VS. TRANSFER

TYPE OF CORRECTION	EDIT	TRANSFER
misspellings	√	√
delete a character	√	√
delete a word	√	√
delete a line	√ ***	√
delete a paragraph	No **	√
add a word	√ *	√
add a character	√ *	√
add a line	No	√
add a paragraph	No	√

*   Characters and words can be added to a line in EDIT as long as you do not exceed the 100 character/line limit.

** In EDIT an entire paragraph cannot be deleted at a time. However, each line of the paragraph can be deleted separately using CODE BACKLINE.

*** Not recommended if document is to be played back in ADJUST or JUSTIFY.

Recommendation:

Before you correct a tape, decide whether to EDIT or TRANSFER. Which method you use is determined by the type of corrections involved (a tape which needs a whole paragraph inserted can be done only in TRANSFER).

Chapter 5
Recording Several
Documents on Tape

RECORDING SEVERAL
DOCUMENTS ON TAPE

ADJUST, VARIABLE ADJUST
AND JUSTIFY

RECORDING AIDS

DOCUMENTS WITH
SEVERAL FORMATS

MEMO

Chapter 5
Recording Several
Documents on Tape
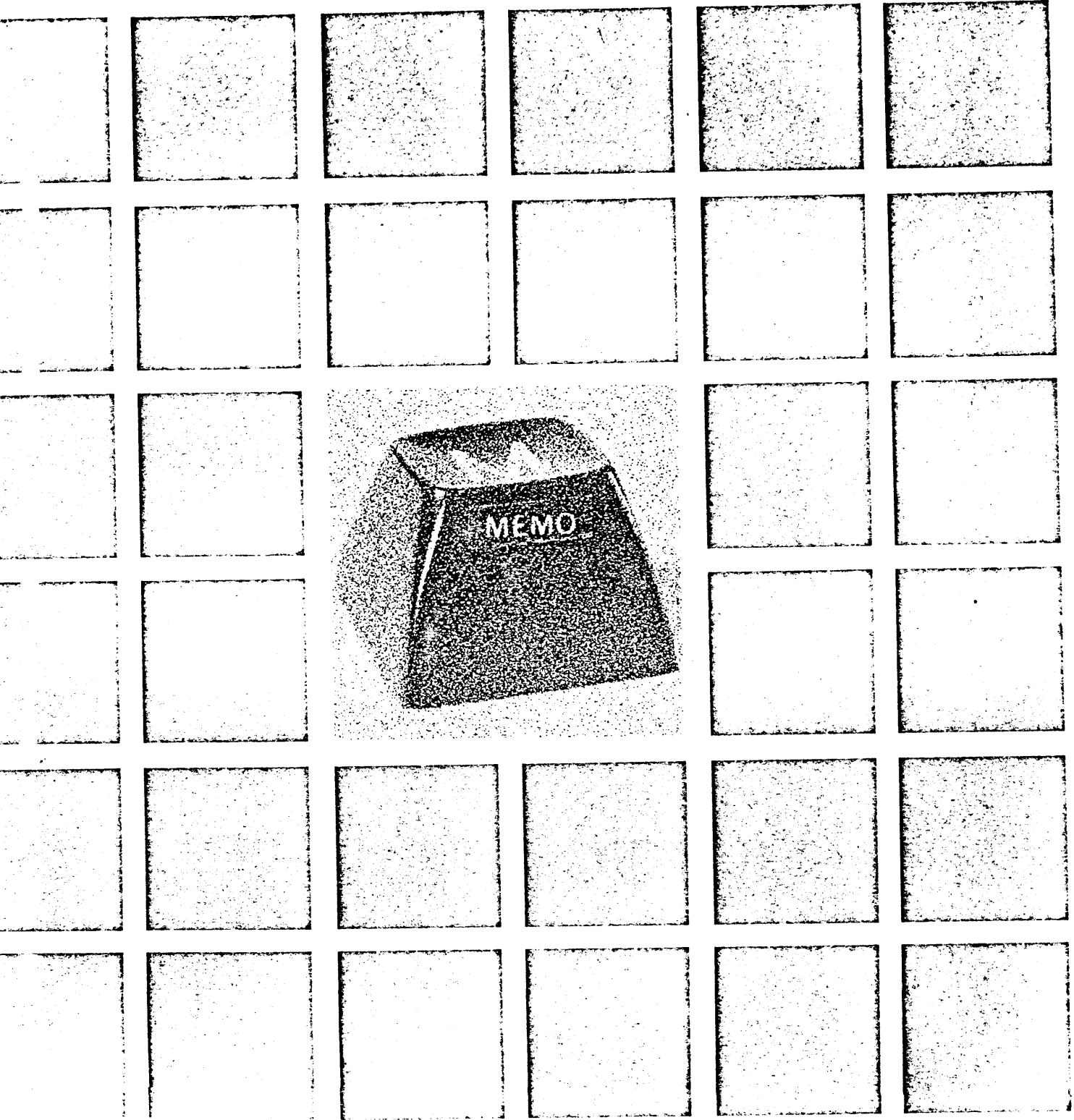
Chapter 5
Recording Several Documents on Tape

INTRODUCTION

To make efficient use of your tapes, more than one document should be recorded on a single cassette. A tape cassette can hold up to 40 typewritten pages. A tape recorded in double block can hold only about 27 pages. In order to find a particular document on a tape, each document is identified with a Memo Code (CODE m) which then is easily and quickly located for playback.

TASK: RECORDING SEVERAL DOCUMENTS ON TAPE USING MEMO CODES

STARTING STEPS:
1. WORK TAPE IN RIGHT HOLDER
2. RIGHT
3. RECORD
4 SAME
5. REWIND

CODE mTHANK YOU LETTER
Dear Customer:

Congratulations on purchasing a Wang System 1200 Dual Cassette Typewriter. We are sure our system will help you streamline your typing tasks. If you have any questions, feel free to contact your Sales Representative.

Sincerely,

Wang Laboratories, Inc.
/ (EOD)

CODE mLETTER TO NEW EMPLOYEES
Dear New Employee:

We at Wang Laboratories are pleased to welcome you aboard, and look forward to seeing you Monday.

Sincerely,

Wang Laboratories, Inc.
/ (EOD)

CODE mFORM LETTER
Dear Customer:

We appreciate your interest in our product. Enclosed is literature describing its features in detail. Our Sales Representative will call on you in the near future.

Sincerely,

Wang Laboratories, Inc.
/ (EOD)

Cm FREE

CHAPTER 5
RECORDING SEVERAL DOCUMENTS ON TAPE

TASK: PLAY BACK THE DOCUMENTS

STARTING STEPS:
DOCUMENT TAPE
IN RIGHT HOLDER
RIGHT
SAME
REWIND
PLAY

HOW TO DO:

Touch **SEARCH**.

Touch **CODE**, type *m*

Type *FORM LETTER*

Touch **SEARCH**.

mFORM LETTER

> **NOTE:**
> *When searching to a Memo Code, you must search* **CODE m**, *then the words to identify the Memo Code. You need only search the number of characters necessary to distinguish the Memo Code from any other. When searching a Memo Code, the System ignores FOD codes.*

2. When the tape stops, touch **AUTO/START**.

> **NOTE:**
> *Only the letter is played out. The information the Memo Code is not played out.*

5. **REWIND** the tape.

Dear Customer:
  We _____
_____
_____
_____, Inc.

PLAY BACK the *Letter to New Employees*

1. Touch **SEARCH**.
  Touch **CODE m**.
  Type *LETTER*
  Touch **SEARCH**.

2. When the tape stops, touch **AUTO START**.

3. REWIND the tape.

mLETTER

Dear New _____
_____
_____
_____
_____
_____, Inc.

CHAPTER 5
RECORDING SEVERAL DOCUMENTS ON TAPE

PLAY BACK the *Thank You Letter*

1. Touch **SEARCH.**
   Touch **CODE m.**
   Type *THANK*
   Touch **SEARCH.**

2. Touch **AUTO/START.**

3. REWIND the tape.

mTHANK

Dear _____:

_____
_____
_____
_____
_____
_____, Inc.

PLAYING BACK THE MEMO CODES

You can play back the information recorded in the Memo Codes. You can write notes or special instructions in the Memo Codes about the recorded document and then play back the **MEMO CODE** only, refreshing your memory about the document.

1. Find and touch the **MEMO (OUT)** key.

2. Touch **MEMO (OUT)** again.

   The System searches as far as the **EOD** Code and stops.

3. Touch **MEMO (OUT)** again. The second Memo Code is played out.

4. Touch **MEMO (OUT)** twice again.

THANK YOU LETTER

LETTER TO NEW EMPLOYEES

FORM LETTER

> **NOTE:**
> *The* **MEMO/OUT** *key advances the tape to the next* **EOD** *Code or Memo Code. When it stops at the Memo Code, the Memo Code is played out.*
>   *You also can search to the Memo Code, and then touch the* **MEMO (OUT)** *key.*

CHAPTER REVIEW CHECK LIST

- Touching the **MEMO (OUT)** key advances the tape to the next **EOD** Code or **MEMO CODE.**

- **MEMO CODES** are used to identify different documents on a tape. A phrase used to identify a document is preceded by **CODE m.**

- **MEMO CODES** are located on a tape by touching **SEARCH**
  CODE m, typing the identifying phrase
  SEARCH

- **MEMO CODES** are played back only when the **MEMO (OUT)** key is touched.

CHAPTER 5
RECORDING SEVERAL DOCUMENTS ON TAPE

HOW TO DO:

Type the first short letter shown. First identify the document with a few words or phrases, preceded by a **CODE** m (lower case).

1. Touch **CODE**, type *m*

2. Type *THANK YOU LETTER* leaving no space after the m.

3. Type the first letter. Be sure to include an **EOD** Code at the end.

```
mTHANK YOU LETTER

Dear _____
     _____
  _____
  _____
  ____
  ____
/
```

Type the second short document:

4. Touch **CODE**, type *m*

5. Type *LETTER TO NEW EMPLOYEES*

6. Type the second short letter.

7. **EOD**

```
mLETTER TO NEW EMPLOYEES

Dear _____
     _____
  _____
  _____
  _____
/
```

Type the third document:

8. Touch **CODE**, type *m*

9. Type *FORM LETTER*

10. Type the third short letter.

11. **EOD**

> **NOTE:**
> *You can record as much information in a Memo Code as you like, up to the 100 character line limit. If more than one line is used, each line must begin with* **CODE m.**

```
mFORM LETTER

Dear _____
     _____
     _____
  _____
  _____
  _____
/
```

Chapter 6
Adjust, Variable Adjust and Justify
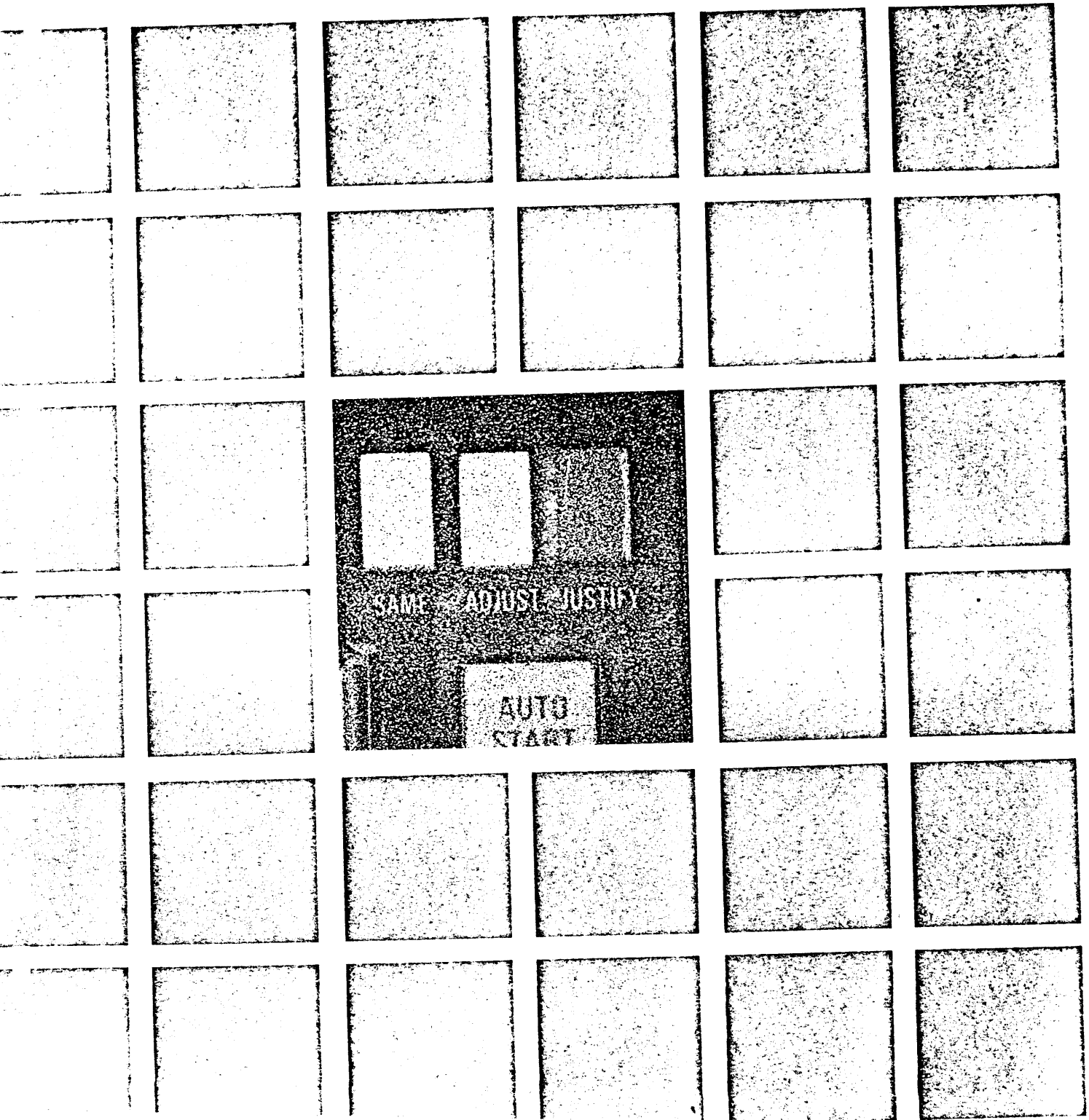
Chapter 6
Adjust, Variable Adjust and Justify

INTRODUCTION
In Chapter 2 you learned how to play back a document in SAME, where each line is played back exactly as recorded. You can produce a smoother right margin by playing back in ADJUST or VARIABLE ADJUST, or a perfect right margin by playing back in JUSTIFY.

PLAYBACK IN SAME

TASK: PLAY BACK A DOCUMENT IN SAME

STARTING STEPS:
a PRERECORDED TAPE
   (CORRECTED VERSION)
   IN RIGHT HOLDER
b RIGHT
c. PLAY
d. SAME
e REWIND

    John Roberts of Boston, Massachusetts, (hereinafter called the "Donor")
    hereby transfers the sum of $234,000.00 to Lawrence Smith of Boston and
    Randolph Wolf of Cambridge (hereinafter with their successors in trust
    called the "Trustees") for the purposes and subject to the provisions
    hereinafter set forth.

    The Trustees hereby acknowledge that they have received said sum
    in trust and declare that they will hold, manage and invest the same,
    together with the proceeds of any policies of insurance paid to them
    and any other property which may hereafter be transferred to the trust
    by gift, will, or otherwise from the Donor or anyone else and accepted
    by them as Trustees; and after paying or making provision for all
    expenses of the trust, including reasonable compensation for their
    services, will dispose of the trust property and the net income
    therefrom as hereinafter provided.

    Upon the death of the Donor, the Trustees shall dispose of the
    remaining principal of the trust, including any property to which they
    are entitled as follows:

PLAYBACK AIDS

TAPE CASSETTE
HANDLING PROCEDURES

RECORDING AIDS

DOCUMENTS WITH
SEVERAL FORMATS

HOW TO DO:
1. Touch **AUTO/START**:
   Stop playback after two paragraphs.
   Playback looks exactly as typed.

SAME

line length
unchanged
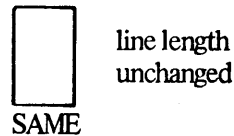
PLAYBACK IN ADJUST

To produce a smoother right margin you must depress the **ADJUST** button, and play back the document in **ADJUST**. When in **ADJUST**, the System reads a line (or two lines, if necessary) of the tape at a time, ignores the **RETURNS** recorded on the tape, and places as many words as fit on a line without exceeding the right margin setting. The right margin is set automatically at 65 characters from the left margin setting, with no **TAB** stops when you turn on the System. To change the right margin setting, and to set **TAB** stops, you must use the System 1200 formatting procedure.

IGNORED

ADJUST

TAPE

LINE 1   LINE 2   LINE 3

ADJUSTED

1
2
3
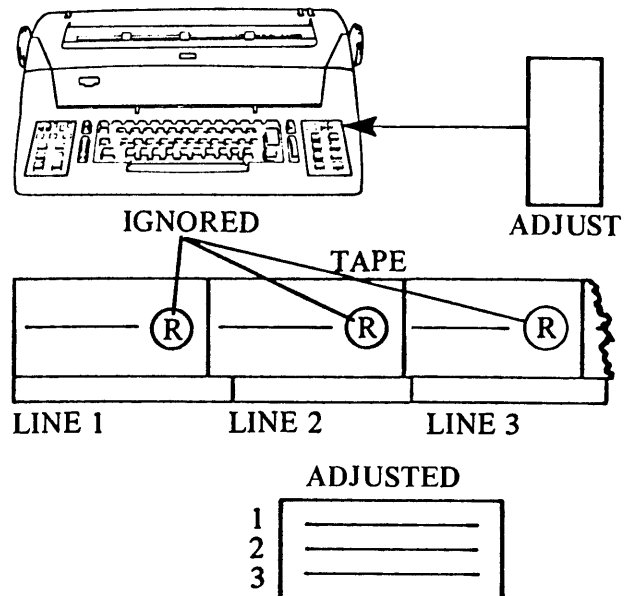
TASK: PLAYBACK A DOCUMENT ADJUSTED

STARTING STEPS:
a. PRERECORDED TAPE
   (CORRECTED VERSION)
   IN RIGHT HOLDER
b. RIGHT
c. PLAY
d. ADJUST
e. REWIND

John Roberts of Boston, Massachusetts, (hereinafter called the "Donor") hereby transfers the sum of $234,000.00 to Lawrence Smith of Boston and Randolph Wolf of Cambridge (hereinafter with their successors in trust called the "Trustees") for the purposes and subject to the provisions hereinafter set forth.

The Trustees hereby acknowledge that they have received said sum in trust and declare that they will hold, manage and invest the same, together with the proceeds of any policies of insurance paid to them and any other property which may hereafter be transferred to the trust by gift, will, or otherwise from the Donor or anyone else and accepted by them as Trustees; and after paying or making provision for all expenses of the trust, including reasonable compensation for their services, will dispose of the trust property and the net income therefrom as hereinafter provided.

APTER 6
DJUST, VARIABLE ADJUST AND JUSTIFY

OW O DO:

Find and depress the **ADJUST** button.

Tc ch **AUTO/START**.
Stop playback in the middle of the page by
touching **CHAR/STOP** key. Compare the play-
b; k in **ADJUST** with the playback in **SAME**.
Notice how the System adjusts each line to con-
form to the line length of 65 characters.

TASK: SETTING THE FORMAT

STARTING STEPS:
a. PRERECORDED TAPE
   J RIGHT HOLDER
b. RIGHT
c. REWIND
d. LAY
e. ADJUST

```
                                              65
14
learn(format                                   )
@
```
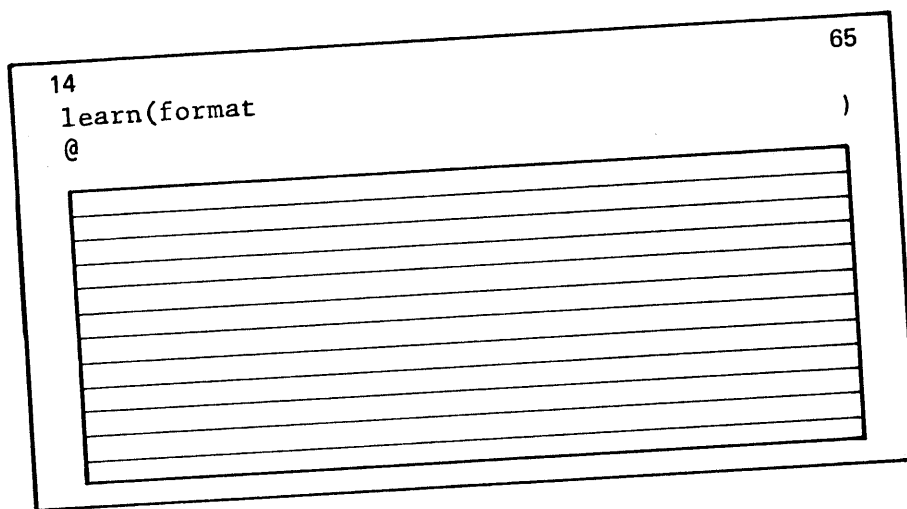
OW TO DO:
1. Set the left margin at 14, then touch **RESET**.

---

2. Touch the **CODE** key.
   Touch the ℓ key
   (learn(is typed which tells the System to learn
   new instructions.)

learn(

. Touch the *f* key.

The System types *format*. The carrier returns, travels to the far-right of the carriage, automatically clears any previously set tab stops and right margin, carrier returns and types @. You are now ready to enter the new margin setting.

```
learn(format
@
```

⁴. Since the margin is to be set at 64 (for a line length of 50 characters), space over to 65 and touch the) key. The right parenthesis key encloses the location of the right margin setting. You do not need any TAB settings for this lesson.

The System types a) and automatically returns the carrier, which sets the right margin at 64, and tells the System the **LEARN** condition is ended. The new margins are in memory, regardless of where the right margin indicator is located, and remain in memory until changed by formatting again, or by turning off the system. The **LEARN** procedure does not affect the tape.

```
learn(format
@                                    )
```

PRACTICE PROBLEMS:
Practice learning the following formats into memory, and playing back the **PRERECORDED TAPE** with various formats. Be sure to **CODE ℓ f** before each new format setting.

1. Left Margin at 10.
   Right Margin at 80.

2. Left Margin at 29.
   Right Margin at 92.

3. Left Margin at 42.
   Right Margin at 72.

> **NOTE:**
> *If you touch the wrong key or backspace any-time during the learn format procedure, the System types ???, clears all the TAB settings again and retypes learn(format. You do not have to type code ℓ f again.*

PLAYBACK IN VARIABLE ADJUST

If you want a tighter margin than is produced in **ADJUST**, you can set an **ADJUST** zone, when you set the format. The System ends all lines within the **ADJUST** zone, when the document is played back in

AD. JST (called **VARIABLE ADJUST**). If the System cannot end the line within the **ADJUST** zone, the warning tone or bell sounds, playback stops, and the **NO ADJUST** light illuminates.

I: **VARIABLE ADJUST**, you tell the System the size of the **ADJUST** zone. The zone can vary from 1 o 99 characters; the smaller the zone, the tighter the right margin. You can use **VARIABLE ADJUST** n both **PLAY** and **TRANSFER**.
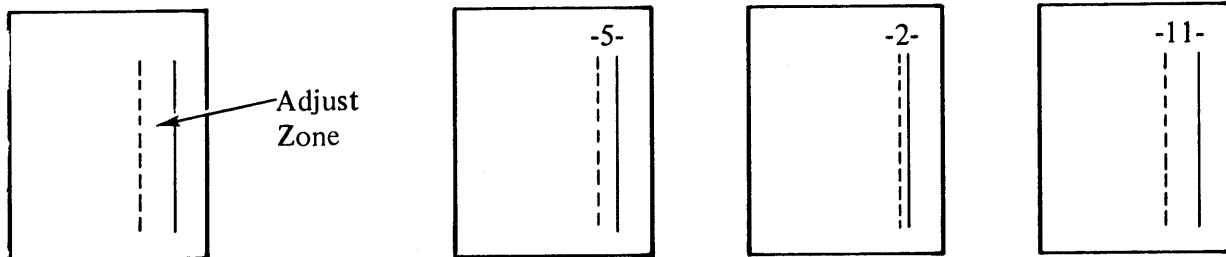
Adjust Zone

TA: <: SET THE FOLLOWING FORMAT
Left Margin at 10.
An **ADJUST ZONE** of five characters.
Rig t Margin at 80.

STARTING STEPS:
a. RERECORDED TAPE
   (CORRECTED VERSION)
   IN RIGHT HOLDER
b. IGHT
c. ADJUST
d. PLAY
e. EWIND

HOW TO DO:
. : :t left margin at 10, touch **RESET**.

2. Touch **CODE** key, and touch ℓ ƒ.

```
learn(format
@
```

3. Although you do not need **TAB** settings for is lesson, set **TABS** at 20 and 30. Space to 20, and touch the **TAB SET** key. Space to 30, and touch the **TAB SET** key. Seven **TABS** can be earned into memory in a format.

```
learn(format
@          T        T
```

PLAYBACK AIDS

TAPE CASSETTE
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RECORDING AIDS

DOCUMENTS WITH
SEVERAL FORMATS

4. Space over to 76, and touch the *a* key *five* times (lower case).

> **NOTE:**
> The *"a"* key tells the System the size of the adjust zone. Each *"a"* represents a character. This variable adjust zone is five characters wide.

```
learn(format
@           T       T       aaaaa
```

5. Touch).
   The variable adjust format now is set.

```
learn(format
@           T       T       aaaaa)
```

TASK: PLAY BACK DOCUMENT IN VARIABLE ADJUST, WITH BLUE LINES INDICATING WHERE SYSTEM STOPS

STARTING STEPS:
a. CONTINUE FROM
   PREVIOUS LESSON

```
John Roberts of Boston, Massachusetts, (hereinafter called the "Donor")
hereby transfers the sum of $234,000.00 to Lawrence Smith of Boston
and Randolph Wolf of Cambridge (hereinafter with their successors in
trust called the "Trustees") for the purposes and subject to the pro-
visions hereinafter set forth.

The Trustees hereby acknowledge that they have received said sum in
trust and declare that they will hold, manage and invest the same,
together with the proceeds of any policies of insurance paid to them
and any other property which may hereafter be transferred to the trust
by gift, will, or otherwise from the Donor or anyone else and accepted
by them as Trustees, and after paying or making provision for all ex-
penses of the trust, including reasonable compensation for their
services, will dispose of the trust property and the net income there-
from as hereinafter provided.
```

HOW TO DO:

1. Touch AUTO/START.

   Notice the System stops at the end of the first line, the warning tone or bell sounds, and the NO ADJUST light illuminates.

```
John. . . . . . . . . .the
```
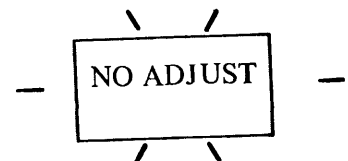
NO ADJUST

The System stops when it reaches a word which, if played out, will exceed the adjust zone.

You must decide what to do.

Adjust zone

John . . . . the "Donor")

---
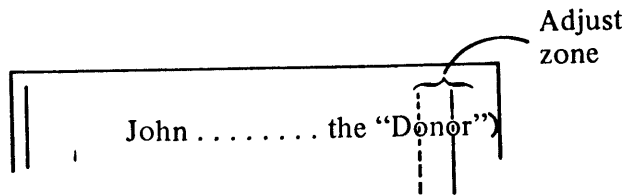
2. Touch **AUTO/START.**
   The System types *Donor* on the line, carrier turns, and continues typing.

   John. . . . . .the Donor")
   . . . . .etc ►

---

3. The System stops again because the word *provisions* does not fit in the zone.

   Trust called. . . . . . .to the ▲

---

4. Touch **CHAR/STOP** *three* times.

   Trust called. . . . . . .to the pro ▲

---

5. Touch the *hyphen* key (a hyphen is typed and the carrier returns).

   Trust called. . . . . . .to the pro-
   ▲

---

6. Touch **AUTO/START.**

   Trust called. . . . . . .pro-
   visions...etc. ►

---

7. When the System stops again, touch **CHAR/STOP** *twice.*

   by them. . . . . for all ▲

   by them. . . . . for all ex-
   penses of the trust. . . .etc.►

---

8. Touch *hyphen* (the carrier returns automatically).

---

9. Touch **AUTO/START.**

10. When the System stops again, touch **RETURN**.

```
penses of the trust. . . . .for their
```

11. Touch **AUTO/START.**

    The System puts the entire word on the next line, and continues typing.

```
penses of the trust. . . . . .for their
services, will. . . . . .etc.
```

12. Play back a few paragraphs in this manner, and compare the results with the playback from Practice Problem No. 1.

PRACTICE PROBLEMS:

1. Set a variable adjust zone of 4 characters long. Left Margin 10, Right Margin 90.

2. Set a variable adjust zone of 7 characters long. Left Margin 30, Right Margin 50.

```
learn(format
@            aaaa)
learn(format
@            aaaaaaa)
```

PLAYBACK IN JUSTIFY

To produce a perfect right margin, you must depress the **JUSTIFY** button, and play back the document in **JUSTIFY**. When in **JUSTIFY**, the System reads as many lines of the tape as necessary in order to make each line the same length. The System ignores the **RETURNS** recorded on the tape, and supplies the necessary blank spaces to make a perfectly flush right margin. Again, when you turn **ON** the system, the right margin automatically is set at 65 characters from the left margin setting. You can change the right margin to any setting, by using the formatting procedure learned in this chapter, as long as the playback line length does not exceed 96 characters.
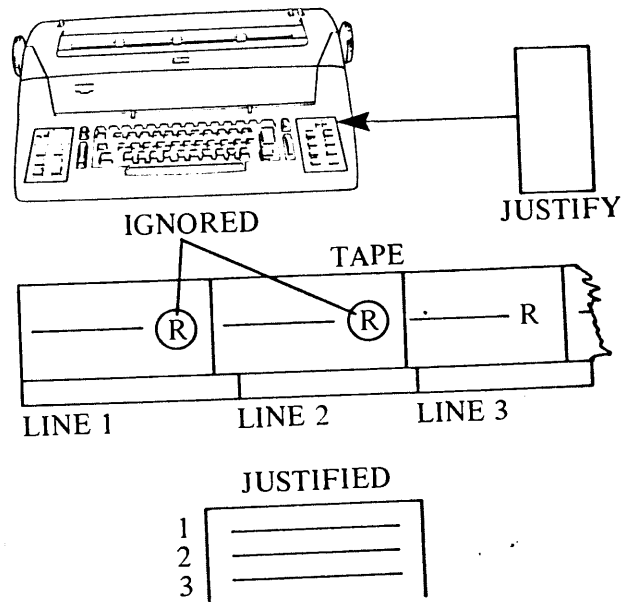
TASK: PLAY BACK A DOCUMENT IN JUSTIFY

STARTING STEPS:
a. PRERECORDED TAPE
   (CORRECTED VERSION)
   IN RIGHT HOLDER
b. RIGHT
c. PLAY
d. REWIND

John Roberts of Boston, Massachusetts, (hereinafter called the "Donor") hereby transfers the sum of $234,000.00 to Lawrence Smith of Boston and Randolph Wolf of Cambridge (hereinafter with their successors in trust called the "Trustees") for the purposes and subject to the provisions hereinafter set forth.

The Trustees hereby acknowledge that they have received said sum in trust and declare that they will hold, manage and invest the same, together with the proceeds of any policies of insurance paid to them and any other property which may hereafter be transferred to the trust by gift, will, or otherwise from the Donor or anyone else and accepted by them as Trustees; and after paying or making provision for all expenses of the trust, including reasonable compensation for their services, will dispose of the trust property and the net income therefrom as hereinafter provided.

HOW TO DO:

1. Turn the System OFF, then ON again, which clears any format setting in memory.
   Find and depress the JUSTIFY button.

2. Touch AUTO/START.

   Stop playback in the middle of the page by touching the LINE key. Compare the playback JUSTIFY with the playback in SAME and ADJUST. Notice the difference in each right margin. In JUSTIFY, the System produces a perfect right margin by adding extra spaces to the line.

> ### NOTE:
> In JUSTIFY, the CHAR/STOP key does not stop playback at a character, but at the end of the line.

PRACTICE PROBLEMS:
Play back the PRERECORDED TAPE IN JUSTIFY WITH THE FOLLOWING FORMATS.

- Left Margin at 10.
  Right Margin at 80.

- Left Margin at 29.
  Right Margin at 92.

3. Left Margin at 42.
   Right Margin at 72.

RECORDING SEVERAL
DOCUMENTS ON TAPE

ADJUST, VARIABLE ADJUST
AND JUSTIFY

CORRECTING WHILE
...COR....

CORRECTING AFTER
ECO ...IG

VARIABLE ADJUST TO TIGHTLY JUSTIFY
A DOCUMENT

Many times in **JUSTIFY**, especially in documents played out with a narrow line length, the System must insert a great many spaces in a line to make a flush right margin. If you prefer tightly justified playback with few extra spaces in each line, use **VARIABLE ADJUST** first. Set up a narrow adjust zone, and **TRANSFER** the original tape in **VARIABLE ADJUST**.

Consider the following example.

```
          Those parts of the System 1200 keyboard normally
          associated with the Selectric typewriter will be
          referred to as "keys"; when singled out individually,
          "character" may be used.
```

If played back in **JUSTIFY** and formatted as shown, the word "individually." falls on the next line because it exceeds the right margin. The third line contains many extra blank spaces.

```
          learn(format
          10                                                        59
          @ ,                                                        !)
          Those parts  of the System 1200 keyboard normally
          associated with the  Selectric typewriter will be
          referred    to as  "keys";    when    singled    out
          individually, "character" may be used.
```

Instead, first **TRANSFER** the document in **VARIABLE ADJUST** with a tight adjust zone, as shown and hyphenate the word "individually".

```
          learn(format
          10                                               54    59
          @                                                aaaaa)
          Those parts of the System 1200 keyboard normally
          associated with the Selectric typewriter will be
          referred to as "keys"; when singled out individ-
          ually, "character" may be used.
```

Then, play back the **TRANSFER** tape, already variably adjusted, in **JUSTIFY**. The third line is spaced more evenly with fewer extra blank spaces.

```
          Those parts  of  the System 1200 keyboard normally
          associated with the  Selectric  typewriter will be
          referred to as "keys";  when  singled out individ-
          ually, "character" may be used.
```

> **NOTE:**
> *You can accomplish the same results by typing hyphens between the syllables of long words when recording the initial document.*

CHAPTER REVIEW CHECK LIST

- **SAME** plays back each line as it was recorded, unchanged in length.

- **ADJUST** changes the length of each line, ignoring recorded **RETURNS** to smooth out the right margin.

- **VARIABLE ADJUST** allows you to hyphenate words to produce a smoother right margin.

- **JUSTIFY** changes the length of each line, ignoring recorded **RETURNS** to make each line the same length.

- A format is learned into memory by **CODE, ℓ, f, set TABS).** Seven **TABS** can be set in a format.

- The System is preset when turned **ON** to a right margin 65 characters from the left margin setting, and no **TAB** settings.

- The System is placed in the format learning condition by touching the **CODE, ℓ, f** keys. You can **CODE LEARN** anytime, whether you are in **RECORD, EDIT, TRANSFER** or **PLAY**, because the **LEARN** condition does not affect the tape.

- A **VARIABLE ADJUST** zone is set into memory by **CODE, ℓ, f, set TABS, aaa..).**

- When the System stops during playback in **VARIABLE ADJUST**, with the **NO ADJUST** light illuminated, three options are available.

  1. Playback, by character, part of the word, and hyphenate it. The carrier returns automatically. Touch **AUTO/START.** The remainder of the word plays back on the next line.

  2. Touch **AUTO/START.** The System types the entire questionable word on the line, carrier returns and continues playback.

  3. Touch **RETURN**, then **AUTO/START.** The questionable word is played back on the next line.

- If you **TRANSFER** a document in **VARIABLE ADJUST**, the new tape is recorded with the new line length and hyphens.

PLAYBACK AIDS

TAPE CASSETTE
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CHAPTER 6
ADJUST, VARIABLE ADJUST AND JUSTIFY

WHEN TO USE PLAYBACK CONTROL BUTTONS

▉ RECORDING	□ + ▉ EDITING	▉ TRANSFER	□ PLAYBACK
Record	Play Record	Trans	Play
Same	Same	Same or Adjust*	Same or Adjust or Justify**
(only)	(only)		

* You can TRANSFER in ADJUST; however, the System does not permit searching in ADJUS

** You cannot play back a document in JUSTIFY by WORD or CHARACTER. The system lo at entire lines in order to JUSTIFY. Use only the LINE, PARA, or AUTO/START k CHAR/STOP and WORD keys stop playback at the end of a LINE.

Chapter 7
Recording Aids

INTRODUCTION

The System 1200 features numerous aids to make recording documents fast and easy. These aids, which are recorded as needed on the tape along with each document, are explained individually on the page indicated in the following list.

SAMPLE LETTER

learn(format

@5   20   25   50   66
      T   T   T   )

CODE b   ·   August 10, 1974 RETURN

RETURN
RETURN
RETURN
Mr. John Smith CODE RETURN
Wang Laboratories, Inc. CODE RETURN
836 North Street CODE RETURN
Tewksbury, Massachusetts 01876 RETURN

RETURN
Dear Mr. Smith, RETURN

RETURN
TAB It is with great appreciation that I am RETURN
returning the literature you sent me.regarding RETURN
the Wang System 1200 Dual Cassette Typewriter. My RETURN
comments are as follows: RETURN

RETURN
CODE oComments: RETURN
CODEoWang System 1200 RETURN

.RETURN
TAB The System, as described in your literature, RETURN
would be of _enormous_ benefit to my clerical RETURN
staff. Since we have many mailings in which RETURN
only the address and salutation changes, they RETURN
could use the two-tape system to: RETURN
CODE TAB make up a permanent copy of the letter RETURN
on one tape and a list of the addresses and the salutation RETURN
on the other tape, then merge the two tapes for a RETURN
single, individualized letter. CODED RETURN
Our customers are quite impressed when they receive what appears RETURN
to be personalized letters. There are three other points RETURN
which I would like to stress as important to my secretaries. RETURN
CODE TAB 1. CODE TAB Ease of decimal alignment RETURN
makes a very unpleasant chore no longer RETURN
a chore. CODE RETURN
CODE TAB 2. CODE TAB Corrections are quite simple to make and greatly RETURN
speed the production of a perfect final RETURN
copy. CODE RETURN
CODE TAB 3. CODE TAB Being able to search directly to any line RETURN
on a tape, without typing out all the RETURN
material before that line, impresses me greatly. CODE RETURN
TAB I see these benefits as only a beginning of what the RETURN
System 1200 can do for us. I will be contacting your local salesman RETURN
immediately for a demonstration and talk. RETURN
RETURN
Thanks again, RETURN
RETURN
RETURN
Barry Gonzales CODE RETURN
ABC Electric Company CODE RETURN
South Street CODE RETURN
Spokane, Washington RETURN
CODE/

The following sections explain the recording aids necessary to record a letter on tape. Each lesson shows you the steps necessary to record the Sample Letter.

RECORDED FORMAT

In Chapter 6, you learned how to set a format into the memory of the System 1200. Whenever you record a document on a tape, it is advisable to record the format along with the document. With recorded formats, you can play back all the documents recorded on the tape without stopping to manually punch format into memory.

TASK: RECORD A FORMAT ON TAPE

KEYING STEPS:

LOCK TAPE IN
RIGHT HOLDER
RIGHT
RECORD
SAME
REWIND

HOW TO DO:

1. Learn the following format into memory, with the left margin set at 15, tab settings at 20, 25, and 50, and the right margin closing at 66.

```
learn (format
15    20   25        50        66
@     T    T         T         )
▲
```

2. Touch **CODE**, type *b*.

```
learn (format

@    T    T        T         )
b
▲
```

3. The format is recorded on tape, and the carrier returns to the left margin. When recorded, the format takes up a complete block (line) on the tape.

ENFORCED RETURN

In Chapter 6 you learned the System ignores the **RETURNS** recorded on tape when playing back in **ADJUST** or **JUSTIFY**. Instead, it places as many words as it can fit on each line within the margins, and supplies a new **RETURN** at the end of each playback line. The only times it does not ignore a **RETURN** is when the **RETURN** is followed by one or more additional **RETURNS**, or by a **TAB**, or by spaces.

At times, you do not want the System to ignore a **RETURN**. You may want to record a short line on purpose. For example, when recording an inside address, if the System ignored all the **RETURNS**, the inside address would play back on one line. To make the System **RETURN** after a purposely short line, you must use an **ENFORCED RETURN**.

PLAYBACK AIDS

TAPE CASSETTE
HANDLING PROCEDURES

TYPING NUMBERS

DOCUMENTS WITH
SEVERAL FORMATS

CORRECTING SEVERAL
DOCUMENTS ON TAPE

JUST
ADJUSTABLE
AND JUSTIFY

FIRST, ADJUSTABLE
AND JUSTIFY

RECORDING AIDS

CORRECTING AFTER
RECORDING

CHAPTER 7
RECORDING AIDS

TASK: RECORD AN INSIDE ADDRESS WITH ENFORCED RETURNS
HOW TO DO:
1. Type the date and inside address as shown, including the **CODE RETURN** at the end of each line. To type a **CODE RETURN**, first touch the **CODE** key, then the **RETURN** key.

```
                                              August 10, 1974 RETURN
                    RETURN
                    RETURN
                    RETURN
                    Mr. John Smith CODE RETURN
                    Wang Laboratories, Inc. CODE RETURN
                    836 North Street CODE RETURN
                    Tewksbury, Massachusetts 01876 RETURN
                    RETURN
                    Dear Mr. Smith, RETURN
                    RETURN
                    TAB It is with great appreciation that I am RETURN
                    returning the literature you sent me regarding RETURN
                    the Wang System 1200 Dual Cassette Typewriter.  My RETURN
                    comments are as follows: RETURN
                    RETURN
```

2. At the end of the last line of the inside address, use either a **CODE RETURN** or a **RETURN** (since a second return follows, a CODE RETURN is not necessary).

CODE RETURNS=ENFORCED RETURNS WHEN USED: To prevent a line from being adjusted in playback. The System never ignores an ENFORCED RETURN. Coded returns stop short lines or addresses from being adjusted or justified.

3. Type the salutation and first paragraph as shown.

CENTERING

Centering is quick and easy. Before typing any word, phrase, number, or group of numbers to be centered simply touch the **CODE** key, then type the lowercase letter o.

TASK: RECORD A LINE TO BE CENTERED
HOW TO DO:

```
                    CODE oComments: RETURN
                    CODE oWang System 1200 RETURN
                              RETURN
```

1. Touch **CODE**, type *o* (lowercase), type *Comments,* and touch **RETURN**.

```
oComments -R
```

Touch **CODE**, type *o* (lowercase), type *Wang System 1200*, touch **RETURN**, and touch **RETURN** again.

oWang Cassette Typewriter ⌐R

⌐R

REMEMBER:
Lines preceded by **CODE** o always are centered in the middle of the format. Playback can be stopped only at the end of the line.

USE CODE *o* = Center Line To

UNDERLINING

Underlining also is quick and easy. As you learned earlier, the **BACKSPACE** key does not erase characters; it only positions the memory pointer back to the character to which you backspaced. To underline a word or number, all you need to do is **BACKSPACE** to the beginning of the word or number, and use the **UNDERSCORE** key as many times as necessary.

There is one point to keep in mind. If underlining a long line, it is best to underline *only* the individual words and *not the spaces* within the line. If you underline the entire line, the System sees the line as *one word*, which can cause problems if playing back in **JUSTIFY**.

TASK: UNDERLINE A WORD

HOW TO DO:
Type the first line of the paragraph as shown.

TAB The System, as described in your literature, RETURN would be of underscore benefit to my clerical RETURN staff. Since we have many mailings in which RETURN

2. Type the second line through *enormous*, **BACKSPACE** to the "*e*", and then underline as you would on any typewriter, using the underscore key.

would be of enormous ◣

3. Type the rest of the line, and the next line as shown.

NOTE:
As a word is underlined, the underscore becomes part of each character. If you skip out an underlined character, you must replace both the character and the underscore.

ENFORCED HYPHEN

As you know, in **ADJUST** or **JUSTIFY**, the System ignores all **RETURNS** unless coded. It also ignores all hyphens in the body of a line and uses only hyphens which end the **ADJUSTED** or **JUSTIFIED** line. Therefore, when recording you can use a hyphen whenever a word does not fit on a **RECORDED** line. When playing back, if the entire word does fit on the **ADJUSTED** or **JUSTIFIED** line, the hyphen is omitted and the entire word is played back on the line. If the word does not fit, the hyphenation remains.

You may, however, need to record hyphens in words or numbers. For example, the hyphens in *mother-in-law* are part of the spelling of the word. To enforce a hyphen, just touch the **CODE** key before the hyphen key.

> **NOTE:**
> *A* **CODE HYPHEN** *should not precede a* **RETURN**, *or playback will be mother- in-law.*

TASK: RECORD AN ENFORCED HYPHEN

HOW TO DO:
1. Type the first line as shown.

```
only the address and salutation changes, they RETURN
                 CODED
could use the two-tape system to: RETURN
```

2. Type *could use the two.*

could use the two

3. Touch CODE, type -.

could use the two-

4. Type *tape.*

could use the two-tape

5. Finish typing the line.

could use the two-tape system to:

> **NOTE:**
> *Besides enforcing a hyphen by coding it, leaving a space before or after the hyphen also enforces the hyphen.*

REQUIRED HYPHENS
CODE hyphen
or
space -
or
- space

FORCED TAB

At times, you may want to record indented subparagraphs. You learned earlier that whenever the System encounters a **RETURN (R)** followed by a **TAB (T)**, it assumes a new paragraph is intended. Therefore, if an indented subparagraph is intended, the lines may not be adjusted or justified properly in playback. For example, if the first line of the indented subparagraph exceeds the formatted margin,

```
 15   20                    40
 @    T                     )

     TAB The System 1200 Dual Cassette Typewriter
     TAB offers many features.
```

playback in **ADJUST IS:**

```
     The System 1200 Dual
     Cassette Typewriter
         offers many features.
```

To assure proper adjustment or justification, and to automatically indent each line of the subparagraph, touch the **CODE** key before the **TAB** key. When the indented subparagraph is complete, a **CODE RETURN** (CR) deactivates the **CODE TAB (CT)**.

TASK: RECORD AN INDENTED SUBPARAGRAPH AND A NUMBERED SUBPARAGRAPH

```
CODE  TAB  make up a permanent copy of the letter RETURN
           on one tape and a list of the addresses and the salutation RETURN
           on the other tape, then merge the two tapes for a RETURN
           single, individualized letter. CODE RETURN
      Our customers are quite impressed when they receive what appears RETURN
      to be personalized letters.  There are three other points RETURN
      which I would like to stress as important to my secretaries. RETURN
CODE TAB 1. CODE Ease of decimal alignment RETURN
            TAB makes a very unpleasant chore no longer RETURN
                a chore. CODE RETURN
CODE TAB 2. CODE Corrections are quite simple to make and greatly RETURN
            TAB speed the production of a perfect final RETURN
                copy. CODE RETURN
CODE TAB 3. CODE Being able to search directly to any line RETURN
            TAB on a tape, without typing out all the RETURN
                material before that line, impresses me greatly. CODE RETURN
```

HOW TO DO:
1. Touch **CODE**, touch **TAB**, and type the first line as shown, including the carrier **RETURN**. Notice after the **RETURN**, the typing element automatically moves to the **TAB**.

```
C
T make up a permanent copy of the letter
```

2. Type the remaining lines of the subparagraph, using a **CODE RETURN** on the last line to deactivate the **CODE TAB**.

CODE   RETURN
EXITS THE SYSTEM FROM CODE TAB

ON TAPE AS FOLLOWS:

C T make.... .R	on......salutation R	on......for a R	single.......CR

C = coded

The **CODED TAB** is recorded only on the first line of the subparagraph. It takes up only one characte on the tape. When the System reads the coded tab from the tape, it remains in memory, causing the nex line to automatically indent. Automatic indenting ends only when the System encounters a **CODE RETURN**.

---

3. Type the next three lines, as shown.
4. Type the first numbered subparagraph as shown, remembering to **CODE RETURN** at the end of each subparagraph.

C = CODE
T   TAB

C = CODE
R   RETURN

ON TAPE AS FOLLOWS

C T 1. C T Ease......ment R	make....R	a chore.CR	C T 2.

Notice when two **CODE TABS** are used the System automatically indents to the second **TAB** setting.

TASK: TYPE THE REST OF THE LETTER

TAB I see these benefits as only a beginning of what the RETURN
System 1200 can do for us. I will be contacting your local salesman RETURN
immediately for a demonstration and talk. RETURN

RETURN
Thanks again, RETURN

RETURN

RETURN
Barry Gonzales CODE RETURN
ABC Electric Company CODE RETURN
South Street CODE RETURN
Spokane, Washington RETURN

CODE

HOW TO DO:
1. Type the last paragraph and closing of the letter, as shown.
2. Remember to **CODE RETURN** after the short lines in the signature, and to record an EOD code at the end.

transferring - re: format

MEMO (OUT) AND LEARN FORMATS

Earlier you learned how to record a format on tape, using **CODE b**. When you recorded the format on tape, the format was, at the same time, automatically set into memory. But when using a prerecorded tape with recorded formats, the formats are not set automatically into memory. Two methods are used to set formats into memory: **CODE MEMO (OUT)** and the learn (t) condition.

When you touch the **CODE** and **MEMO (OUT)** keys, the System searches the tape until it finds a format. Then it sets that format into memory only. If you have recorded more than one document on a tape, and each document has a different format, you must touch **CODE** and **MEMO (OUT)** before playing back each document to set each format into memory. When using **CODE MEMO (OUT)** in **TRANSFER, you must use CODE b after each CODE MEMO (OUT), because CODE MEMO (OUT) only sets the format into memory; it does not record the format on the left tape.**

The learn (t) condition also tells the System to learn any recorded format it encounters during playback. But, unlike **CODE MEMO (OUT)**, the learn (t) condition is automatic; once in the learn (t) condition, the System automatically enters any formats recorded on tape into memory as it reads them. If the System is in the learn (t) condition, and the tape contains six different document with six different recorded formats, each new format is entered automatically into memory as each document is played back. When you TRANSFER in the learn (t) condition, all the formats and the **CODE b's** are transferred to the second tape. The learn (t) condition is explained in further detail in Chapter 8, Documents With Several Formats.

TASK: PLAY BACK THE DOCUMENT IN ADJUST

STARTING STEPS:

1. RIGHT
2. PLAY
3. REWIND
4. ADJUST

HOW TO DO:

1. Touch **CODE** key.

2. Find and touch **MEMO/OUT** key.

> **NOTE:**
>
> **CODE MEMO (OUT)** *searches through a tape until it finds a format and then sets the the format into the typewriter. The* **CODE MEMO/OUT** *procedure recalls a format from tape. It is necessary to* **CODE MEMO OUT)** *before playing out a document if you have changed the format since recording the document, or if you have turned the System* **OFF,** *since the format would no longer be in the memory.*

$$\text{CODE} \atop \text{MEMO/OUT} = {\text{SETS} \atop \text{FORMAT}}$$
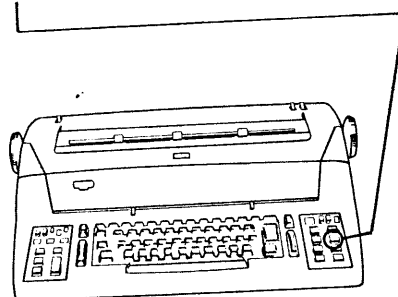
3. Touch **AUTO/START** and compare playback with the rough draft; paying particular attention to **CODE TAB** sections and lines followed by enforced **RETURNS**.

CHAPTER 7
RECORDING AIDS

CORRECTING RECORDING AIDS

When correcting documents containing recording aids, uses the following guidelines.

1. When searching to a line which begins with **CODE TAB**, a **TAB** or spaces, it is not necessary to search the **TAB** or the spaces. Simply search the first word of the line.

2. When searching a line with a **CODE o**, you must search the **CODE o**.

3. To eliminate a **CODE TAB**, a **TAB**, a **RETURN** or a **CODE RETURN** from a tape, delete them as you would any character, since they are recorded as characters.

4. When playing back a line beginning with a **CODE o**, the entire line is played back, whether you touch the **CHAR, WORD,** or **LINE** key. In order to correct a centered line, you must retype the entire line including the **CODE o** and **RETURN**.

5. After making corrections on lines containing **CODE TABS**, the System automatically **TABS** on the next line. You must cancel the **CODE TAB** to return to the left margin. Use either procedure:
   a. switch to **PLAY** and touch **CODE** and **RETURN**.
   b. search to the line containing the **CODE RETURN**, and play it out.

6. When searching to the second line in an indented subparagraph, the **CODE TAB** does not activate since it is recorded only on the first line of the subparagraph. Make the corrections necessary although the paragraph is not indented when correcting, it indents properly when the entire subparagraph is played back.

7. When underlining, each underscore becomes part of the character it underlines. When searching to a line beginning with an underlined word, you must **SEARCH** the line as it appears. That is touch **SEARCH**, type the word, backspace and underline the word, or search a few characters underscoring them individually, then touch **SEARCH** again.

8. When searching for a word containing an enforced hyphen (either a coded hyphen or a hyphen with a space before or after it) you *must* code the hyphen.

9. When searching for a period, make sure you type the period in the same case it was recorded. The System cannot find a lowercase period when was recorded in uppercase.

ENFORCED SPACE

When playing back in **JUSTIFY**, the System ignores all spaces recorded on the tape, and supplies as many spaces as necessary between words. If a recorded line ends with a period, but the period is located in the middle of a line in playback, the System supplies two spaces between the period and the next word. Make sure you space twice between sentences (a standard typing rule) for consistent documents.

If you want to enforce a space during playback, you must touch **CODE** and **SPACE** for each space to be enforced. For example, you may want to leave a space or two to draw in a character which is not on your typing element. Or you may want to prohibit the System from splitting a name.

TASK: RECORD AN ENFORCED SPACE
STARTING STEPS:
a. WORK TAPE IN RIGHT HOLDER
b. LEFT MARGIN 10
c. RIGHT MARGIN 71
d. RIGHT
e. RECORD

```
learn(format
10
@
b
```

72

The forerunner of Wang Laboratories was formed in 1951 by Dr. An Wang, and was incorporated in 1955. Working with a small staff, Dr. Wang performed research and development in electronic systems and instruments. Early products included special-purpose data handling equipment for industry and government, and general-purpose computer peripherals.

PLAYBACK AIDS

TAPE CASSETTE
HANDLING PROCEDURES

TYPING NUMBERS

DOCUMENTS WITH
SEVERAL FORMATS

HOW TO DO:

1. Record the paragraph as shown, making sure to CODE SPACE where indicated (CSP).

2. Notice, if you did not CODE SPACE between *Dr.* and *An,* in JUSTIFY, *Dr.* would play back on the first line, and *An Wang* and the remainder of the sentence on the next line.

TASK: PLAY BACK THE PARAGRAPH

STARTING STEPS:

a. REWIND
b. PLAY
c. JUSTIFY

The forerunner of Wang Laboratories was formed in 1951 by Dr. An Wang, and was incorporated in 1955. Working with a small staff, Dr. Wang performed research and development in electronic systems and instruments. Early products included special-purpose data handling equipment for industry and government, and general-purpose computer peripherals.

HOW TO DO:

1. Touch AUTO/START. Notice the entire name *Dr. An Wang* is played back on the second line.

NO ADJUST CONDITION

Often, you may want to record a list or columns along with material that is to be adjusted or justified. Naturally, you do not want the list or columns to be adjusted or justified. Any material in the NO ADJUST CONDITION, recorded as CODE learn (naj), is not adjusted or justified when played back. When in NO ADJUST, the System automatically codes all spaces, hyphens, and RETURNS as they are recorded. A CODE RETURN, or changing from RECORD to PLAY deactivates the NO ADJUST CONDITION, Additional information on the uses of NO ADJUST can be found in Chapter 11, Typing Numbers; Chapter 12, List and Directories; and Chapter 13, Programmed and Document Assembly.

TASK: RECORD A DOCUMENT USING NO ADJUST

STARTING STEPS:

a. WORK TAPE IN
   RIGHT HOLDER
b. RIGHT
c. RECORD
d. SAME
e. REWIND

learn(format
10   15   55   86
@   T   T   )
b   I   December 12, 1974

Mr. Charles Matson, Supervisor- C R
Mail Order Department- C R
Acme Book Distributors- C R
55 High Street- C R
Newtown, Massachusetts 01234- R

Dear Mr. Matson:

    Please send me one copy of each book included in the following list:

learn(naj)
    T Computational Handbook of Statistics   T Linear Algebra- R
    T James L. Bruning, B. L. Kintz   T Kenneth Hoffman, Ray Kunze - R
    T Scott, Foresman   T Prentice-Hall- R

    T Basic Marketing   T Minds and Machines R
    T E. J. McCarthy   T A. R. Anderson- R
    T Irwin   T Prentice-Hall- C R

    You may send the invoice for the above books to me personally. Thanking
you in advance for your continued good service, I remain,

                                            Yours truly,

                                            Sam Jones- C R

    /

HOW TO DO:

1. Set the format, as shown, and record it on tape
   with CODE b.

2. Type the letter as shown, making sure to CODE
   RETURN (CR) where indicated, and to include
   an EOD at the end of the letter.

TO DO: CORRECTING IN NO ADJUST

fore correcting, in **EDIT** or **TRANSFER**, documents or sections of documents recorded in **NO** US' remember to place the System in **NO ADJUST** before beginning. Also remember since **NO** US, codes the spaces, hyphens and returns, you cannot take a normally recorded document and ct to change it to a **NO ADJUST** document by entering the learn (naj) command and transferring the me t.

DOCUMENTS RECORDED IN NO ADJUST	MUST BE	EDITED OR TRANSFERRED IN NO ADJUST

CORDING MORE THAN 100 CHARACTERS ON A LINE

In hapter 2, you learned you can record up to 100 characters on each line (block) of the tape. In some plications it is necessary to record more than 100 characters on a single line. A simple procedure called LOCK LINK allows you to extend a line to as many characters as will fit across the carriage (150 for 12 tch 125 for 10 pitch). By touching the **CODE** and **BACK LINE** Keys before reaching the 100th character ne warning tone/bell sounds at the 90th character), the System allows you to record an additional 100 characters on that same line. For example if you type 50 characters, then touch **CODE** and **BACK LINE**, bu an type a total of 150 characters on the line. You can repeat the **CODE BACK LINE** processes as han, times as necessary.

When playing back, as soon as the System reads the **CODE BACK LINE** character, it automatically jumps o ti beginning of the next block on the tape, and continues playback without stopping.

Y u also must remember that a line longer than 96 characters cannot be justified. You can format the entire width of the carriage (from 1 to 150), and set the seven tabs anywhere within the total width of the car ge, but you must play back in **SAME** or **ADJUST** if the line length is more than 96 characters.

TASK: RECORD A LINE LONGER THAN 100 CHARACTERS

ST RTING STEPS:

a. ORK TAPE IN
   RIGHT HOLDER
b. ECORD
c. IGHT
d. SAME
e. REWIND

Recent studies by geologists and geophysicists indicate that the North American continent is rotating counterclockwise.

HOW TO DO:

1. Record the above as shown. The warning tone/ bell sounds between *continent,* and *is* to warn you that you have typed the 90th character.
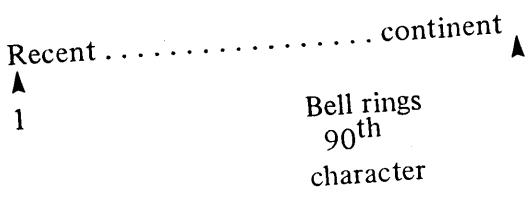
Recent . . . . continent
▲   ▲
1   Bell rings
                            90th
                          character

RECORDING SEVERAL
DOCUMENTS ON TAPE

ADJUST, VARIABLE ADJUST
AND JUSTIFY

RECORDING AIDS

CORRECTING AFTER
RECORDING

2. Continue typing.

Where the *n* is typed, the tone/bell sounds, and the carrier backspaces one character; you just typed the 100 character into the memory. There are only two things you can do at this time; either

a. Backspace to before *rotatin,* and touch **RE-TURN.** The line up to and including *is,* is recorded on tape. Then begin typing a new line.

or

b. **BLOCK LINK (CODE BACK LINE),** which enables you to continue the line beyond one hundred characters.

Recent . . . . is rotatin

94

Bell rings &
carriage backspaces
at 100th
character
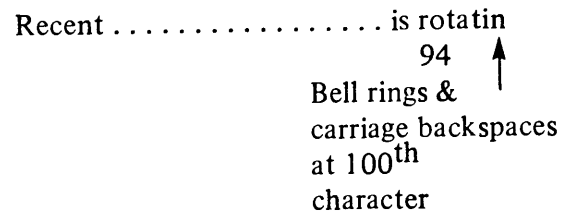
3. Touch **CODE,** and touch **BACK LINE.** The tape moving light blinks, and the tape advances. Everything up to *rotati* is recorded on tape, without a carrier **RETURN.** The **BLOCK LINK** replaces the character *"n".* You can now continue to record the rest of the line.

CODE   BACK LINE = BLOCK LINK

Recent . . . . rotatin
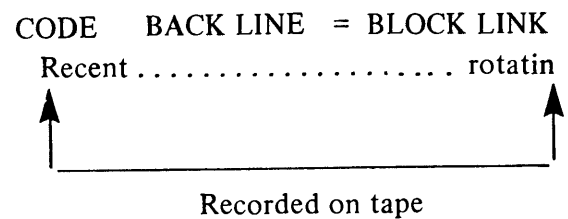
Recorded on tape

4. Continue typing the line, including the *"n".*

...rotatinng counterclockwise.

101st 119th
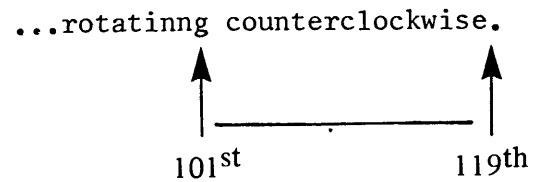
5. **CODE EOD**

6. **REWIND** the tape and play it back in **SAME.**

TAPE

1	99 100	1	21 1C
Recent.....rotati C BL		ng counterclockwise.R	
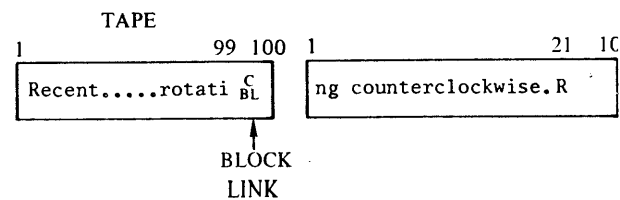
BLOCK
LINK

OR ECTING A BLOCK LINK LINE

Correcting a **BLOCK LINK** line is easy, as long as you remember how the line is recorded on tape. Retype e l`ne in the above example. After the **RETURN**, place the System in **EDIT**, and touch **BACK LINE** once. ay ack the line. Notice, only the characters on the second block are played back. **BACK LINE** only backs the tape one block. To position yourself at the beginning of the **BLOCK LINK** line, touch **BACK LINE** vic

If ou want to insert *"slowly"* between *"is rotating"*, again you must remember how the line is recorded on ape. Play back the line, word by word, past *"is"*. **SKIP WORD** to eliminate *"rotati"* and the **BLOCK LINK**. ype *"slowly"* and touch **CODE** and **BACK LINE**. This new **BLOCK LINK** positions you at the beginning f t e next block. Type in a space and *"rotati"*, then play out the remainder of the line.

If you insert the word *"rapidly"*, rather than *"slowly"*, the entire word would not fit on the line. After liminating *"rotati"*, you could type in *"rapidl"* and **BLOCK LINK**. Then, you must type *"y"*, space, and `ro ti" before playing back the rest of the line.

It is, therefore, a good idea to **BLOCK LINK** early enough in the line to allow room for later editing. Also, it is a good practice to **BLOCK LINK** only between words or numbers, to simplify editing.

SE TING MORE THAN SEVEN TABS

arlier you learned the System accepts a total of seven **TABS** in a format. In the previous section you learned the format can include the entire width of the carriage. Additional **TABS** (up to 9 on the System 12 2, an unlimited number on the System 1220) can be entered manually for documents requiring more th seven columns. Often, when recording numerous **TAB** positions, you can exceed the 100 character line limit. It is a good practice to use a **BLOCK LINK** line when recording more than seven columns, and to re ember to **BLOCK LINK** between columns. Additional information on setting more than seven **TABS** is in uded in Chapter 11, Typing Numbers.

T SK: RECORD A DOCUMENT WITH TEN TAB SETTINGS

S ARTING STEPS:
a. **WORK TAPE IN RIGHT HOLDER**
b **RIGHT**
c. **RECORD**
d. **SAME**
e **REWIND**

HOW TO DO:

learn(format	20 T	30 T	40 T	50 T	60 T	70 T	80 T		(90)	(100)	(110)
O											
@											
b											
oBRANCH OFFICES						Portland	Ottawa C BL	Phoenix	Detroit	Miami
TYPE (Personnel)	Boston	Atlanta	Dallas	Chicago	Tampa	X(4)	X(6) BL	X(5)	X(5)	X(1)
SALES	X(12)	X(6)	X(10)	X(12)	X(5)	X(1)	X(1) C BL	X(2)	X(2)	
SERVICE	X(5)	X(2)	X(5)	X(5)	X(3)		X(1) C BL			X(1)
TRAINING	X(1)	X(1)	X(1)	X(1)						

/

. Record the format as shown, including the seven tab settings and the right hand margin at 121.

l CODE and b

2. Depress **PLAY.**
   Space to 90 and touch the **TAB** key. Touch
   CODE and **BACKLINE** (for a **BLOCKLINK**),
   then space to 100, and touch **TAB.** Space to
   110 and touch **TAB** and then **RETURN.**

3. Depress **RECORD** and type the document as
   shown, remembering to **CODE BACK LINE**
   where indicated.

TASK: PLAY BACK THE DOCUMENT
STARTING STEPS:
a. REWIND
b. PLAY
c. SAME

HOW TO DO:

1. Touch **AUTO/START**

> **NOTE:**
> *Any* **TABS** *learned into memory are elimi-
> nated when the System is turned off or when
> a new format is entered. On the System 1222,
> any manual tabs also are eliminated when the
> system is turned off. But on the System 1220,
> the manual tabs are not cleared automatically.
> You must clear them manually by tabbing
> past all the settings, holding the* **TAB CLEAR**
> *key depressed, and touching* **RETURN.**

AUTOMATIC VERTICAL HALFSPACING

The Automatic Subscript and Superscript key (INDEX), standard on the System 1222, optional on the System 1220, simplifies typing subscripts, superscripts and formulas. Touching **CODE INDEX** causes the platen to index one half space upward. Touching **INDEX** causes the platen to index one half space downward. Additional information on Automatic Vertical Halfspacing can be found in Chapter 11.

TASK: RECORD A SUBSCRIPT
STARTING STEPS:
a. WORK TAPE IN
   RIGHT HOLDER
b. RIGHT
c. RECORD
d. SAME
e. REWIND

The use of variables[1] is a mathematical
shorthand which allows you to assign a
numeric value to a letter, and then
use the letter in several ways.
/

HOW TO DO:

1. Type the first four words in the line.

The use of variables ▲

---

2. Touch **CODE** and **INDEX.** Type 1.

3. Touch **INDEX.** Type the remainder of the line.

The use of variables[1]
                      ▲

to 150 characters. The lines are played back --

- Formats are learned into the memory. If you want to record a format on a tape, you ---
  CODE b. Any format currently in the memory is recorded when **CODE b** is used.
- When using **CODE MEMO (OUT)** in **TRANSFER,** be sure to type **CODE b** after each **CODE MEMO (OUT).**
- A character which is underlined still is considered one character.
- Seven **TABS** can be set and recorded in a format.
- Nine additional **TABS** can be set manually on the System 1222. An unlimited amount of additional **TABS** can be set on the System 1220.

Chapter 8
Documents With
Several Formats

INTRODUCTION

In Chapter 6 you learned how to enter a format into memory, and in Chapter 7 you learned how to record a format on tape. Many times several different formats are required in one document. You can record several formats within one document, and direct the System to change the formats automatically as it plays back the document. The command to change formats in playback is **CODE learn (t)**. The **learn (t)** condition is not a preset condition. The preset condition (present when you turn on the System) is **learn (u)**, and is used to deactivate **learn (t)**.

RECORDING AND PLAYING BACK MULTI-FORMATTED DOCUMENTS

TASK: RECORD A MULTI-FORMATTED DOCUMENT TO BE PLAYED BACK AS FOLLOWS

STARTING STEPS:
a. WORK TAPE IN RIGHT HOLDER
b. RIGHT
c. RECORD
d. SAME
e. REWIND

November 19, 1974

Dear Sir:

Wang Laboratories is planning to open a Regional Sales and Training office in your city. Since we must rent or purchase furnishings for the office, please send me information on the following:

Lounge area furniture and furnishings in the Danish Modern style.

Executive office furniture, including two-pedestal desks and executive style armchairs.

Thank you for your assistance on this project. I will be in your area at the end of the month to make final arrangements.

Sincerely,

Bob Jones

HOW TO DO:

1. Set a format with left margin at 15, tab at 20 and 60, right margin at 85.

2. Record the format on tape (CODE b).

3. Type the date, the salutation and first paragraph of the letter.

4. Set the second format with the left margin the same, tab at 25, right margin at 75.
   Record the format on tape (CODE b).

5. Type the two indented paragraphs, making sure to CODE TAB at the beginning, and CODE RE-TURN at the end of each paragraph.

6. Reset the original format, and record it on tape (CODE b).

7. Type the last paragraph, the closing and the signature line.

8. Type an EOD code and REWIND the tape.

> **NOTE:**
> *Each format must be followed with a* **CODE b.** *Without a* **CODE b,** *the System cannot set the new format automatically.*

TASK: PLAY BACK THE MULTI-FORMATTED DOCUMENT
STARTING STEPS:
a. MULTI-FORMATTED
   DOCUMENT TAPE IN
   RIGHT HOLDER
b. PLAY
c. RIGHT
d. JUSTIFY

HOW TO DO:
1. Touch CODE, type learn (t), which directs the System to read the formats and automatically set them in memory, when playing back the document.*

learn(t)

*Use the NO PRINT Key, if you have a System 1222. See Appendix C for complete instructions on the use of the NO PRINT key.

2. Touch AUTO START.

EDITING AND TRANSFERRING MULTI-FORMATTED DOCUMENTS

When editing a multi-formatted document, make sure you are in the **learn (t)** condition, and make sure you are working within an appropriate format for the section you are editing. Any format bypassed during a SEARCH operation in EDIT or PLAY is not learned into the machine. Although all formats are recorded on the second tape when you TRANSFER in the learn (t) condition, if you correct in TRANSFER, and bypass a format, the format is not learned into the memory. The CODE and MEMO (OUT) keys are used to bring the appropriate format into memory.

For example, if you want to EDIT the second line in the first paragraph of the previous lesson, you need only SEARCH to *"in your"*, since the format of the last paragraph and closing (still in memory) is the same as the first.

```
15   20                                        40                    85
learn(format
  e    t                                         t                    )
  b
  |    TAB                          TAB  November 19, 1974
  |
  |
Dear Sir:
  |
  |  TAB Wang Laboratories is planning to open a Regional Sales and Training office
  in your city.  Since we must rent or purchase furnishings for the office, please
  send me information on the following:
learn(format
  e    |    T                                            75
  b    |                                                  )
  |    CODE Lounge area furniture and furnishings in the Danish
  |    TAB Modern style. CODE RETURN
  |
  |    CODE Executive office furniture, including two-pedestal desks
  |    TAB and executive style armchairs. CODE RETURN
learn(format
  e 15  T 20                                     t 40                  ) 85
  b
  |    Thank you for your assistance on this project.  I will be in your area
  at the end of the month to make final arrangements.
  |
  |    TAB                          TAB  Sincerely, CODE RETURN
  |
  |
  |    TAB                          TAB  Bob Jones CODE RETURN
```

But if you want to EDIT one of the subparagraphs, you must learn the new format into memory first by searching to the last line before the new format, then touching the CODE and MEMO (OUT) keys. Without the new format you would be missing one TAB setting, and could not EDIT correctly.

As a general rule, you must use CODE MEMO (OUT) only when the section to be edited contains more TAB settings than the current format in memory.

If you use the above CODE MEMO (OUT) procedure to correct in TRANSFER, be sure to type a CODE after each time you use CODE MEMO (OUT). As you learned earlier, CODE MEMO (OUT) only sets a format into memory; it does not record it on the left tape.

TASK: EDITING A MULTI-FORMATTED
DOCUMENT AS SHOWN

STARTING STEPS:
a. MULTI-FORMATTED
   DOCUMENT TAPE IN
   RIGHT HOLDER
b. RIGHT
c. EDIT
d. SAME
e. REWIND

HOW TO DO:

```
i5  2o                                    ьO              чS
learn|format
•      T                                  Ъ
b                                         November 19, 1974
|      |
|      |                                  |
Dear Sir:                                 |
      Wang Laboratories is planning to open a Regional Sales and Training office
in your city.  Since we must rent or purchase furnishings for the office, please
send me information on the following:
learn|format                                        7S
•    |    2S                               |         )
b    |    |                                |
|    |    Lounge area furniture and furnishings in the Danish
|    |    Modern style.          teak
|    |    Executive office furniture, including two-pedestal desks
|    |    and executive style armchairs,  Λ
learn|format              Carpeting
•    |   ∤2O |                    ⎡ьO              ⎡чS
b    |    |
|    Thank you for your assistance on this project.  I will be in your area
at the end of the month to make final arrangements.
|    |    |                     Sincerely,
|    |    |
|    |    |                     Bob Jones
```

1. Touch **SEARCH**, type *send me,* touch **SEARCH**.

2. Touch **CODE MEMO (OUT)**.
   The second format is set into memory. The
   carrier moves, but the format settings are not
   printed on the paper.

3. Touch **SEARCH**, type *Lounge,* touch **SEARCH**.

4. Play back *Lounge,* skip the word *area,* then touch
   the **LINE** key to play out the remainder of the
   line.

5. Notice, since you searched to a line beginning
   with a **CODE TAB**, the carrier automatically
   CODE TABS after the line is played back.
   However, you need not correct the remainder of
   the subparagraph. To return the carrier to the
   Left Margin, depress **PLAY**, touch **CODE** and
   RETURN, and then depress the **EDIT** buttons
   again. **Do not touch CODE and RETURN in
   EDIT**, or you will record a **CODE RETURN** in
   place of the second line in the subparagraph.

lounge furniture and
Λ

. Touch **SEARCH**, type *Exec*, and touch **SEARCH**.

. Play back past *including* type *teak* and a space, and touch **LINE**.

8. Play out the next line past *style*, **SKIP** the word *armchairs*, type *carpeting*, and touch **CODE** and **RETURN** (since the **CODE RETURN** was deleted along with *armchairs*. when you touched **SKIP** and **WORD**).

HOW TO DO:

REVISING WHILE TRANSFERRING A MULTI-FORMATTED DOCUMENT

If you want to revise the previous lesson in **TRANSFER**, keep in mind the fact if you search past a format in **TRANSFER**, although the format is transferred to the second tape, it is not learned into memory. But when you use **CODE MEMO (OUT)**, the format is not transferred to the second tape. Follow the same steps as in the previous lesson, but depress **TRANSFER** rather than the **EDIT** buttons, place a clean tape in the left holder, and type **CODE b** after each time you use **CODE MEMO (OUT)**. After the last correction, touch **SEARCH, SEARCH** to transfer the remainder of the tape.

REMOVING THE EXTRA LINE CAUSED BY CHANGING FORMATS

When you played back the example used in this chapter, you may have noticed two lines were played back before and after the subparagraphs (when you changed formats), even though you recorded only one RETURN after the first paragraph and the last subparagraph. Remember after you typed in the learn format code, the System cleared all the previous tab settings, and then allowed you to enter the new tab settings. When recorded, learning the settings takes up a line on the tape, and the new settings take up another line.

If you do not like the extra line generated when changing formats, a simple procedure is available (on the System 1222, or on a System 1220 with the Automatic Vertical Halfspacing option) to remove it. After recording the last line before the format change, touch **CODE** and **INDEX** twice before touching **RETURN**. For example, after typing *following*, record **CODE INDEX** twice, then touch **RETURN**. In the last subparagraph, after *armchairs*. record **CODE INDEX** twice, then touch **CODE** and **RETURN**.

If you do not have a System 1222 or the Automatic Vertical Halfspacing Option on the System 1220, use the following procedure:

1. Record a **STOP CODE (CODE g)** at the beginning of each line following the format change and **CODE b**. (In the example, at the beginning of the first indented subparagraph, record **CODE g, CODE TAB,** *Lounge area*, etc. At the beginning of the last paragraph, record **CODE g, TAB,** *Thank you,* etc.).

2. During playback, after each format is set, the System stops. Manually roll back the platen one line. Touch **AUTO/START** to continue playback.

3. If you want to play back in **JUSTIFY**, you must record the **STOP CODE** and a **RETURN** on a separate line after each **CODE b**. During playback, roll back the platen two lines after each stop.

CHAPTER REVIEW CHECK LIST

- The **CODE ℓ t** condition directs the System to read and set recorded formats automatically per document. If you do not **CODE ℓ t** when playing out a multi-formatted document, you must **CODE MEMO (OUT)** for each format.
- The **CODE ℓ u** condition is the preset condition of the System. Whenever a **CODE ℓ t** is used, **CODE ℓ u** is used to deactivate **CODE ℓ t**.
- When playing back a single formatted document in the **CODE ℓ u** condition, the **CODE** and **MEMO (OUT)** keys are used to direct the System to read and set the format.
- If you correct errors in **TRANSFER,** and **SEARCH** past a recorded format, the format is recorded on the second tape, but is not learned into memory.
- If you correct errors in **TRANSFER,** and use **CODE MEMO (OUT),** you must type **CODE b.** Any format set into memory with **CODE MEMO (OUT)** does not transfer to the second tape.

Chapter 9
Playback Aids

INTRODUCTION

The System 1200 features a variety of codes and commands which make playback completely automatic. The most commonly used playback aids are explained in this chapter, and can be found on the page indicated in the following list.

PLAYBACK AID	RECORDED OR TYPED AS	USE	PAGE
SINGLE OR DOUBLED SPACING	CODE] = s CODE] = d	To make the System automatically single or double the space.	86
PAGE SIZE CODE LINES PER PAGE CODE	CODE ℓ # xx CODE ℓ ℓ xx	To tell the System the size paper (letter, legal, evelopes) you are using, and how many lines to play back on each page.	89
END PAGE COMMANDS (PLAY, STOP, EJECT, *STOP, *EJECT)	CODE ℓ e p CODE ℓ e s CODE ℓ e e CODE ℓ e * s CODE ℓ e * e	To tell the System what to do after the proper amount of lines are played back on a page.	89
NEW PAGE CODE	CODE] = p	To indicate a new page to the System.	94
REWIND (STOP) REWIND (GO)	CODE w CODE 9	To rewind the tape and either stop or continue playback.	94
STOP CODE	CODE g	To stop playback for insertion of variable information	97
SWITCH READ CODE	CODE 4	To make the System switch playback to the opposite tape holder.	101

SINGLE OR DOUBLE SPACING

On a typewriter, single and double spacing are controlled by a mechanical lever. Every time you want to change between single and double spacing, you must move the lever to the proper position.

On the System 1220, single and double spacing are controlled by touching the **CODE** key, the bracket (left-hand numeric) key, and the **s** (for single) or **d** (for double) key. Although the **SPACING** lever on the System typewriter does function in the normal manner, you need not ever use it; leave it positioned at Single Space.
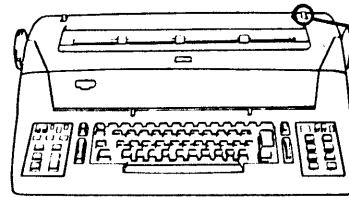
SINGLE SPACE
OR
DOUBLE/SPACE
AND A HALF
SPACING LEVER

The System is preset at **CODE]** = s; when you turn on the System, playback automatically is single spaced. To record and play back double spaced material, you need only touch the **CODE,]** and **d** keys. To return to single spacing, you touch the **CODE,]** and **s** keys.

Both the single and double spacing commands are entered automatically into memory, and recorded on tape. Therefore, it is possible to record a document with sections played back automatically in both single and double spacing.

On the System 1222, you have a choice of single, space and a half, double, and triple spacing. With the typewriter lever set at single space (the front position), the System single spaces when the **CODE]** = s condition is in memory, and double spaces when the **CODE]** = d condition is in memory. With the typewriter lever set at space and a half (the rear position), the system operates in space and a half when **CODE]** = s is in memory, and triple spaces when **CODE]** = d is in memory.

TASK: RECORD A DOCUMENT CONTAINING BOTH SINGLE AND DOUBLE SPACED SECTIONS
STARTING STEPS:
a. WORK TAPE IN
   RIGHT HOLDER
b. RIGHT
c. RECORD
d. SAME
e. REWIND

```
The Wang Dual Cassette Typewriter is the only·typewriter
that is truly automatic.  Its unique memory has several
very useful features including:
]=d

The ability to switch automatically from single to double

spacing within the body of a document, without any operator

intervention and without changing the spacing lever on

top of the typewriter.

]=s
/
```

HOW TO DO:
1. Type the first paragraph.

> **NOTE:**
> '.he the System is turned on, it is preset to
> ype _ingle spaced._

preset = single

The .next paragraph is to be double spaced with-
 out recording the double carrier returns. Touch
the **ODE**,] (the left-hand numeric key, no
ma...er if a], a 1, an ! or any other characters
prints) and **d** keys.

] = d

> **NOTE:**
> _Th~ System automatically line feeds twice_
> _to how it now line feeds twice each time the_
> **RETURN** _key is used._

. Type the next paragraph. When you finish
r~ ording a double spaced section, be sure to
c ncel the double space condition.

4. Record a single space code.

5. F. ecord an **EOD** code.

CODE] s
] = s

TASK: PLAY BACK THE DOCUMENT

SI .RTING STEPS:
a. **REWIND**
b. **PLAY**
c. **ADJUST**

HOW TO DO:
1 Touch **AUTO/START.**

**T .SK: REMOVE THE TRIPLE CARRIER RETURN BETWEEN SI. GLE
. ND DOUBLE SPACED PARAGRAPHS**

STARTING STEPS:
  WORK TAPE IN
    RIGHT HOLDER
b. **RIGHT**
    RECORD
_. **SAME**
e. **REWIND**

```
The chairman stated that the meeting had been
called for the purpose of considering and
voting upon the following question:    CODE BACK LINE    RESET
  CODE ] d

Resolved, that the shareholders of ABC Corp-

oration do hereby authorize, approve and

direct voluntary liquidating.    CODE BACK LINE    RESET

  CODE ] s
  RETURN
The chairman stated that the voluntary liquidating
and dissolution of the corporation had been duly author-
ized by shareholders and that it was . . .

  CODE /
```

HOW TO DO:

You notice in the last lesson the carrier triple spaced between paragraphs when changing the spacing. If you do not want triple spacing, but prefer double spacing between paragraphs, a simple procedure is available.

1. Type the first two lines of the first paragraph. Type the third line, and after the colon, touch **CODE** and **BACK LINE**. Then touch **RESET**. The carrier returns to the left margin, and the memory is cleared. However, a **RETURN** is not recorded on the tape, because **RESET** was preceded by a **BLOCK LINK (CODE BACK LINE)**.

2. Type **CODE] d**, which is recorded on the **BLOCK LINK** line. The carrier returns. This return is a double **RETURN**, since it was preceded by the **CODE] d**. You now have a double space between the first paragraph and the typing line.

3. Type the second paragraph as shown, including the **BLOCK LINK, RESET,** and **CODE]=s**. Remember, though, the double **RETURN** after the **RESET** was not recorded on the tape. After recording the **CODE] s**, you must RE-TURN again to double space between the second and third paragraphs.

4. Record the third paragraph and an **EOD** code.

CHAPTER 9
PLAYBACK AIDS

TASK: PLAY BACK THE DOCUMENT

STARTING STEPS:
a. **REWIND**
b. **PLAY**
c. **ADJUST**

HOW TO DO:
1. Touch **AUTO/START**.
2. Notice the double, rather than triple spacing, between paragraphs.

PAGE DESIGN

x commands and one code allow you limitless variety in designing how your document is to be automatically played back on a page.

PAGE SIZE AND ENDPAGE COMMANDS

The page size command (CODE ℓ #) tells the System the size page being used. The System considers one inch equal to six lines of type. It is preset to assume automatically the page size is eleven inches (the length of letter paper), or 66 lines. You can change the page size to any size between two and 99 lines. For example, when using legal paper (8½ X 13 inches), you must enter **CODE** learn (#/page = 78). For one inch labels, the page length command is Code (# / page = 06). Notice, when using numbers smaller than 10, you must precede the number with a zero (6 = 06). Also, you must use the upper left-hand numeric key for the on   not the lowercase ℓ).

The lines-per-page command (CODE ℓ ℓ) tells the System how many lines to play back on each page. The System is preset to playback 50 lines on a 66 line page. You can change the lines played back per page to any number between two and 99, as long as the lines-per-page command is not larger than the page size command.

Five endpage commands tell the System what to do when it reaches the last line to be played back on a page: stop, eject, continue playback, stop and switch to the opposite tape, or eject and switch to the opposite tape.

The endpage play command (**CODE** ℓ e p) is the preset condition for the System. It automatically continues playback unless instructed to do otherwise.

The endpage stop command (**CODE** ℓ e s) tells the System to stop after it plays back the number of lines in the lines-per-page command. The endpage stop command is used when playing back on single sheets of paper and on envelopes.

The endpage eject command (**CODE** ℓ e e) tells the System to eject after it plays back the number of lines in the lines-per-page command. The difference between the page size and the lines-per-page commands is the number of lines it ejects. For example, if you begin playback six lines from the top of 66 line paper, and then play back 50 lines, the System ejects 16 lines (10 lines to the bottom of the page and six lines from the top of the new page). Naturally, you use the endpage eject command with continuous form paper or continuous labels.

The endpage * eject command (**CODE** ℓ e * e) tells the system to eject after it plays back the number of lines in the lines-per-page command, and then to switch automatically to the opposite tape holder and continue playback from the other tape. Uses of endpage * eject are explained on page 96   of this chapter, and in Chapter 15, Automatic Page Numbering and Titling.

The endpage * stop command (**CODE** ℓ e * s) tells the System to stop after it plays back the number of lines in the lines-per-page command and then to switch control to the opposite tape holder. Endpage * stop is further described in Chapter 15.

CHAPTER 9
PLAYBACK AIDS

All the endpage commands, the page size and the lines-per-page commands cannot be recorded on they are entered into memory when beginning playback. After changing the preset conditions, rememb return the System to normal operation (page size = 66, lines-per-page = 50, endpage = play).

TASK: PLAY BACK PRERECORDED TAPE ON CONTINUOUS FORM LETTER
        PAPER EJECTING AT THE BOTTOM OF THE PAGE
STARTING STEPS:
a. PRERECORDED TAPE
   (CORRECTED VERSION)
   IN RIGHT HOLDER
b. RIGHT
c. ADJUST
d. PLAY
e. REWIND

CONTINUOUS FORM
PAPER

50 lines/page
ejects

50 lines/page
ejects

50 lines/page
ejects
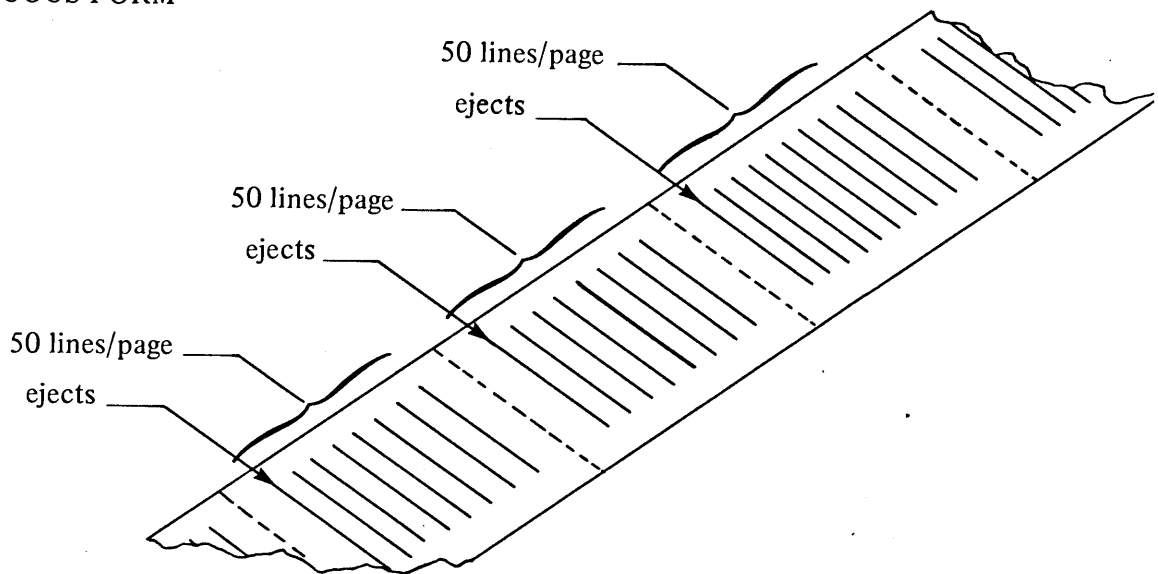
HOW TO DO:
1. Tell the System to eject after each page is typed
   by touching the **CODE** key and typing the ℓ, **e**
   and **e** keys (lowercase).

> **NOTE:**
> *Since the System is preset to type 50 lines-per-page on 11 inch (letter) paper when turned on, you do not enter page size and lines-per-page commands. When using the endpage eject command, the System counts and plays back 50 lines, then ejects to a new page, types 50 lines on that page, and so on.*

...uch **RESET**.

> **NOTE:**
>
> ...e **RESET** key sets the internal line counter
> ...z( ). The line counter counts one line
> ...ry .ime the carrier returns to the left mar-
> ... When a document is being played out
> ...er it is important to count lines (as with
> ...dp.ge commands), the **RESET** key must
> ...used to set the line count to zero just before
> ...gi ning playback of the first page. Depress-
> ...g ...EWIND also **RESETS** the line counter.
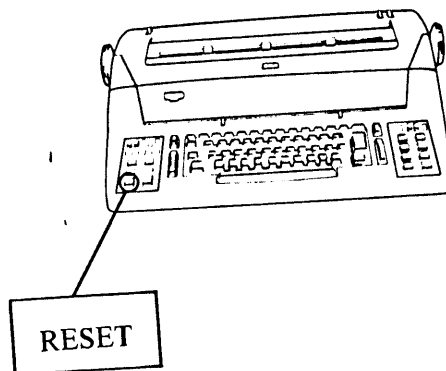
...Rc. the platen to eight lines below the top of a
clean page of continuous paper.
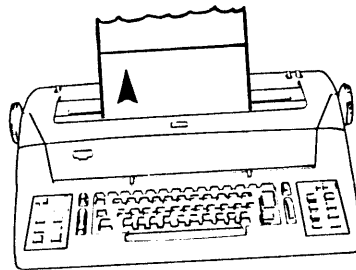
.. T .uch **AUTO/START**
S.op playback after a few pages are typed, by
touching the **CHAR/STOP** key.

> **NOTE:**
>
> (..ce the endpage eject condition is learned
> into the System, it is remembered until the
> S.stem is turned off, or you change it.

50th ◄── EJECTED

50th ◄── EJECTED
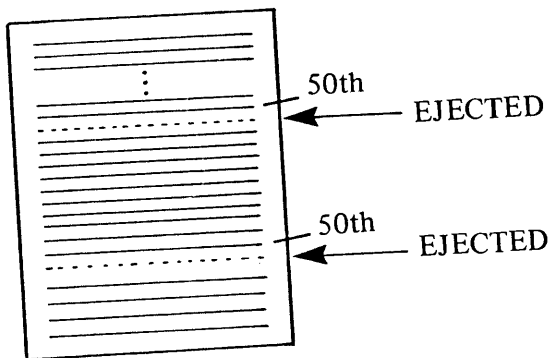
T .SK: PLAY BACK PRERECORDED TAPE ON SINGLE SHEETS OF LEGAL PAPER,
STOPPING AFTER EACH SHEET IS TYPED

S.ARTING STEPS:

a. PRERECORDED TAPE
   (CORRECTED VERSION)
   IN RIGHT HOLDER
b. RIGHT
c. ADJUST
d. PLAY
e. REWIND

CHAPTER 9
PLAYBACK AIDS
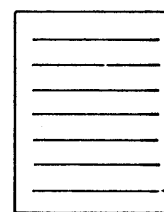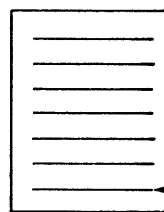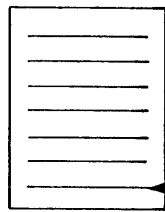
HOW TO DO:

1. You first must tell the System it is to play back on legal paper (8½ × 13 inches). Touch the **CODE**, ℓ and # keys, and type 78 (13 × 6 = 78).

> **NOTE:**
> *Most people use the lowercase ℓ to type the number one. However, when you enter a page size and a lines-per-page command, and the number contains a one, you must use the key labeled* **PAGE** *on the keyboard. Depending upon the keyboard used, it is either the one key, the bracket key, or some other special character.*

WHAT SIZE PAPER?

CODE 1 #
learn(#/page=78)

2. To keep the top and bottom margins the same as on letter paper, you must add 12 lines to the lines-per-page command (two additional inches of paper equals 12 lines). Touch the **CODE**, ℓ, and ℓ keys, and type 62 (50 + 12 = 62).

HOW MANY LINES?

CODE 1 1
learn(lines/page=62)

3. Direct the System to **STOP** after it types each page by touching the **CODE**, ℓ, e, and the s keys (lowercase).

> **NOTE:**
> *Once the endpage=STOP condition is learned into the System, the System remembers this condition, until you turn the System* **OFF**, *or until you change it.*

learn(endpage=stop)

1 e s

4. Touch **RESET** to set the line counter to zero.

5. Roll the platen to eight lines below the top of a clean page of legal paper.

...uch **AUTO/START**.

...nen, ...layback stops, insert a new piece of paper.
...ouch **AUTO/START**. Do not touch **RESET**.

...epeat step 7 *two* times.
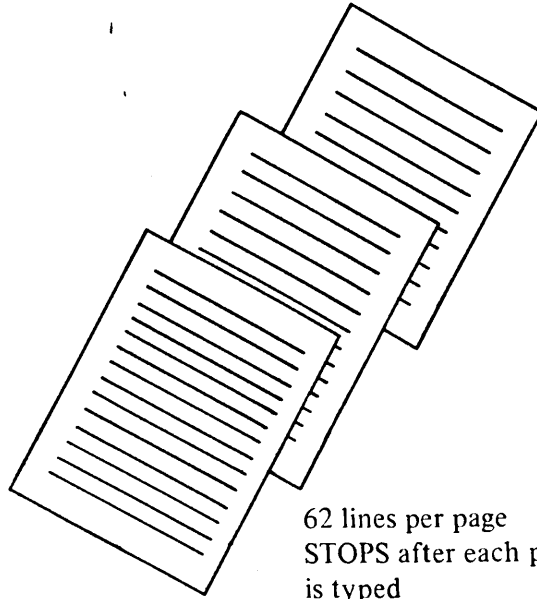
62 lines per page
STOPS after each page
is typed

...SK. RETURN ENDPAGE TO PRESET CONDITION

...AR'ING STEPS:
...'RI RECORDED TAPE
(CORRECTED VERSION)
...N RIGHT HOLDER
...RI HT
...AL.UST
...PLAY
...RI 'IND

CONTINUOUS FORM PAPER

ENDPAGE = PLAY
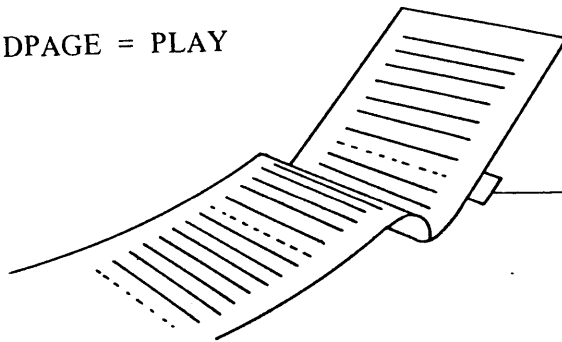
Continues playing
Ignoring Line
Count

...OW TO DO:
When the System is turned on, it is in the end-
...ge play condition. Playback continues line after
...er. disregarding any line count. To return to the
...dpage=play condition:
...ush the **CODE**, ℓ, e, and p (lowercase) keys.

```
learn(endpage=play)

Code  l  e  p
```

DOCUMENT & PROGRAMMED
ASSEMBLY, MASKED SEARCH

TAPE CASSETTE
HANDLING PROCEDURES

TYPING NUMBERS

MAILING LISTS AND DIRECTO...

2. Touch **AUTO/START.**

Stop playback after a few pages. The System
now is back to its normal, or preset, condition of
endpage=play.

> **NOTE:**
> *Endpage conditions cannot be recorded on
> tape. They must be entered into memory when
> you are ready to play back a document.*

plays
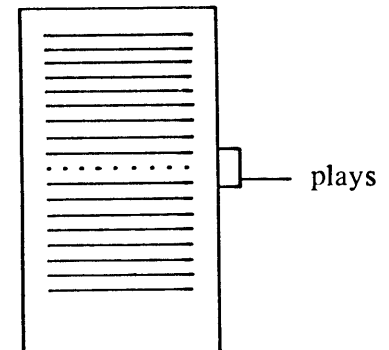
NEW PAGE CODE

In the previous two lessons, the amount of lines
played back on each page was always the same
(either 50 or 62). At times, however, you may want
to play back a page with less lines than the lines-
per-page count. For example, consider you are
recording a manuscript. You want the standard 50
lines played back on 66-line paper. But, at the end
of each chapter, you want the System to begin the
next chapter on a new page, even if only 30 lines
were typed on the last page of the chapter.

The new page code (**CODE] = p**), used with
endpage = eject , is recorded on the tape wherever
you want to begin a new page (at the end of each
chapter, in the example). When the System reads
the new page code, it automatically turns the line
counter back to zero, and ejects to the top of the
next page and continues playback.

CONTINUOUS FORM PAPER

CODE
(]=p)

50 lines
typed

50 lines

30 lines
typed

ejects and starts new
chapter on new page

50
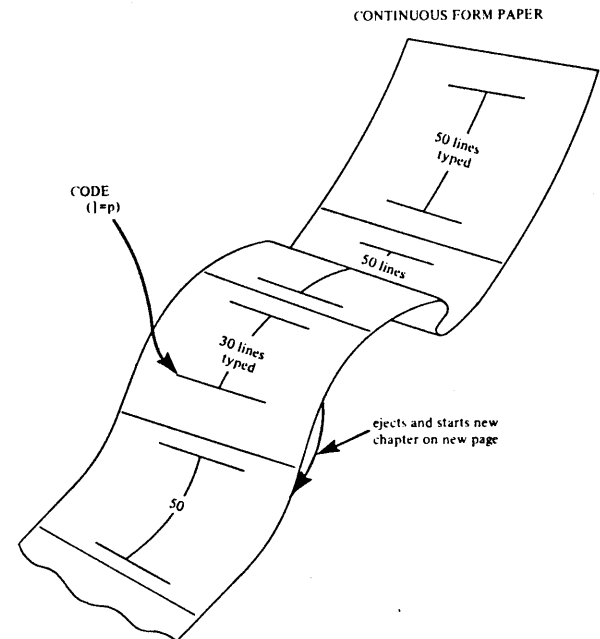
REWIND CODES

Often, you may have a document you type over and over again, for example, a form letter. You ca
make the System playback a document as often as you wish, by using either the **REWIND-GO** command
(**CODE 9**), or the **REWIND-STOP** command (**CODE w**). **CODE 9** is used with continuous forms, whil
CODE w is used with single sheets of paper.

TASK: RECORD A DOCUMENT FOR PLAYBACK MORE THAN ONCE ON CONTINUOUS
        FORM PAPER
STARTING STEPS:
a. **WORK TAPE IN**
   RIGHT HOLDER
b. **RIGHT**
c. **RECORD**
d. **SAME**
e. **REWIND**

]=d

Dear Customer:

As you have requested, I am writing to keep you abreast

of what new products are being released. As of July 15, 1974,

we are introducing a new product in our calculator

line.

Further information will follow on August 1, 1974.

Sincerely,

]=s

John McLellin
Vice President
New Products

]=p
9
/

OW᠆ O DO:
Record the letter as shown, making sure to type
th᠆ **CODE**] **d** at the beginning of the tape.

A᠆ er the closing, touch the **CODE,**] and **p** keys,   ]=p
w᠆ ich causes the paper to eject when played   NEW PAGE CODE
back.

. Touch **CODE,** type 9. When read, this code   CODE 9
᠆ uses the tape to rewind, and playback to   REWIND-GO
᠆ontinue. Record an **EOD** code.

T᠆᠆K: PLAY BACK THE DOCUMENT ON CONTINUOUS FORM PAPER
STARTING STEPS:
a. ᠆EWIND
b. ᠆LAY

HOW TO DO:
1 ᠆nsert continuous form paper in the platen, and
᠆osition the typing line eight lines from the top
of the page.

2. Touch **CODE**, type ℓ e e, to place the System in endpage=eject condition.* Touch **RESET** to return the line counter to zero.
3. Touch **AUTO/START**. Notice, the tape rewinds at the end of each letter, and playback continues.
4. After playing back two or three letters, stop playback by touching **CHAR/STOP**.
5. Return the System to the endpage=play condition by typing ℓ e p.

TASK: RECORD AND PLAY BACK THE DOCUMENT MORE THAN ONCE ON SINGLE-SHEET PAPER

HOW TO DO:

1. Follow the steps in the previous example, except record **CODE w** in place of CODE 9 and CODE ℓ e s, to place the system in endpage=stop condition. Use single-sheet paper, rather than continuous form paper.

CODE w
REWIND–STOP

---

2. When playing back, notice the tape rewinds, and playback stops after each letter. Insert clean paper, and touch **AUTO/START**.

> **NOTE:**
> **CODE 9** *and* **CODE w** *rewind to the beginning of the tape, which may not be the beginning of the document.*

DELETING REWIND CODES

When you need to delete a REWIND code, use the following guidelines.

A. In **TRANSFER**

    1. **SEARCH** to the line before the **CODE**
    2. Play back line
    3. **SKIP** line

B. In **EDIT**

    1. **SEARCH** to line before the **CODE**
    2. Play back line
    3. **CODE BACK LINE**
        (Not recommended if playback in ADJUST or JUSTIFY)

---

*Use the **NO PRINT** key if you have a System 1222. See Appendix C for complete instructions.

OP ODES

Ma., form letters, proposals, contracts, trusts and wills are standard documents, and contain only small ounts of variable information. When using a typewriter, you must retype the document each time you nt change the variable information. With the System 1200, you record the document once, placing a OP CODE (CODE g) wherever variable information must be entered. The System automatically plays k the document in **SAME** or **ADJUST**, stopping whenever it encounters a **STOP CODE**. You then can e i the variable information, and then touch **AUTO/START** and continue automatic playback.

SK: PREPARE A FORM LETTER

AR ING STEPS:

WC RK TAPE IN
RIGHT HOLDER
RI HT
RI ORD
SAME
RFWIND
LI T MARGIN 25,
RIGHT MARGIN 80

```
              CODE R
Dear g:
R
As you have requested, I am writing to keep you abreast R
                                        CODE
of what new products are being released. As of g_____R
                                        CODE
we are introducing a new product in our g_____R
line.R
R                                   CODE
Further information will follow on g_____.R
R
Sincerely, R

R

R
John McLellin CODE RETURN
Vice President CODE RETURN
New Products R


]=p
9
/
```

IOW TO DO:

1. **RECORD** the format.
   CODE b

```
learn(format
25                              81
@                               )
b
```

2. Type *Dear* plus a space.

Dear ▲

3. Touch CODE and type g.

Dear g

> **NOTE:**
> 4 **CODE g** *is recorded on the tape as a single character.*

4. Type in the colon (:) that would follow the salutation and two **RETURNS**.

Dear g:

---

5. Finish typing the letter, remembering to put in a space before the **STOP CODE** and a space, a carrier return, or a punctuation mark after the **STOP CODE**.

......As of^{SPACE}g
.............new products in our^{SPACE}g
line.
Further........on^{SPACE}g.

---

6. A **CODE] p** (new page code) is used here to tell the System to eject or stop at the end of the letter.

CODE] p
New page

---

7. Touch **CODE**, type 9.
This code directs the System to rewind the tape and begin playing back the letter again.

CODE 9
REWIND & REPLAY

> **NOTE:**
> *If you are playing back the letter on single sheets of paper, use a* **CODE w**, *which directs the System to rewind the tape and stop. With* **CODE w**, *you do not need* **CODE] p**.

CODE w
REWIND & STOP

---

8. Touch **CODE**, type / (EOD).

---

9. REWIND the tape.

TASK: PLAY BACK THE FORM LETTER ON CONTINUOUS PAPER, INSERTING THE VARIABLE INFORMATION WHENEVER THE SYSTEM STOPS

STARTING STEPS:
a. RIGHT
b. PLAY
c. ADJUST
c. REWIND

Dear Mr. Jones:

As you have requested, I am writing to keep you abreast

of what new products are being released. As of July 31, 1974,

we are introducing a new product in our calculator

line.

Further information will follow on August 31, 1974.

Sincerely,

John McLellin

Vice President

New Products

OV TO DO:

. Direct the System to eject after each page is
typed (CODE ℓ e e when using continuous form
p per).
Ir using single sheets of paper, use CODE ℓ e s to
stop so that you can insert a clean sheet.

learn(endpage=eject)

---

2. ` ouble space letter (CODE] d).

]=d

---

3. Roll the platen until the typing line is 15 lines
from the top of a clean page.

∠ Touch **RESET**, touch **AUTO/START**.

---

5. After *Dear*, playback stops. Type *Mr. Jones*
Touch **AUTO/START**.

Dear ▲Mr. Jones▲

CHAPTER 9
PLAYBACK AIDS

6. After *As of,* playback again stops. Type *July 31, 1974*
   Touch **AUTO/START**.

.........As of ▲July 31, 1974▲

7. After *in our,* the System stops. You type *calculator*
   Touch **AUTO/START**.

......in our ▲calculator▲

8. When playback stops after *will follow on,* type *August 31, 1974*
   Touch **AUTO/START**.

......will follow on ▲August 31, 1974▲

9. After completing the letter, the System ejects, rewinds and begins the letter again. Continue typing in variable information in each **STOP CODE**.

10. After playing back a few letters, **STOP** playback, and reset the endpage condition to endpage=play (CODE ℓ e p).

PRACTICE PROBLEM:
   Practice recording the following document with variable information, using **STOP CODES** where th variable information goes. Put a **REWIND STOP** code at the end of the letter, so that you can put in a clea sheet of paper to type out a new letter.

   You and _____ are cordially invited to attend our weekly reception for new clients on _____.

   At that time refreshments will be served. The reception usually starts at _____ and ends at _____.

   Looking forward to talking with you and _____.

EDITING STOP CODES
To delete a **STOP CODE** in EDIT or TRANSFER:

1. a. Play back to before **STOP CODE**.
   b. **SKIP CHAR**.
2. a. Play back until **STOP CODE** activates and stops playback.
   b. Backspace.
   c. **CODE x**

Γ'ay back until **STOP CODE** activates
; .d stops playback.
Backspace.
Type over with new information.

TCH READ CODES
n ke repetitive letter writing more automatic, you can use both tape holders, and record the standard
r c one tape and the variable information on a second tape. In order to tell the system to switch from
tape to the other, you must record a **SWITCH READ CODE (CODE 4)** at each appropriate location.

August 31, 1974

Mr. Clayton Wolf
252 Newton Drive
Wayland, Ohio

Dear Mr. Wolf:

As you have requested, I am writing to keep you informed on
what new products are being released. As of September 1, 1974,
we are introducing a new product in the *Wayland* area.

Further information will follow on December 7, 1974.

Sincerely,

John McLellin
Vice President
New Products

To prepare the standard and variable tapes, you must decide what information is standard, what is
v iable, and where the **SWITCH READ** codes are to be recorded. Consider the above letter. The standard
i formation is illustrated with regular type, and the variable information is illustrated in italic type.
You must place a **SWITCH READ CODE** wherever you want playback to change from one tape to the
(her. Study the following diagram.

PLAYBACK AIDS

ADJUST. VARIABLE ADJUST
AND JUSTIFY

RECORDING AIDS

CORRECTING AFTER
DOCUMENTS WITH
SEVERAL FORMATS

STANDARD TAPE	VARIABLE TAPE

August 31, 1974

Mr. Clayton Wolf
252 Newton Drive
Wayland, Ohio

4

Dear Mr. Wolf:4
  Wayland4

        As you have requested, I am writing to keep you informed on
what new products are being released. As of September 1, 1974,
we are introducing a new product in the4   area.

Mrs. Mary Freeman
27 Euclid Circle
East Lansing, Michigan

        Further information will follow on December 7, 1974.

Dear Mrs. Freeman:4
  East Lansing4

Sincerely,

John McLellin
Vice President
New Products

When deciding where to record **SWITCH READ CODES**, keep in mind the following rules:

1. When recording a **SWITCH READ CODE** in the middle of a line, the spacing before the informatio
   is recorded after the **SWITCH READ CODE**, on the other tape along with the information. Th
   spacing after the information also is recorded on the opposite tape.

STANDARD TAPE   VARIABLE TAPE

........in the4[space]area   [space]Wayland4

2. When recording a **SWITCH CODE** at the end of a line, record the **RETURN** on the opposite tap

STANDARD TAPE   VARIABLE TAPE

Dear Mr. Wolf:4

RETURN
RETURN

> **REMEMBER:**
> DO NOT SPACE OR RETURN DIRECTLY BEFORE A SWITCH READ CODE. THE FIRST THING THE SYSTEM SHOULD READ AFTER A SWITCH READ CODE IS A SPACE OR A RETURN.

For automatic letter writing, the standard tape must end with a CODE] = p (to tell the System to eject or stop for a new page) and a CODE 9 or CODE w (to tell the System to REWIND the tape). You may record up to approximately 300 sets of names, addresses and variable information on the variable tape. Each time the standard tape rewinds, the letter is played back again, using the next set of information on the variable tape.

TASK: RECORD A STANDARD TAPE WITH THE BODY OF LETTER AS SHOWN BELOW

STARTING STEPS:
a. WORK TAPE IN RIGHT HOLDER
b. RIGHT RECORD
d. SAME
e. LEFT MARGIN AT 25
f. TABS AT 30 AND 60
g. RIGHT MARGIN AT 80

```
learn(format                        60                    81
25   30                             T                      )
@    T
b
TAB
R
R
4
R
  TAB  As you have requested, I am writing to keep you informed on R
what new products are being released.  As of September 1, 1974, R
we are introducing a new product in the 4
  area. R
R
  TAB Further information will follow on December 7, 1974. R
R
Sincerely, R
R
John McLellin  CODE RETURN
Vice President CODE RETURN
New Products R


]=p
9
/
```

TAB August 31, 1974 R

CHAPTER 9
PLAYBACK AIDS

HOW TO DO:

1. Set the format as shown.
   Record the format.

```
25   30   60              81
learn(format
@    T    T               )
CODE b
```

2. Touch **TAB**, touch **TAB**, type the date.

August 31, 1974

3. Carrier **RETURN** twice. The spacing between the date and address/salutation is recorded on this tape.

August 31, 1974

↑

4. Touch **CODE**, type 4 (SWITCH READ CODE), which directs the System to switch to other tape play back the address and salutation.

August 31, 1974

4
↑

> **NOTE:**
> *When you entered the* **SWITCH READ CODE,** *the carrier automatically returned, because* **CODE 4** *automatically ends a line on the tape. The* **RETURN** *caused by the* **CODE 4** *does not occur during playback.*

CODE 4
=
SWITCH READ

After the address and salutation are played from the other tape, the System will switch back to this tape. Now you need to enter **RETURNS** for proper spacing between the salutation and body of the letter.

5. Carrier **RETURN** twice.

6. Record the first two lines of the letter.

TA? As..........................on *R*
what....................1974 *R*

CODE learn(naj)
Mr. Clayton Wolf
252 Newton Drive
Wayland, Ohio
R
Dear Mr. Wolf:4 *CODE*
Wayland4 *CODE*
Mrs. Mary Freeman
27 Euclid Circle
East Lansing, Michigan
R
Dear Mrs. Freeman:4 *CODE*
East Lansing4 *CODE*
Miss Leona Slovak
2945 Rosemont
Detroit, Michigan
R
Dear Miss Slovak:4 *CODE*
Detroit4 *CODE*

CODE /

HOW TO DO:
1. To assure the short lines of the inside address and salutation do not run together when played back in **ADJUST** or **JUSTIFY**, put the System in **NO ADJUST CONDITION**.
   Touch **CODE**, type ℓ n.

> **NOTE:**
> *If you are using one or several long variables and are playing back in **JUSTIFY** do not record the variable tape in **NO ADJUST**. Rather, use **CODE RETURNS** after each line of the inside address. Since all spaces are coded in **NO ADJUST**, a long variable may not play back correctly in **JUSTIFY**.*

learn(naj)

2. Type the first address and salutation as shown.
   Do not **RETURN** after *Dear Mr. Wolf:*

Mr. Clayton Wolf
252 Newton Drive
Wayland, Ohio

Dear Mr. Wolf:

pe he third line of the letter, but **STOP** after
pir _ *the*. Do not put in a space after *the*.
nce the next word is variable, it will be re-
ed n the other tape, and the space before the
ble nformation will be supplied on that tape.

we are introducing a new product in the

ucn **CODE**, type 4.
he carrier returns to indicate the line is ended,
r u d up, on the tape.

we are introducing a new product in the4

we are introducing......in the4
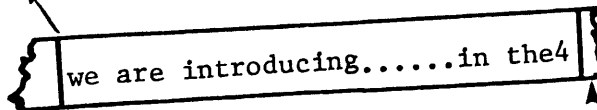
Ty (*Space) area.*
Th space before area is supplied on this tape.

area.

Finish typing the rest of the letter.

Further.............1974

R cord a **CODE] p** to tell the System to eject
t or stop for a new page.

....

2. I cord a **REWIND-GO (CODE 9)** if using con-
tinuous paper, or record a **REWIND-STOP**
(CODE w) if using single-sheet paper.

3. Record **CODE EOD**.

New Products

....Products |]=p | Code 9 | Code /
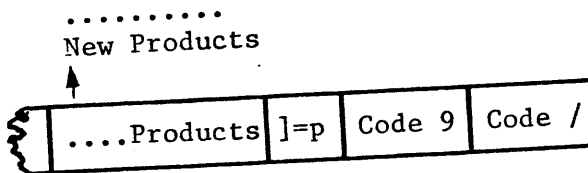
TA K: RECORD THE ADDRESS AND VARIABLE INFORMATION TAPE

STARTING STEPS:
a. ORK TAPE IN   d. REWIND
   LEFT HOLDER   e. SAME
b. LEFT   f. NO ADJUST
c. ECORD

ler the salutation, the System must be directed
switch back to the letter tape.
uch CODE, type 4.

<div style="text-align:right">Dear Mr. Wolf:4</div>

nce the line feeds between the salutation and
e ody of the letter are supplied on the other
pe the variable information is recorded next.
ype *(space)*, type *Wayland*, touch CODE and
ype 4.

e space in the final copy between *the* and
Wayland is recorded on the tape before *Wayland*
fter *Wayland*, the CODE 4 directs the System
to switch back to the letter tape, and finish
typing the letter.

<div style="text-align:center">Wayland4</div>

This completes the variable information for
on letter. Since the letter is being sent to several
different people, several other addresses and
variable information must be recorded on the
ta :.

. R cord the rest of the addresses and variable
ii ormation as shown on the previous page.

6. REWIND the tape.

TASK: PLAY BACK BOTH TAPES, MERGING THE INFORMATION

ST RTING STEPS:
a. LETTER TAPE IN
   RIGHT HOLDER
b. VARIABLE TAPE IN
   LEFT HOLDER
c. REWIND TAPES
d. RIGHT
e. PLAY
f. ADJUST
   CONTINUOUS FORM
   PAPER

<div style="text-align:right">August 31, 1974</div>

Mr. Clayton Wolf
252 Newton Drive
Wayland, Ohio

Dear Mr. Wolf:

As you have requested, I am writing to keep you informed on what new products are being released. As of September 1, 1974, we are introducing a new product in the Wayland area.

Further information will follow on December 7, 1974.

Sincerely,

John McLellin
Vice President
New Products

PLAYBACK AIDS

ADJUST, VARIABLE ADJUST
AND JIFY

RECORDING JOBS

WITH
WHEN
SEVERAL FORMATS

CHAPTER 9
PLAYBACK AIDS

HOW TO DO:

After both tapes are recorded, it does not matter which tape you put in which tape holder. However, for the tapes to play back in proper order, you must depress the tape control button (RIGHT or LEFT) of the tape holder containing the tape to be read first. In this example, the letter tape is read first, and since it is in the RIGHT holder, depress the RIGHT button.

1. Set endpage command to eject for continuous form paper, or set endpage command to STOP for single-sheet paper.

```
CODE l e e
learn(endpage=eject)

CODE l e s
learn(endpage=stop)
```

2. Touch CODE MEMO/OUT to find and set the format. Do not use learn (t), or the System will play back the format each time the tape rewinds.

3. Touch RESET.

4. Touch AUTO START.
   Play back a few letters and then stop playback.

5. Reset the normal endpage=play condition (CODE ℓ e p).

PRACTICE PROBLEM:

Record the following form letter on one tape, and record the variable information on another tape. Record SWITCH READ CODES where appropriate.

STANDARD TAPE	VARIABLE TAPE
Dear4:	
	[space] Mr. Smith4
How are you and4	[space] Mrs. Smith4
enjoying your home in4	[space] Arlington4
	[space] Mr. Leonard4
As builders of this home, we are	[space] Mrs. Leonard4
very interested in your being satis-	[space] South Weymouth4
fied.	
9	
/	

LY . WORD IN PLAYBACK

. may like to play back a library copy of a letter or other document with a notation supplied wherever
TCH READ occurs, such as **BLANK, NAME** or **VARIABLE**. Or, you may simply wish the playback
lo| .ve a **RETURN** after each **SWITCH READ**, so the **SWITCH READ** falls at the end of a line, and, in
. tne playback looks exactly the way the tape was recorded originally.

supply a word at each switch, simple record the second tape as follows:

> [SPACE] BLANK (or VARIABLE, or NAME) [CODE 4]
>
> [CODE 9]

lac this tape in one tape holder, the letter tape in the other, and play back the two tapes, starting
n t..e letter or document tape. Whenever a **SWITCH** code is encountered on the letter tape, it switches
.he variable tape, and plays back the word (**BLANK, VARIABLE** or **NAME**). The **CODE 9** saves record-
.th word more than once. You should play back in **ADJUST**.
To ..ause a **RETURN** after every **SWITCH** code so you can play the document back in the **SAME** con-
ion, record the blank tape as follows:

> RETURN
> [CODE 4]
> [CODE 9]

LA BACK WITH NO FILLS-INS

You may occasionally want to play back a document containing switch codes without the variable tape.
o (this you must place a blank tape in the left tape holder, the standard tape in the right tape holder, and
lep..ss the **TRANSFER** button. Touch **AUTO/START**, and the System plays back the material on the
standard tape, ignoring the **SWITCH** codes because **TRANSFER** transfers all material (including SWITCH
coc s) without activating the **SWITCH** codes.
(1e situation should be taken into consideration when performing this procedure: if you play back in the
SAME condition, some of the lines may run together - particularly if you recorded **RETURNS** on the
va| .ble tape that are not used in playback. To avoid running lines together, play back (in **TRANSFER**) in
th **ADJUST** condition.

E: [RACTING NAMES AND ADDRESSES FROM A SWITCH TAPE

If you are sending a number of form letters and you use **SWITCH READ CODES**, you can use the variable
ta~e containing the names and addresses to play back envelopes or continuous labels.
lowever, you must record an extra **SWITCH READ CODE** when you record the original letter and
variable tapes. Ordinarily, you record switch letters as follows:

Variable Tape	Letter Tape
Name	Date
Address	[R]
City, State	[R]
[R]	[CODE 4]
Dear Sir:[CODE 4]	[R]
	[R]
	Letter

DOCUMENT & PROGRAMMED
ASSEMBLY, MASKED SEARCH

TAPE CASSETTE
HANDLING PROCEDURES

TYPING NUMBERS

MAILING LI...

CHAPTER 9
PLAYBACK AIDS

If you wish to extract the address, however, you must record an extra **SWITCH CODE** between the address and the salutation. Prepare your letter tape with an extra switch read to compensate for the switch code between the address and salutation as follows:

Variable Tape	Letter Tape
Name	Date
Address	[R]
City, State	[R]
[CODE 4]	[CODE 4]
Dear Sir:[CODE 4]	[R]
	[CODE 4]
	[R]
	[R]
	Letter

After you have played out the letters, prepare a control tape to play back envelopes or labels as follows:

Continuous Envelopes or Labels	Single Envelopes or Labels
[CODE 4]	[CODE 4]
TAB[CODE 4]	TAB[CODE 4]
[R]	[R]
[CODE] p]	[CODE w]
[CODE 9]	

Place the address tape and the control tape into the tape holders. Set a format with a tab at the far right side of the platen. Begin playback from the control tape. The address is typed at the left margin, but the salutation is typed at the right of the paper or envelope, on the platen. Set the System to endpage=eject or endpage=stop, the lines-per-page to five (or two lines longer than the size of the addresses), and the page size to the size of the label.

USING SWITCH READ CODES AND MEMO CODES

A useful benefit of an automatic typewriter is its ability to play back any number of original documents. If you use continuous paper and do not wish to monitor the number of copies the System plays back, you can set up a control tape to count copies for you. Once recorded, the control tape can be used as a permanent page counting tape without ever having to rerecord it.

If you anticipate a maximum count of 100 copies for the majority of your work, the page counting control tape is recorded with **MEMO CODES** beginning at 100, down to 1, with a **SWITCH CODE** after every **MEMO CODE**.

e mple:

```
         m100                          ׀
         4
         m99
         4
         m98
         4
         m97
         4
         m96
         4
         etc.
         /
```

T e document tape is placed in the right holder and the page counting tape in the left holder. If you ish to make 53 copies of the document, **SEARCH** to **MEMO CODE 53** on the left tape. Set the System for he ndpage * eject (**CODE** ℓ **e** * **e**) which automatically ejects the page and switch play back to the opposite ap After the System types the first page, it ejects, switches, and reads a numbered **MEMO CODE** and a **SWITCH CODE** on the other tape, and then returns to the document tape. It continues to do this until it t r s out of **SWITCH MEMO CODES**, and finally reads an **EOD CODE**. Hence, the 53 **MEMO** and **SWITCH CO ES** produce 53 copies of the document. Of course, it is necessary to record a new page code followed by a **REWIND-GO** code (**CODE 9**) at the end of the document.

Ex nple:

```
         (one-page document)
         CODE ] p
         CODE 9
         CODE /
```

This application is useful only for a one-page document, and is recommended for use with a pin feed p ten.

CHAPTER REVIEW CHECK LIST

SINGLE AND DOUBLE SPACING
- The System is preset to single space when turned on.
- If a double spacing code is used (]=d), it must be cancelled from the memory by typing a (]=s code.

PAGE DESIGN
- The lines-per-page, page size and new page commands are used in conjunction with endpage commands. The following table summarizes what information the System must be told in order to use each endpage command.

		With endpage = play	With endpage = stop	With endpage = eject
W H A T		PRESET CONDITION	Typed lines-per-page command CODE ℓ ℓ xx learn (lines/page=xx)	Page Length command CODE ℓ # xx learn (#/page=xx)
1 2 0 0			PRESET TO (lines/page=50)	PRESET TO (#/page=66)
M U S T		CODE l e p learn (endpage=play)	CODE l e s learn (endpage=stop)	Typed lines-per-page command CODE ℓ ℓ xx learn (lines/page=xx)
B E				PRESET TO (lines/page = 50)
T O				CODE ℓ ee learn (endpage=eject)
L D		Used to turn off other endpage control conditions.	xx = two-digit number 02 to 99.	xx = Two-digit number 02 to 99.

- Every inch of paper is equivalent to six lines of type.
- It is a good practice to set the System back to its normal (preset) condition after a document is typed, either by coding the information or by turning it off, then on again.
- The page size is the length of the paper in lines. The standard length is 11 inches, or 66 lines. To change the page size, use CODE ℓ # xx, where xx ranges from 02 to 99. You only use CODE ℓ # xx with an endpage=eject command if the paper size is different from 66 lines.
- The System is preset to play back 50 lines-per-page when turned on.
- You can change the number of lines played back on each page by using CODE ℓ ℓ xx where xx is the number of lines in two digits from 02 to 99.

AP, ER 9
,YBACK AIDS

- After changing the number of lines to be played back on a page, you automatically should return he System to its normal condition (CODE l 50).

- CODE l p can be recorded on tape, and is used to tell the System either to eject or to stop for a new page. The line counter is set back to zero after the new page code is executed. It must be used with in endpage=eject or an endpage=stop command.

WIND CODES

- A REWIND-GO CODE (CODE 9) is recorded at the end of a document to make the tape rewind and continue playback. (Used with continuous form paper.)

- A REWIND-STOP CODE (CODE w) is recorded at the end of a document to make the tape rewind and stop playback so a new sheet of paper can be inserted.

O CODES

- A STOP CODE (CODE g) is used on a tape to stop the playback so information can be typed in. When STOP codes are used, you can play back only in SAME and ADJUST. JUSTIFY cannot be used

ITCH READ CODES

- SWITCH READ Codes (CODE 4) are recorded on a tape to direct the System to switch and read the other tape.

- When recorded, a SWITCH READ Code either takes up an entire line on the tape, or ends a line on the tape, depending upon where it is used.
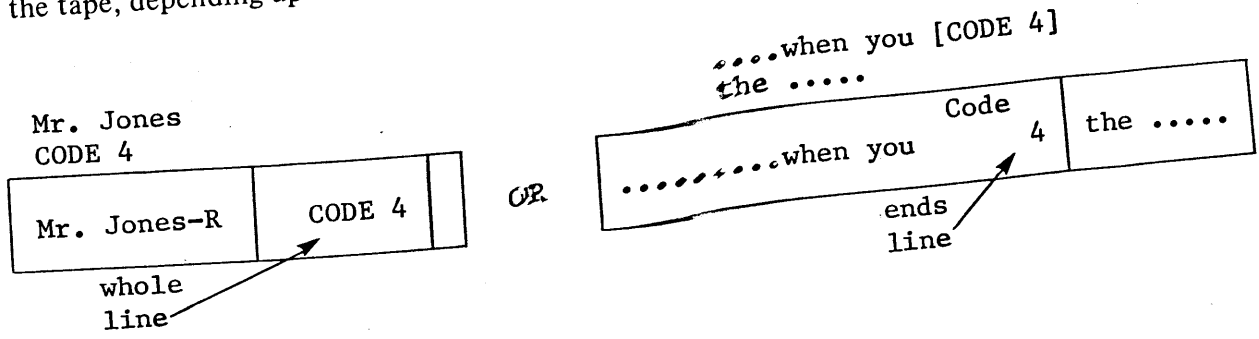
- When playing back tapes containing SWITCH READ Codes, depress the tape control button (right or left) that controls the tape with the first SWITCH READ Code in the document.

- When a SWITCH READ Code (CODE 4) is used in the middle of a line, enter the CODE 4 immediately after the last word without entering a space or RETURN. The space before the word or words to be supplied MUST BE on the other tape. In other words, any spacing in the middle of lines where a CODE 4 is used, is provided after the CODE 4 on the other tape. This is necessary in order for the copy to be ADJUSTED or JUSTIFIED properly.

- When using a CODE 4 at the end of a line, do not carrier RETURN before the CODE 4. Enter the CODE 4 at the end of the line. The carrier RETURN(s) are supplied on the other tape.

Chapter 10
Tape Cassette
Handling Procedures

IDENTIFYING AND STORING TAPE CASSETTES

To aid in the total utilization of your tape cassettes, Wang Laboratories has designed a System 1200 Cassette Log for identifying tape cassettes you want to save. A sample of a Cassette Log is shown on the next page.

The first line records the number of the tape. By numbering each of your tape cassettes, you can keep accurate records of the contents of each tape for later referral. The second line shows in which Cassette Albums the tape is stored. Make sure you write both these numbers on the tape cassette label, for proper identification. As each document on the tape becomes obsolete, cross it off the log. When all the documents are obsolete, dispose of the old log sheet, relabel and reuse the cassette, and begin a new log.

For each document recorded on the tape, the log provides spaces for filling in the following information.

Name of Document — an actual title, a descriptive term (legal contract), or the notation in the Memo Code.

Memo Code — use a simple numerical Memo Code system (1 through 10) to avoid confusion and aid in searching, when more than one operator may play back a tape.

Number of Pages — the length of the document, played out.

Location on Tape — an approximation of the location on tape, using the scale underneath the clear plastic window on the cassette. See the next section on how to use the scale.

Special Instructions — include format information, stop code information... any special instructions.

Name of Document	Memo Code	No. of pages in document	Location on tape	Special Instructions
				1200 CASSETTE LOG
CONTENTS OF TAPE NUMBER __1__				
ALBUM NUMBER __2__				
Analysis of application	M1	2½	Beg.	Format Recorded
July Banquet	M2	1	5	Update in July - Switch Reel
Sales Meeting	M3	5	8	Format Recorded
McAdam's letter	M4	2	23	none

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USING THE CASSETTE SCALE

On each tape cassette label, a scale is under the clear plastic window. When the tape is rewound, the tape on the left reel is at zero, as shown in Figure A. As you record on the tape, more tape is wound around the left reel. If you are about to begin a new document, and the cassette looks like Figure B, make a note that the new document begins at 1 on the tape cassette scale.
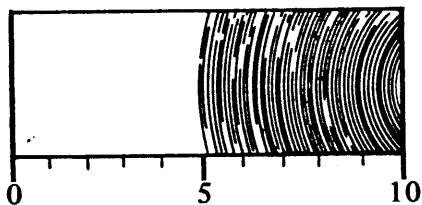
Figure A
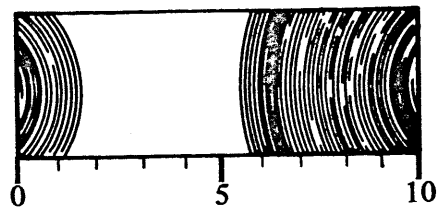
Figure B

If you want to play out the second document on tape, you know it starts somewhere around 1 on the tape cassette scale. Touch the **FORWARD** Key until the tape advances to near the 1. Touch **RESET** to stop the tape. Then search for the desired document by Memo Code (or touch **MEMO (OUT)**).

At first this process may seem to be hit or miss, and you may advance the tape too far. But after a little practice, you will be able to forward the tape with a great degree of accuracy.

D-OF-TAPE CODE

As ou are recording a number of documents on one tape cassette, you may find it necessary to interrupt ur ork for another project, or you may have depleted your material without filling up an entire tape. A quick way to mark the end of the recorded material is to record a Memo Code after the last recorded e. This Memo Code should be a standard code, to be used consistently by all the operators in the office. r ample, you can record **CODE m/** or **CODE mEND** or **CODE m***. Whatever you use, be consistent, d be sure all the operators follow the same procedure.
Wh n you wish to find the end of the tape to begin recording again, **SEARCH** to the **CODE m/**, record ev Memo Code for the next document on top of the previously recorded **CODE m/**, and proceed as usual.

ASK: TRANSFER A DOCUMENT TO A NEW TAPE

A TING STEPS:

- SAME
- PRERECORDED TAPE
- (( )RRECTED VERSION)
- IN RIGHT HOLDER
- REWIND
- W RD TAPE IN LEFT HOLDER

OW TO DO:

1. F d and depress the red **TRANSFER** button.
   T SAME button must be depressed.
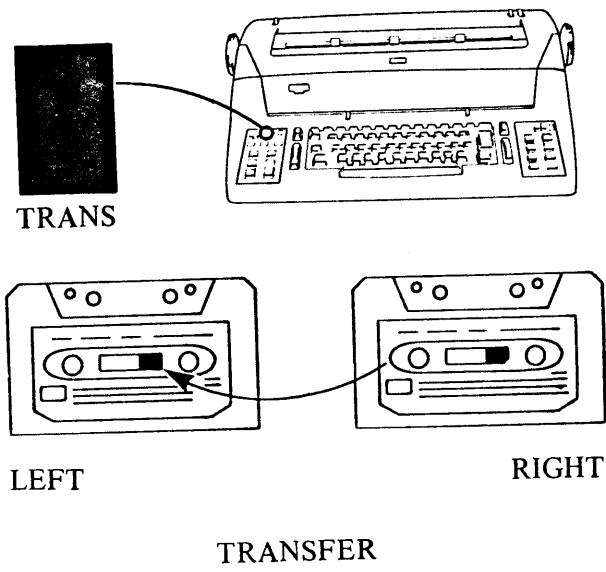
TRANS

NOTE:

Transfer always occurs from the Right to the L 't tape. You always must place the original t e in the right tape holder. When in TRANS-FER, it does not matter whether the right or l 't button is down, because transfer occurs in c e direction, only.

LEFT   RIGHT

TRANSFER

---

2. Make a copy of this document by transferring
   om the right to the left tape.

3. Touch **SEARCH** twice.

SEARCH		Transfers the entire
SEARCH	=	tape quickly

NOTE:

*The **EOD** light illuminates to indicate transfer mpleted.*

CHAPTER 10
TAPE CASSETTE HANDLING PROCEDURES

YBA ... IDS

TAPE CASSETTE
HANDLING PROCEDURES

RE ... DING ... S

DOCUMENT ... TH
SEVERAL FORMATS

TRANSFER A SERIES OF DOCUMENTS TO A NEW TAPE

If you have ended a series of documents with a Memo Code rather than an EOD code (CODE m/ CODE mEND or CODE m*) you can transfer the documents to another tape by using the following procedure:

1. REWIND both tape cassettes.
2. Depress RIGHT and TRANS.
3. Search your end-of-tape Memo Code.

The contents of the tape up to the Memo Code are transferred. Then depress LEFT and RECORD, and continue recording a new document right on top of the previously recorded end-of-tape Memo Code.

> **NOTE:**
> *Keep in mind, if you transfer a document with Memo Codes, they are transferred to the new tape. If you PLAY while transferring the Memo Codes are transferred, even though they do not play back on paper. The only time a Memo Code does not TRANSFER is if you touch MEMO OUT while TRANSFER is depressed.*

TRANSFER AND DELETE INDIVIDUAL DOCUMENTS FROM A TAPE

When more than half the documents recorded on a tape cassette are obsolete, it is impractical to tie up the tape cassette with obsolete material. Transfer the active documents onto a new tape cassette and continue to record new material. Use the following procedure:

1. Depress RIGHT and PLAY.
2. SEARCH Memo Code of first active document.
3. Touch MEMO (OUT).
4. Depress RIGHT and TRANS.
5. Record new Memo Code CODE m 1 (records on left tape).
6. Touch SEARCH, SEARCH (assuming you have recorded END OF DOCUMENT codes at the end of each document).

If you have additional documents to transfer, go back to step 2.

Continue in this manner until you have transferred all the active documents. Continue to record new Memo Codes in sequence on the new (left) tape.

Sometimes one document, recorded on a cassette with several other documents, may need extensive revisions. Depending on the circumstances, it may be more practical to transfer that one document to make the revision, especially if the document is to be used as a final copy. However, you may wish to keep the entire tape intact, and still make the necessary changes. In that case, you must transfer the entire tape while making the corrections. The procedure is:

1. REWIND both tape cassettes.
2. Depress TRANSFER.
3. Search the Memo Code of the desired document.
4. Proceed to revise while transferring.
5. Search to your end-of-tape Memo Code (CODE m/, CODE mEND or CODE m*)

Now you have a completely new tape cassette with all the documents, including the corrected one, on one cassette. Remember, the old cassette can be reused.

CHAPTER 10
TAPE CASSETTE HANDLING PROCEDURES

PROTECTING TAPE CASSETTES

simple technique is available to prevent accidental recording on a library, or storage tape cassette. Each cassette is equipped with a pair of orange plastic tabs located on the bottom edge. If the tabs are turned inward to expose square holes at each end of the bottom edge, the cassette becomes a "protected tape" (you cannot record upon it). If you try to record on a protected tape, the System 1200 warns you by sounding the warning bell or tone and flashing the console lights. You can "unprotect" the tape when it is obsolete, or when you want to add additional documents, by flipping the tabs back to cover the holes (make sure both holes are covered). If the plastic tabs become detached, and you want to record on the cassette, cover the holes with cellophane tape; remove the tape to protect the cassette.

> **NOTE:**
> When in **EDIT**, the System does not warn you when you attempt to edit a protected tape. You go through the motions, but nothing is edited on the protected tape. Make sure to check the plastic tabs before editing a tape.

PROTECT POSITION
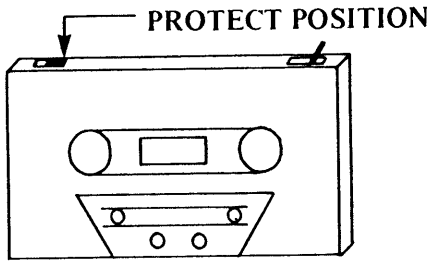
CLEANING PROCEDURE FOR TAPE HEADS

IMPORTANT: READ DIRECTIONS COMPLETELY BEFORE CLEANING TAPE HEADS

The magnetic tape cassette should be kept free from dust and dirt, by cleaning the tape head periodically. The cleaning process is as follows:

The tape reading head is located in the top center of each tape cassette holder (Figure 1). The head can be lowered to cleaning position as follows:

Select a tape cassette holder and depress either **RIGHT** or **LEFT**, then **PLAY**. Touch **AUTO/START**, then immediately touch **RESET**. The head is lowered into the position shown in Figure 2. Follow this procedure to lower the tape head in the other holder.

Tear open the foil packet containing the cleaning pad (Figure 3), and rub each magnetic tape head gently for a few moments (Figure 4). After cleaning, dispose of the pad in the foil packet, exercising care that it does not touch any painted, shellacked, or plastic surface (because of possible damage to the finish). The pads are saturated with 91% Isopropyl alcohol. If you are allergic to this type of alcohol, do not attempt the cleaning procedure.

FIGURE 1
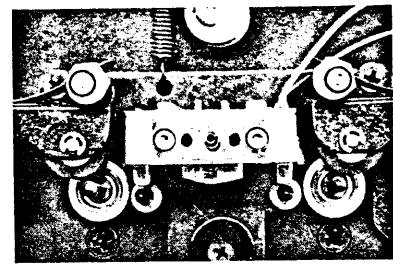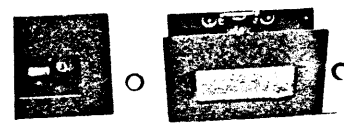
FIGURE 2

FIGURE 3

After cleaning, restore the tape heads to their normal position by depressing **RIGHT** and **REWIND**, then **LEFT** and **REWIND**.

Perform the cleaning operation every three weeks, under normal conditions. In the event that your tapes become heavily contaminated with dust or dirt, or if the System is operating with the room humidity below 20%, more frequent cleaning is required because of possible electrostatic attraction of dust and dirt to the tape mechanism. Contact your Wang Service Representative, if you note a build-up of dirt on operating parts of the tape mechanism.
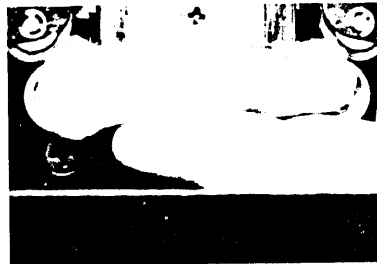
FIGURE 4
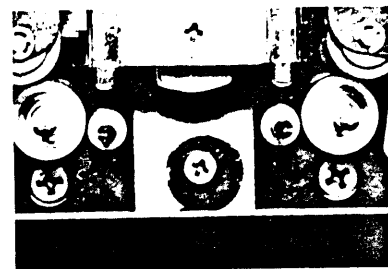
FIGURE 5

Chapter 11
Typing Numbers

Statistical Typing And Mathematical Formulas

INTRODUCTION

Statistical typing and typing complicated formulas, two of the most tedious jobs you may ever face, are quick and easy with the System 1200, which features both automatic Decimal Alignment, and Vertical Half spacing (either standard on the System 1222, or an option on the System 1220). When typing long columns of numbers, you no longer have to align each number separately. When typing subscripts, superscripts and complicated formulas, you no longer need to manually manipulate the platen - it is done automatically by the System.

STATISTICAL TYPING WITH DECIMAL ALIGNMENT

The DECIMAL ALIGNMENT condition is activated by placing the System in the NO ADJUST condition. Then the position of the decimal point in each column is set by formatting TAB stops. When typing the columns at rough draft speed, you need only CODE TAB to the preset TAB stop for each column. In DECIMAL ALIGNMENT the CODE TAB does not cause an automatic indent. Rather, it causes the System to automatically supply the necessary coded backspaces to align each number in each column on the decimal point during playback. If you record only whole numbers, the columns are aligned where the decimal point normally would be located; in other words, the whole number is played back to the left of the TAB stop.

TASK: RECORD THE FOLLOWING TABLE IN DECIMAL ALIGNMENT CONDITION

STARTING STEPS:

WORK TAPE IN RIGHT HOLDER	learn(naj)					
	CODE TAB	800.76	CODE TAB	6.0	CODE TAB	110.00 -R
RIGHT	"	79.00	"	3.1	"	11.00 -R
RECORD	"	1900.00	"	10.0	"	336.00 -R
SAME						
REWIND	"	928.54	"	(42.)	"	(21) -R

WORK TAPE IN RIGHT HOLDER
RIGHT
RECORD
SAME
REWIND
LEFT MARGIN AT 5
TABS AT 15, 35, 55   CODE RETURN
RIGHT MARGIN AT 75
                         E.O.D.

HOW TO DO:

Put the System in the Decimal Alignment condition.
Touch CODE ℓ n.
Notice the NO ADJUST light illuminates.
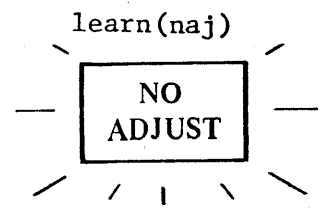
learn(naj)

— NO ADJUST —

> **NOTE:**
> *Any section of a document needing auto-matic Decimal Alignment must be recorded in the* **NO ADJUST** *condition.*

learn(format

2. Record the format.

5	15		35	55	75
@	T		T	T	)
b					

3. Touch **CODE**, touch **TAB**.
   Type *800.76*

800.76 ▲

4. Touch **CODE**, touch **TAB**, type *6.0*

800.76   6.0 ▲

5. Touch **CODE**, touch **TAB**, type *110.00*

800.76   6.0   110.00 ▲

6. Touch **RETURN**.

800.76   6.0   110.00
▲

7. Type the next.two rows using a **CODE TAB** before each number and **RETURN** after each row.

79.00   3.1   11.00

1,900.00   10.0   336.00
▲

8. Record the next row, with the parentheses as shown, ending the line with a **RETURN**.

928.54   (42.0) (21)
▲

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> **NOTE:**
> When the System plays back a number in parentheses, it aligns the number according to where the decimal is (42.0). If there is no decimal in the number (21), it sees the right-hand parenthesis as the decimal point and aligns the number accordingly.

9. Touch **CODE, RETURN.**

> **NOTE:**
> A coded return must be used to terminate the NO ADJUST condition. When using NO ADJUST to align decimals, the coded return must be recorded on a separate line as shown in the example. The last line will not align if the CODE RETURN is recorded on the same line.

928.54   (42.0) (21)

▲

10. **CODE EOD.**
    REWIND the tape.

928.54   (42.0) (21)
/
▲

ASK: PLAY BACK THE TABLE OF NUMBERS
STARTING STEPS:
  TABLE TAPE IN
  RIGHT HOLDER

800.76	6.0	
79.00	3.1	
1,900.00	10.0	
928.54	(42.)	

b. RIGHT
. PLAY
. SAME

HOW TO DO:
. Touch **AUTO/START**

TASK: RECORD THREE COLUMNS OF NUMBERS UNDERLINING THE COLUMNS

STARTING STEPS:
a. WORK TAPE IN
   RIGHT HOLDER
). RIGHT
c. RECORD
d. LEFT MARGIN AT 5, TABS AT 15, 35, 55,
   RIGHT MARGIN AT 75
e. SAME
f. REWIND

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> **NOTE:**
> System plays back a number in
> it aligns the number according
> the decimal is (42.0). If there is no
> the number (21), it sees the right-
> parenthesis as the decimal point and
> the number accordingly.

CODE, RETURN.

> **NOTE:**
> return must be used to deactivate
> ADJUST condition. When using
> A JUST to align decimals, the coded
> must be recorded on a separate line as
> n the example. The last line will not
> the CODE RETURN is recorded on
> same line.

928.54   (42.0) (21)

▲

ODE EOD.
RE IND the tape.

928.54   (42.0) (21)
/
▲

SK: PLAY BACK THE TABLE OF NUMBERS

RTING STEPS:

800.76	6.0	110.00
79.00	3.1	11.00
1,900.00	10.0	336.00
928.54	(42.)	(21)

TA LE TAPE IN
RIGHT HOLDER
RIGHT
PL Y
SA ME

OW TO DO:
T ch AUTO/START

AS : RECORD THREE COLUMNS OF NUMBERS UNDERLINING THE COLUMNS

ST RTING STEPS:

a. WORK TAPE IN
   I GHT HOLDER
b. I GHT
c. RECORD
d. EFT MARGIN AT 5, TABS AT 15, 35, 55,
   IGHT MARGIN AT 75
e. SAME
f. EWIND

CODE TABS 800.76 CODE TABS 6.0 CODE TABS 110.00 - R

" 79.00 ' " 3.1 " 11.00 - R

" 1900.00 ' " 10.0 " 336.00 - R

" 11,221.00 " 1.0 " 42.00 - R

CODE RETURN
/

HOW TO DO: RECORD THE FIRST THREE LINES

1. Record format on tape.

```
learn(format
5    15   36        55      75
@    T    T          T       )
b
```

2. Touch **CODE**, type ℓ, n.

```
learn(naj)
```

3. Record the first three rows of numbers remembering to **CODE TAB** before each number.

   In the last row of numbers, three special conditions exist - all of which have to do with underlining a column of figures. In the first column, the underline is as long as the last number in the column, which also is the largest number in the column. In the second column, the underline has to be longer than the last number in the column, as the last number is not the largest. In the third column, the underline is located on the next line of type. Each of these conditions requires a different method of recording. Go on and learn each underlining procedure.

800.76	6.0	110.00
79.00	3.1	11.0
1,900.00	10.0	336.00

HOW TO DO: UNDERLINE SAME LENGTH AS THE NUMBER

1. CODE TAB type *11,221.00.*

```
11,221.00
```

2. To underline a column where the last number in the column is the largest, merely backspace and underline as you would on any typewriter.

BACKSPACE to the beginning of the number and underline.

11,221.00
▲

> **NOTE:**
> *Do not backspace and type over the coded TAB, as you will eliminate it.*

11,221.00
▲

HOW TO DO: UNDERLINE LONGER THAN THE NUMBER

11,222.00   ▲

1. CODE TAB.

Touch the underline key *once*, to type in the part of the underline which has no digit directly above it (in this case only one).

11,222.00   —
                ▲

. Type *1.0*

11,222.00   1.0
                ▲

4. BACKSPACE to the beginning of the number to underline it.

11,222.00   1.0
                ▲

HOW TO DO: UNDERLINE ON NEXT LINE

11,221.00   1.0   ▲

1. CODE TAB.

2. Type number.

11,221.00   1.0   42.00
                        ▲

3. Touch RETURN.

11,221.00   1.0   42.00
▲

4. CODE TAB *three* times.	<u>11,222.00</u>	<u>1.0</u>	42.00 ▲

5. Count the number of digits to the left of the decimal for the largest number in the column (110.00 has three digits), then **CODE BACK-SPACE** that amount, in this case, *three* times.	<u>11,222.00</u>	<u>1.0</u>	42.00 ▲

6. Underline equal to the number of times you **CODE BACKSPACE**, plus one for the decimal and as many times as the number of digits to the right of the decimal (a total of *six*, for the example).	<u>11,222.00</u>	<u>1.0</u>	42.00 <u> </u> ▲

7. RETURN	▲

8. CODE RETURN	▲

9. CODE/,REWIND

TASK: PLAY BACK THE TABLE

STARTING STEPS:	800.76	6.0	110.00
a. RIGHT	79.00	3.1	11.00
b. PLAY	1900.00	10.0	336.00
c. SAME	<u>11,221.00</u>	<u>1.0</u>	42.00
d. REWIND			<u> </u>

HOW TO DO:
1. Touch **AUTO/START.**

HOW TO DO: EDITING IN DECIMAL ALIGNMENT

When editing in **DECIMAL ALIGNMENT**, remember the following rules:

1. Be sure to edit in **NO ADJUST.**

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. When recording in **DECIMAL ALIGNMENT**, the System automatically counts the number of places to the left of the decimal point the number must be aligned, and records on the tape the proper number of **CODE BACKSPACES**. On tape, the number 1,000,000.00 is recorded as:

CODE C C C C C C C C C ı	
TAB B B B B B B B B B 1,000,000.00	

When editing, play back numbers a character at a time, so you can compensate for the **CODE BACKSPACES**. T change the above number to 100,000.00:

a. Play back the **CODE TAB**.
b SKIP CHAR *twice*.
c Play back the *seven* remaining **CODE BACKSPACES**.
d. SKIP CHAR *three* times.
e. Type *1*
f. Play back the *00,000.00*.

T SK: RECORD A COLUMN WITH EXAMPLES OF A DOLLAR SIGN,
UNDERLINING, DOUBLE UNDERLINING, AND NUMBERS IN PARENTHESES

STARTING STEPS:
a WORK TAPE IN
   RIGHT HOLDER
b. RIGHT
c RECORD
d. SET FORMAT
   LEFT MARGIN AT 5, TAB
   AT 15, RIGHT MARGIN
   AT 20
e. SAME
   REWIND
g. NO ADJUST-CODE ℓ n

1. $ 4,482.61
        323,298.76
2.   4,482.61
        332,263.98
3.   _____
4.   4,482.61
5. $ 4,482.61
6. ($ 4,482.61)
7.   --

HOW TO DO:

xample 1: A number with a dollar sign when there is a larger number in the same column.
   a. **CODE TAB**
   b. type *$*
   c. space twice (to allow for larger number)
   d. type digits

---

xample 2: Number with underline, where there is a larger number in the same column.
   a. **CODE TAB**
   b. space three times (to allow for the larger number)
   c. type digits
   d. backspace to **TAB**
   e. underline

Or,
  a. **CODE TAB**
  b. underline three times (to allow for the larger number)
  c. type digits
  d. backspace to first digit
  e. underline

Example 3: Blank underline.
  a. **CODE TAB**
  b. **CODE BACKSPACE** the number of times equal to the number of digits before the decimal (eight times in this example, counting the spaces and $)
  c. type underline three times more than the number of backspaces to compensate for the decimal and two places to the right of the decimal (eleven times in this example)

Example 4: Double underline where there is a larger number in the same column (you must have a double underline character on your typing element).
  a. **CODE TAB**
  b. space three times (to allow for the larger number)
  c. type digits
  d. **CODE BACKSPACE** to **TAB** (you must **CODE BACKSPACE** because the system considers a underline as a normal strike-over)
  e. double underline

Example 5: Double underlined number with dollar sign where there is a larger number in the same column.
  a. **CODE TAB**
  b. type $ and two spaces (to allow for larger number)
  c. type digit
  d. **CODE BACKSPACE** to dollar sign (you must **CODE BACKSPACE** because the system considers a double underline as a normal strike-over)
  e. double underline

Example 6: Double underlined number with dollar sign in parenthesis where there is a larger number in the same column.
  a. **CODE TAB**
  b. type digits, including parenthesis, leaving two spaces between the dollar sign and the first digit to allow for the larger number.
  c. **CODE BACKSPACE** to dollar sign
  d. double underline

Example 7: A blank line with a dash.
  a. **CODE TAB**
  b. type – (be sure to **CODE** these hyphens)

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TASK: RECORD A TABLE WITH A HEADING AS FOLLOWS

STARTING STEPS:
WORK TAPE IN
RIGHT HOLDER
RIGHT
SAME
d. RECORD
REWIND

	December 1966	December 1965
CURRENT ASSETS		
Cash in hand	$ 980,000	$ 675,440
Short-term investments-at cost	565,250	233,100
Trade accounts receivable	1,550,000	1,375,260
Recoverable federal income taxes	265,000	250,000

HOW TO DO:

1. Set the format with the left margin at 10, **TAB** stops at 15, 60, 80, and the right margin at 90. Record the format. Place the System in **NO ADJUST** condition.

```
learn(format
10      15      60      80    90
@       T       T       T     )
b
learn(naj)
```

2. In this lesson, the heading "December" is positioned directly above each column, flush to the right, by using the DECIMAL ALIGNMENT condition with the heading. The System then sees the heading as a number, and aligns the heading to the left of where the decimal normally would fall (to the right of the "r").
TAB to the first setting, CODE TAB, type *December,* CODE TAB, type *December,* RETURN

▲   December   December

3. To center a heading in DECIMAL ALIGNMENT you must use **CODE BACKSPACE.** In this lesson, to center the years under *December,* **TAB** to the first setting, **TAB** to the second setting, **CODE BACKSPACE** *six* times, type *1966,* **TAB** to the second setting, **TAB** to the third setting, **CODE BACKSPACE** *six* times, type *1965,* **RETURN.**

December   December

1966   1965

4. Record the remainder of the table, using only **TAB** for the first setting (the row headings) and **CODE TABS** for the figure columns.

5. Touch **CODE RETURN,** record an **EOD, RE-WIND** the tape, depress **PLAY.**

PLAYBACK AIDS

TAPE CASSETTE
....DUPL... ..10CL....IES

TYPING NUMBERS

DOCUMENTS WITH
SEVERAL FORMATS

CHAPTER 11
TYPING NUMBERS
STATISTICAL TYPING AND MATHEMATICAL FORMULAS

TASK: REVISE TABLE BY EDITING

Financial reports, such as the table in the previous lesson, must be updated every year. Rather than retyping the entire report, the table can be quickly updated by editing the tape.

STARTING STEPS:

a. REPORT TAPE IN
   RIGHT HOLDER

b. RIGHT

c. SAME

d. EDIT

e. REWIND

	December 1966	December 1965
CURRENT ASSETS		
Cash in hand	$ 980,000	$ 675,440
Short-term investments–at cost	565,250	233,100
Trade accounts receivable	1,550,000	1,375,260
Recoverable federal income taxes	265,000	250,000

HOW TO DO:

1. Be sure to edit in **NO ADJUST**.
   Type ℓ n.

learn(naj)

---

2. To change the years, **SEARCH** to *"1966".*
   Play out the line, character by character, to
   bypass the **CODE BACKSPACES**. Then play out
   the *196,* **SKIP** character, and type *7.* Play out
   the **TAB**, the **CODE BACKSPACES** and the *196,*
   SKIP CHAR, then type *6,* and touch **RETURN**.

1967	1966

---

3. **SEARCH** to *"Cash".* Touch the **WORD** key.
   The entire line *"Cash in hand"* plays back
   because the spaces are coded in **NO ADJUST**.
   The tab plays back, too.

---

4. Type the new number and **CODE TAB**.

Cash in hand $ 234,000

---

5. Play back the number from the first column,
   character by character, then touch **RETURN**.
   Do not use **WORD**, or an additional **TAB** will
   play back with the number.

Cash in hand $ 234,000 $ 980,000

---

6. If using **TRANSFER**, after playing back the
   number from the first column (now in the
   second column), be sure to **SKIP CHARACTER**
   and **SKIP WORD**.

---

7. Touch **RETURN**.

8. Repeat the procedure for each line in the table.

HOW TO DO: PRERECORD TAPES WITH FORMATS FOR FORMS

Many companies use standard forms for financial and statistical reports. If you use standard forms, you can record a format, designed for the form, on a separate Library Tape, recall the format with a **CODE MEMO (OUT)** when using the form, and then record the format on the work tape you are using to record the form.

When designing the format tape, you must remember the decimal point falls on the **TAB** position. For example, set the format:

```
learn(format
  @                    T                    T                              )
```

Then type the numbers:	2,345.88	543,897.00
	345.88	4,555.66

When you play back the final document, however, the **TAB** stops are still set:

	T	T

	2,345.88	543,897.00
The numbers play back:	345.88	4,555.66

Therefore, you must decide before you begin where you want your columns to be located. If you are using whole numbers or decimal numbers, make the necessary allowance for the number aligning.

First, set the format for the standard document. Record the document, and play it out to see that it is the format you need. Then place a library tape in the other tape holder, record a Memo Code to indicate the type of format (or simply record **CODE m1**), then type **CODE b**. The same format is now on the library tape and can be used for future documents. After **CODE b**, record an end of tape Memo Code (**CODE m/**), or whatever end of tape code you have decided to use.

Everytime you record a new document with a different standard format, you can search the library tape for **CODE m/**, record a new Memo Code for the new format (possibly **CODE m2**), and then type **CODE b** for the new format (followed by a new end of tape notation).

When you are ready to record a new document with one of the standard recorded formats, place the library tape into one tape holder, a work tape in the other tape holder, search the library tape for the appropriate Memo Code, and then touch **CODE MEMO (OUT)**. This sets the appropriate format into the

System. Switch to the other tape holder, type **CODE b** (in **RECORD**) to record the same format on the work tape.

Although these procedures take some planning and setup time, once a series of formats are recorded, they always are available for future use and save a great deal of time.

HOW TO DO: RECORDING EXTRA WIDE STATISTICAL DOCUMENTS
Consider the following document:

learn(format

@	T	T	T	T	T	T	)

b
learn(naj)

$13,000,000	$ 580,000	$6,560,000	$1,350,000	$20,140,000	$13,000,000
2,000,000	4,000,000	3,065,000	3,065,000	1,535,000	6,152,000
15,500,000	5,540,000	6,740,000	450,000	27,330,000	2,885,000

When using **DECIMAL ALIGNMENT** with several columns of large numbers, it is possible to exceed 100 characters on a line. Although you are recording within the 100 character limit, in playback the System supplies required backspaces to align the decimals, and may exceed the 100 character limit. When this occurs, the last columns of numbers do not align properly.

Consider the number $13,000,000, by itself. When recording the number, only *eleven* characters are used. When playing back the number in **DECIMAL ALIGNMENT**, the number of characters doubles (since *eleven* characters are required for backspacing to align the number).

When recording several columns, simply **CODE BACK LINE** in the middle of the line between columns (after a number and before the next **CODE TAB**). **CODE BACK LINE** adds another 100 characters to the typing line, increasing the recording and playback capacity of the line. Do not **CODE BACK LINE** in the middle of a number.

Also use **CODE BACK LINE** if you wish to align more than seven columns. You cannot record a format with more than seven tabs, but you manually can set additional tabs into the typewriter (nine more on the System 1222, an unlimited number on the System 1200).

The columns will play back in **DECIMAL ALIGNMENT**, as long as you **CODE BACK LINE** at the appropriate place.

VERTICAL HALFSPACING
The Automatic Vertical Halfspacing feature, standard on the System 1222, and optional on the System 1220, simplifies typing subscripts, superscripts, and complicated formulas. Touching **CODE INDEX** causes the System to index the platen automatically one halfspace upward. **INDEX** causes the System to index the platen one halfspace downward.

TASK: RECORD THE FOLLOWING PARAGRAPH
STARTING STEPS:
a. WORK TAPE IN RIGHT
   HOLDER
b. RECORD
c. RIGHT
d. SAME

e. LEFT MARGIN AT 15,
   RIGHT MARGIN AT 85
f. REWIND
g. DOUBLE SPACE BY USING CODE] =d

Solve the Panhandle equation for each of these variables Q, P_1, and P_2 when L = 125 miles and D = 29.3 inches. Use the following data:

Q = 492.5 M M C D F D , P_1 = 999.98 PSIA and P_2 = 700 PSIA, as required by the program for particular variable being solved, i.e., to find Q use P_1 and P_2 and then compare the calculated Q with the given Q.

FORMULA

$$Q = .0013678 \frac{P_1^2 - P_2^2}{L} D^{2.53}$$

HOW TO DO:

. Set the format, and record it on tape.

```
learn(format
@                        )
b
```

. Set the manual spacing lever to single spacing, and set the System to double spacing with Code] = d.

. Type the first line as far as P and STOP.

Solve the Panhandle equation for each of these variables Q, P

Touch the INDEX Key.
The INDEX Key automatically lowers the car- ... one half line. INDEX is recorded as a single ... ter on the tape.

Solve the Panhandle equation for each of these variables Q, P

5. Type *1*

Solve the Panhandle equation for each of these variables Q, P_1 ↑

6. To return the carrier to its normal line position, touch the **CODE** Key, and touch the **INDEX** Key.
   CODE INDEX automatically raises the carrier by one half line.

Solve the Panhandle equation for each of these variables Q, P_1 ↑

7. Type *, and P*

Solve the Panhandle equation for each of these variables Q, P_1, and P ↑

8. Touch **INDEX**, type *2*, touch **CODE** and touch **INDEX**.

Solve the Panhandle equation for each of these variables Q, P_1, and P_2 ↑

9. **CARRIER RETURN** *once.*

Solve the Panhandle equation for each of these variables Q, P_1, and P_2
↑

10. Type the second line, including the **CARRIER RETURN**.

when L = 125 miles and D = 29.3 inches. Use the following data:
↑

11. Type lines 3, 4, and 5, remembering to touch the **INDEX** Key to lower the carrier for a subscript, and **CODE INDEX** after the subscript to return the carrier to its normal line position.

Q = 492.5 M M C D F D , P_1 = 999.98 PSIA and P_2 = 700 PSIA, as required by the program for particular variable being solved, i.e., to find Q use P_1 and P_2 and then compare the calculated Q with the given Q.
↑

12. The sixth line needs to be centered; therefore type **CODE o** before **FORMULA**. Type line 6 and line 7 (a **CARRIER RETURN** only).
   On the eighth line, the entire formula needs to be centered; therefore type the formula as a single line on the tape as follows:

oFORMULA

13. **CODE o** and type *Q = .0013678*

oQ = .0013678
↑

14. To place the numerator of the formula in the correct position, **CODE INDEX** *twice,* and type *P*

$$oQ = .0013678^{P}$$

15. Touch **INDEX,** and type *1* to enter the subscript.

$$oQ = .0013678^{P_1}$$

16. To type the superscript, **CODE INDEX** *twice.* and type *2*

$$oQ = .0013678^{P_1^2}$$

17. Lower the carrier to the line with *P* by touching the **INDEX** Key, so you can type in the minus sign.

$$oQ = .0013678 \quad P_1^2$$

18. Touch *space,* type -, touch *space.*

$$oQ = .0013678 \quad P_1^2 -$$

19. Type *P2* as follows and **STOP.**
    Type *P,* **INDEX,** type *2*
    CODE INDEX twice, and type *2*

$$oQ = .0013678 \quad P_1^2 - P_2^2$$

20. Lower the carrier to the subscript line by touching the **INDEX** Key *twice.*

$$oQ = .0013678 \quad P_1^2 - P_2^2$$

21. In order to underline the numerator, **CODE BACKSPACE** *nine* times to the beginning of the numerator; then touch the **UNDERLINE** Key *nine* times.

$$oQ = .0013678 \frac{P_1^2 - P_2^2}{}$$

22. In order to position the carrier correctly to type in the denomimator *L*, **CODE BACKSPACE** *five* times.

$$oQ = .0013678 \frac{P_1^2 - P_2^2}{\uparrow}$$

23. To position the carrier on the correct line to type the *L*, touch **INDEX** *twice* and type *L*.

$$oQ - .0013678 \frac{P_1^2 - P_2^2}{L_\uparrow}$$

24. Raise the carrier to its normal line position by touching **CODE INDEX**.

$$oQ = .0013678 \frac{P_1^2 - P_2^2}{L\uparrow}$$

25. Space forward to the end of the underline.

$$oQ = .0013678 \frac{P_1^2 - P_2^2}{L} \uparrow$$

26. Space, type *D*, **CODE INDEX**, and type *2.53*

$$oQ = .0013678 \frac{P_1^2 - P_2^2}{L} D^{2.53} \uparrow$$

27. Return the carrier to its normal line position by touching **INDEX**.

> **NOTE:**
> *Be sure to return to the normal typing line before the* **CARRIER RETURN.**

$$oQ = .0013678 \frac{P_1^2 - P_2^2}{L} D^{2.53} \uparrow$$

28. Touch **RETURN**.

$$oQ = .0013678 \frac{P_1^2 - P_2^2}{L} D^{2.53}$$
$$\uparrow$$

29. **CODE**/ (end of document).   /

> **NOTE:**
> **CODE INDEX** *cannot be recorded as the first character on a line, the first character in a centered line after the* **CODE o,** *or as the first character in a Memo Code after the* **CODE m.**

TASK: PLAYBACK THE PARAGRAPH ADJUSTED AND DOUBLESPACED

Solve the Panhandle equation for each of these variables Q, P_1, P_2 when L = 125 miles and D = 29.3 inches. Use the following data:

Q = 492.5 M M C D F D , P_1 = 999.98 PSIA and P_2 = 700 PSIA, as re-

quired by the program for particular variable being solved, i.e.,

to find Q use P_1 and P_2 and then compare the calculated Q with the

given Q.

FORMULA

$$Q = .0013678 \frac{P_1^{\,2} - P_2^{\,2}}{L} D^{2.53}$$

STARTING STEPS:
a. **REWIND**
b. **RIGHT**
c. **PLAY**
d. **ADJUST**
e. **DOUBLE SPACING**

HOW TO DO:

1. **CODE MEMO (OUT)** to set the format.
   Touch **AUTO/START.**

---

2. **REWIND** tape.

---

3. Return the System to single spacing by **CODE**
   ] = s.   ]=s

CHAPTER 11
TYPING NUMBERS
STATISTICAL TYPING AND MATHEMATICAL FORMULAS

EDITING WITH VERTICAL HALFSPACING:

1. If you must correct a line, and backspacing beyond **CODE INDEX** or **INDEX** is required, it is best either to retype the line by rerecording, or to edit the line.

2. The formula in this lesson used 75 characters on the tape. To help you in editing, the illustration below shows how the formula actually was recorded on the tape.

$$\left(\frac{S}{P} = \text{SPACE}, \; R = \text{CARRIER RETURN}, \; \frac{C}{I} = \text{CODE INDEX}, \; I = \text{INDEX}, \; \frac{C}{B} = \text{CODE BACKSPACE}\right)$$
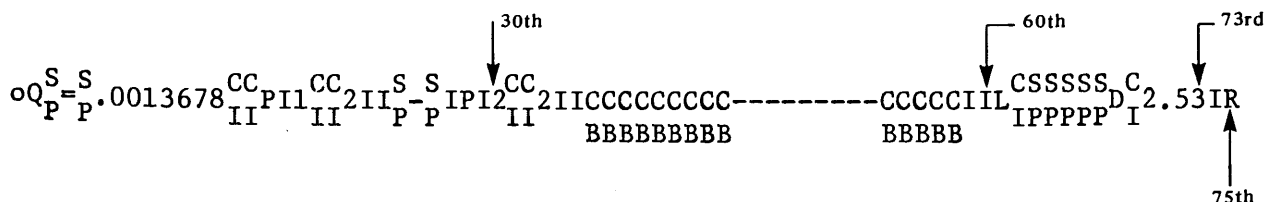
CHAPTER REVIEW CHECK LIST

- Vertical halfspacing is accomplished by touching **CODE INDEX** or **INDEX**. **CODE INDEX** raises the platen one half line, and **INDEX** lowers the platen by one half line.

- Each time an **INDEX** or **CODE INDEX** is used, a character is recorded on the tape. Since complicated formulas require the use of **INDEX** or **CODE INDEX** many times, the 100 character/line limit easily can be exceeded. The bell or tone warns you when you have reached the 90th character. Remember to **CODE BACKLINE** at the 100th character or before to lengthen the line limit.

- **CODE INDEX** cannot be recorded as the first character on a line, the first character in a centered line after the **CODE o** or as the first character in a Memo Code after **CODE m**.

- When underlining with **CODE INDEX** or **INDEX**, you must use **CODE BACKSPACES** followed by underline characters.

Chapter 12
Mailing Lists
And Directories

INTRODUCTION

With the System 1200 you easily can prepare long mailing lists and directories. Usually, a great amount of work is necessary to update or change a mailing list or directory. The System 1200 simplifies the process.

MAILING LISTS

Mailing lists which are not to be used to automatically address letters can be recorded in **SAME**. But if your list is to be used with adjusted or justified material (either for addressing letters or as part of a large document), be sure to record the list in **NO ADJUST**. In this lesson you are to record, in **NO ADJUST**, a mailing list to address envelopes and continuous labels, play out a copy of the list, and change and update the list.

TASK: RECORD A MAILING LIST IN NO ADJUST

STARTING STEPS:

a WORK TAPE IN
   RIGHT HOLDER

b RIGHT

c RECORD

d. SAME

e REWIND

```
learn(naj)
Mr. John Smith
Acme Company
254 Allen Street
Jay City, Oregon
]=p

Mrs. Julie Jones
Counsellor
1107 Commonwealth Court
Sacramento, California
]=p

Miss Ellen Wolf
256 "A" Street
Boston, Mass.
]=p
```

```
Mr. Jason Clay
Managing Editor
46 Elm Street
Jacksonville, Florida
]=p

Mr. Richard Bates
573 Main Street
Centerville, Illinois
]=p

Miss Barbara Swift
103 Mason Terrace
Columbus, Ohio
]=p
COLUMN
EOL
```

HOW TO DO:

In order to prevent the list from being adjusted in playback, put the System 1200 in **NO ADJUST** condition.

1. Touch **CODE**, type ℓ, type n (lowercase). The **NO ADJUST** light illuminates. Lines recorded in **NO ADJUST** are never adjusted in playback, even if the **ADJUST** or **JUSTIFY** keys are depressed.

2. Record each line as shown (correcting any mistake by backspacing and overstriking, if necessary). <u>After each address, record the New Page Code (**CODE**]=p)</u>. Since each address varies in the number of lines, the New Page Code directs the System to eject or stop after each address is typed when the list is played back in endpage=eject or endpage=stop condition.

learn (naj)

> **NO**
> **ADJUST**

mrs J R. Smith
22 Circle Ct.
Washington, DC. R
☓ R
]=p

be sure to put a return
in after end of address.

3. After the last **CODE**]=p, **CODE RETURN**, (which turns off the **NO ADJUST** condition), and type an **EOD** code.

Notice the **NO ADJUST** light goes out, when the **CODE RETURN** is typed.

> **CODE RETURN**
> turns off
> **NO ADJUST**

NOTE:

When a section of a document is recorded in the **NO ADJUST** *condition, the System 1200 automatically codes all the returns, all the spaces, and all the hyphens on the tape.*

---

4. REWIND and play back the tape in **ADJUST**.

Notice each line is played back with the line length unchanged.

```
Mr. John Smith
Acme Company
254 Allen Street
Jay City, Oregon
Mrs. Julie Jones
Counsellor
1107 Commonwealth Court
Sacramento, California
```

TASK: PLAY BACK THE MAILING LIST ON EVELOPES

STARTING STEPS:

a. RIGHT
b. PLAY
c. ADJUST
d. REWIND
e. ENVELOPES

HOW TO DO:
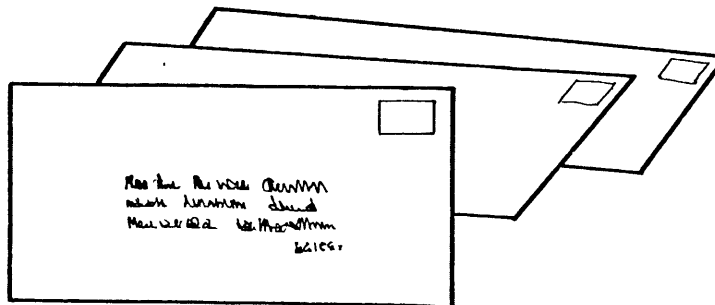
1. Tell the System 1200 to stop, after each envelope typed (use the **NO PRINT** key if you have a System 1222).*

`learn(endpage=stop)`

2. There is no need to tell the System how many lines to type per envelope, as the **CODE]=p** causes the System to follow the endpage=stop command, when it reads the **CODE]=p**.

3. Set the left margin control at the position where the first address is to be typed.

4. Insert the envelope (using the **EXP** key, if you have a System 1222)* and position it one line above where you want the first line typed.

5. Touch **RESET**.

6. Touch **AUTO/START**.
   When playback stops, insert a clean envelope, and touch **AUTO/START**.

7. Continue feeding envelopes and touching **AUTO/START**, until the EOD Code is reached.

8. Reset the System to endpage=play condition (**CODE ℓ e p**).

---

*See Appendix C for complete instructions on the **NO PRINT** and **EXPRESS** keys.

CHAPTER 12
MAILING LISTS AND DIRECTORIES

TASK: PLAY BACK A LIST ON LABELS

STARTING STEPS:
a. REWIND TAPE
b. RIGHT
c. PLAY
d. ADJUST
e. CONTINUOUS
   ONE-INCH LABELS

```
Mr. John Smith
Acme Company
254 Allen Street
Jay City, Oregon
```

```
Mrs. Julie Jones
Counsellor
1107 Commonwealth Court
Sacramento, California
```

```
Miss Ellen Wolf
256 "A" Street
Boston, Mass.
```

```
Mr. Jason Clay
Managing Editor
46 Elm Street
Jacksonville, Florida
```

1 inch =
6 lines

```
Mr. Richard Bates
5736 Main Street
Centerville, Illinois
```

```
Miss Barbara Swift
1036b Mason Terrace
Columbus, Ohio
```

CHAPTER 12
MAILING LISTS AND DIRECTORIES

HOW TO DO:

1. Tell the System the new page size of the page (in this case, the label). Remember, one inch = six lines.

   ✓ CODE ℓ # 06.

   `learn(#/page=06)`

2. Tell the System what to do at the end of the page (eject).

   ◄ CODE ℓ e e.

   Again, the CODE] = p directs the System to follow the endpage=eject Code, when the CODE]=p is read. Therefore, there is no need to enter a lines-per-page condition.

   `learn(endpage=eject)`

3. Set the left margin. Insert labels and roll platen to one line before where you want the first address typed. (Do not use the RETURN Key.)

4. Touch RESET, touch AUTO/START.

5. Reset the System to endpage=play condition.

TASK: UPDATE THE MAILING LIST

STARTING STEPS:
a. REWIND TAPE IN RIGHT HOLDER
b. WORK TAPE IN LEFT HOLDER
c. SAME
d. TRANSFER

Mr. John Smith
Acme Company
254 Allen Street
Jay City, Oregon

Mrs. Julie Jones
Counsellor
1107 Commonwealth Court
Sacramento, California

Miss Ellen Wolf
256 "A" Street
Boston, Mass.
} *delete*

Mr. Jason Clay
Managing Editor
46 Elm Street
Jacksonville, Florida

Mr. Richard Bates
5736 Main Street
Centerville, Illinois
} *delete*

Miss Barbara Swift
1036b Mason Terrace
Columbus, Ohio

learn(naj)
Mr. Seymore Elkins
87 Terrace Road
Burlington, Ohio
} *add*
]=p

Mrs. Lydia Johnson
10 Lilly Street
Salt Lake City, Utah
} *add*
]=p
CODE RETURN
EOD

The list needs updating. It must be done in TRANSFER and NOADJUST.

CHAPTER 12
MAILING LISTS AND DIRECTORIES

HOW TO DO:

1. Place the System in the NO ADJUST condition
   (type ℓ naj).

2. Transfer the first two addresses. Touch SEARCH,
   type *Miss space Ellen*
   Touch SEARCH.

   Miss[space]Ellen

   Miss Ellen Wolf
   256 "A" Street
   Boston, Mass.

3. Delete the next address as follows:
   Depress PLAY.
   Touch SEARCH, type *Mr. space Jason*
   Touch SEARCH.

   Mr. Jason Clay

   _____
   _____
   _____Florida

4. Transfer the next address as follows:
   Depress TRANSFER.
   SEARCH
   Mr. space Rich
   SEARCH

   Mr. Richard Bates

   _____
   _____Illinois

5. Delete the next address as follows:
   Depress PLAY.
   Touch SEARCH, type *Miss space Barbara*
   Touch SEARCH.

6. Transfer the next address as follows:
   Depress TRANSFER.
   Touch SEARCH, type CODE /.
   Touch SEARCH.

   LEFT TAPE

——— R	——— R	——OHIO	E.O.D.

   Here Now ⬆
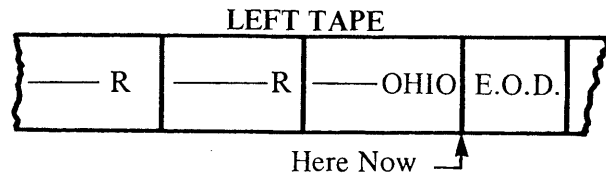
7. Type the new addresses, each followed by a new page command and a **CODE RETURN**. End with an **EOD** code.

| —OHIO | —R | UTAH | E.O.D. |

Added
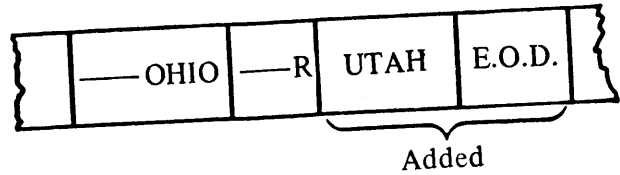
8. Rewind the tape, and depress **PLAY**.

TASK: PLAY BACK NEW UPDATED TAPE

STARTING STEPS:
a. **LEFT**
b. **REWIND**
c. **PLAY**
d. **ADJUST**

Mr. John Smith
Acme Company
254 Allen Street
Jay City, Oregon

Mrs. Julie Jones
Counsellor
1107 Commonwealth Court
Sacramento, California

Mr. Jason Clay
Managing Editor
46 Elm Street
Jacksonville, Florida

Miss Barbara Swift
1036b Mason Terrace
Columbus, Ohio

Mr. Seymore Elkins
87 Terrace Road
Burlington, Ohio

Mrs. Lydia Johnson
10 Lilly Street
Salt Lake City, Utah

HOW TO DO
1. Touch **AUTO/START**.

DIRECTORIES

Again, if your directory is to be played out with adjusted, or justified material, be sure to record it in NO ADJUST. If not you can record the directory in **SAME**.

TASK: ...RD THE FOLLOWING TELEPHONE DIRECTORY

STARTI... STEPS:
a. WORK TAPE IN
   RIGHT FOLDER
b. RIGHT
c. SAME
d. RECORD
e. REWIND

HOW TO ...

1. Place the System 1200 in **NO ADJUST** condition type (naj).

2. Record the list as shown.

3. Type a CODE RETURN to deactivate **NO ADJUST** and an EOD Code.

4. REWIND the tape.

5. Depress **PLAY**.

6. When finished, be sure to return the System to the normal endpage and line count conditions.

learn (naj)

Allen, Deborah	201
Arsenault, Albert	223
Barrett, Jacqueline	231
Battiatos, Richard	228
Bedardy, Gerard	202
Brody, Violet	211
Chen, Richard	235
Cloutier, Florence	245
Cohan, Rita	222
Cunningham, Alexander	244
Davids, Peter	210
DeCrescenzo, Robert	212
DeMaria, Barbara	246
DeMoglio, Marcia	224
Gallagher, John	236
Garnagan, Ann	203
Gosselly, James	220
Harris, Katherine	213
Haslam, Josephine	209
Hirschly, Marian	237
Hornasky, Marie	221
Ingalls, Francis	238
Johnson, Howard	204
Johnson, Johanna	229
Jones, John	241
Kibilkius, Avery	215
Miller, David	205
Nelson, Michael	230
Nadar, Paul	225
Peterson, Marcia	240
Prince, Howard	216
Quinn, Rachael	242
Richards, Raymond	217
Sands, William	207
Smith, Lawrence	227

CODE
RETURN

/

CHAPTER 12
MAILING LISTS AND DIRECTORIES

TASK: PLAY OUT THE DIRECTORY AS SHOWN

STARTING STEPS:
a. RIGHT
b. PLAY
c. ADJUST
d. REWIND

HOW TO DO:

1. In this lesson, you want to play back the directory in blocks of five names, with a space between each block. Since the new block of names begins six lines from the beginning, set the page length at 6 (CODE ℓ # 06).

2. To play out five names every six lines, set the lines-per-page at 5 (CODE ℓ ℓ 05).

3. To make the System skip the line between the blocks, set the endpage condition to eject (ℓ e e).

4. Touch **RESET**, touch **AUTO/START**.

Allen, Deborah	201
Arsenault, Albert	223
Barrett, Jacqueline	231
Battiatos, Richard	228
Bedardy, Gerard	202
Brody, Violet	211
Chen, Richard	235
Cloutier, Florence	245
Cohan, Rita	222
Cunningham, Alexander	244
Davids, Peter	210
DeCrescenzo, Robert	212
DeMaria, Barbara	246
DeMoglio, Marcia	224
Gallagher, John	236
Garnagan, Ann	203
Gosselly, James	220
Harris, Katherine	213
Haslam, Josephine	209
Hirschly, Marian	237
Hornasky, Marie	221
Ingalls, Francis	238
Johnson, Howard	204
Johnson, Johanna	229
Jones, John	241
Kibilkius, Avery	215
Miller, David	205
Nelson, Michael	230
Nadar, Paul	225
Peterson, Marcia	240
Prince, Howard	216
Quinn, Rachael	242
Richards, Raymond	217
Sands, William	207
Smith, Lawrence	227

5. You can play back the directory in any grouping you wish by changing the page length (CODE ℓ # xx) and the lines-per-page size (CODE ℓ ℓ xx), and using the endpage eject command (CODE ℓ e e).
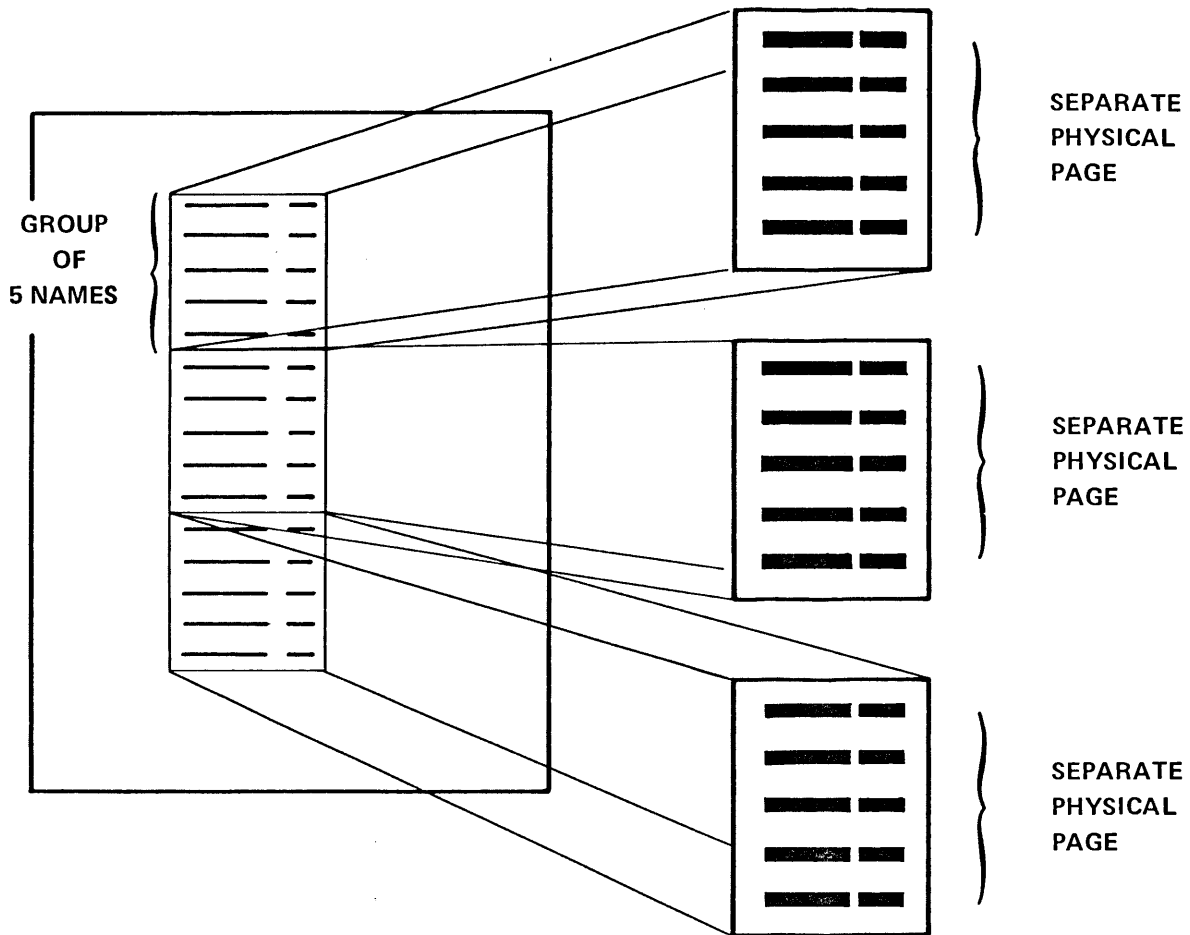
In this example, to play back in blocks of five, the page length size is set at 6, and the lines-per-page size at 5, which allows for one blank line between each group. If you want more than one blank line between groups, simply increase the page length size. When playing out directories in blocks, you must stop playback manually at the end of each page.

If you want double columns on a page, simply roll the paper back to the proper position, set the left-hand margin control at the desired point, touch the RESET key once, and continue playback. For further information, refer to Chapter 14, Formatting for Publication.

If you wish to playback a list without blocks, simply use the endpage eject command (CODE ℓ e e) to center the list evenly on each page.

CHAPTER 12
MAILING LISTS AND DIRECTORIES

TASK: UPDATE THE DIRECTORY AS FOLLOWS

STARTING STEPS:
a. DIRECTORY TAPE IN
    RIGHT HOLDER
b. WORK TAPE IN
    LEFT HOLDER
c. NAME
d. TRANSFER
e. REWIND

Allen, Deborah	201
Arsenault, Albert	223
Barrett, Jacqueline	231
Battiatos, Richard	228
Bedardy, Gerard	202
Brody, Violet	211
Chen, Richard	235
Cloutier, Florence	245
Cohan, Rita	222
Cunningham, Alexander	244
Davids, Peter	210
DeCrescenzo, Robert	212
DeMaria, Barbara	246
DeMoglio, Marcia	224
Gallagher, John	236
Garnagan, Ann	203
Gosselly, James	220
Harris, Katherine	213
Haslam, Josephine	209
Hirschly, Marian	237
Hornasky, Marie	221
Ingalls, Francis	238
Johnson, Howard	204
Johnson, Johanna	229
Jones, John	241
Kibilkius, Avery	215
Miller, David	205
Nelson, Michael	230
Nadar, Paul	225
Peterson, Marcia	240
Prince, Howard	216
Quinn, Rachael	242
Richards, Raymond	217
Sands, William	207
Smith, Lawrence	227

HOW TO DO:

1. Make the indicated changes in **TRANSFER**.

2. Be sure to place the System in **NO ADJUST** condition (since the directory was recorded in **NO ADJUST**).

3. When finished, depress **PLAY** and type a **CODE RETURN**.

4. Rewind the left tape.

CHAPTER REVIEW CHECK LIST

* Long lists (such as mailing lists or telephone directories), when they are to be played back with adjusted or justified material, are recorded in **NO ADJUST**.

* Updating a list is done in **TRANSFER** (or **EDIT**), and **NO ADJUST**, if recorded in **NO ADJUST**.

* When recording a mailing list, if the addresses vary in length, end each address with a CODE [=p. When playing back the list, you need to enter only the page length (**CODE ℓ #xx**) and the endpage (**CODE ℓ e e** or **CODE ℓ e s**) commands.

* A detailed explanation of using mailing lists to automatically address letters is found in the Masked Search section of Chapter 13.

Chapter 13
Document Assembly,
Programmed Document Assembly,
And Masked Search

INTRODUCTION

Many reports, proposals, engineering specifications, legal contracts, trusts and wills, contain sections and paragraphs which are used frequently. With the System 1200, you can record standard paragraphs on a library tape, labelling each paragraph with a unique Memo Code.

Two methods are available to assemble the new document from the standard paragraphs. With Document Assembly, the operator searches for the Memo Codes of the desired paragraphs, which are transferred to a tape in the second tape holder. She can, at the same time, type in any new text necessary. The new document, containing the desired paragraphs from the library tape and any necessary new text, is recorded on the second tape, ready for playback.

With Programmed Document Assembly, the operator prepares a program tape containing the Memo Codes of the desired paragraphs on the library tape. The program tape is used with the library tape, and the new document is played out automatically without operator attendance.

The Masked Search Feature, used with the Programmed Assembly condition, allows the System 1200 to "sort" automatically from a prerecorded list on tape. Masked Search is explained in the last section of this chapter.

DOCUMENT ASSEMBLY

When using Document Assembly, you first must prepare the Library Tape which includes the standard paragraphs, each identified by a different Memo Code. Variable information can be added by recording TOP Codes in the paragraphs. An EOD Code is not used until the very end of the tape.

After preparing the Library Tape, by typing the Memo Code of the appropriate paragraph, you can assemble a new document, using the standard paragraphs in any order you wish. Also, you can add any new information necessary as you assemble the new document. Document Assembly can be performed in **PLAY** or **TRANSFER**. In **PLAY**, you obtain only the playout of the new document. In **TRANSFER**, you obtain the playout and a tape of the new document.

TASK: RECORD THE LIBRARY TAPE AS SHOWN BELOW

```
T1.1

        The Trustees hereby acknowledge that they have received said
sum in trust and declare that they will hold, manage and invest the
same, together with the proceeds of any policies of insurance paid to them and
any other property which may hereafter be transferred to the trust by gift,
will, or otherwise from the Donor or anyone else and accepted by them as
Trustees, and after paying or making provision for all expenses of the
trust, including reasonable compensation for their services, will dispose
of the trust property and the net income therefrom as hereinafter provided.
```

T1.2

During the life of the Donor, the Trustees shall pay to g
or as g may in writing direct such part or all of the net income
and/or principal of the trust as the Donor may from time to
time request in writing, and in their uncontrolled discretion
the Trustees may at any time or times and for any reason pay any
part or all of the net income and/or principal of the trust to the
Donor, even though g does not request such payment. Any net income
not so paid shall be added to the principal of the trust at such
times as the Trustees shall determine and in any event upon
the death of the Donor.

T1.3

Upon the death of the Donor, the Trustees shall dispose of the
remaining principal of the trust, including any property to which they are
entitled as a result of the death of the Donor, as follows:

T1.3-4

4. If the Donor's g and the Donor die under such circumstances that
there is not sufficient evidence that they died other than simul-
taneously, for the purpose of this indenture the Donor's g shall
be deemed to have survived the Donor.

T1.4

All property which is to be held by the Trustees as provided
in this Article shall be held by the Trustees as a separate trust
(herein called the "marital trust") as follows:

T1.4-1

1. The Trustees shall pay the net income of the marital trust at
least as often as annually to the Donor's g as long as g lives;
and in their uncontrolled discretion the Trustees may at any time
or times and for any reason pay any part or all of the principal
of the marital trust to g.

T1.4-1 (Alt.)

1. The Trustees shall pay the net income of the marital trust
at least as often as annually to the Donor's g as long as g lives.
The Trustees shall also pay to g such part or all of the principal
of the marital trust as g may from time to time request in writing;
and in their uncontrolled discretion the Trustees may at any time
or times and for any reason pay any part or all of the principal
of the marital trust to g, even though g does not request such payment.

/

STARTING STEPS:
 WORK TAPE IN
   RIGHT HOLDER
b. SAME
c. RECORD
d. REWIND

HOW TO DO:
1. Record the paragraphs as shown. Use the numbers above each paragraph for the Memo Code. When recording your own Library Tape, you can design any type of Memo Codes that suit your needs.
2. For this lesson, you may skip over the appropriate **STOP** Codes in the example and type just the paragraph text. The positions, where the **STOP** Codes normally are recorded, are indicated on the example.
3. Do not record on **EOD** Code until all the standard paragraphs are recorded.
   REWIND the tape when finished.

TASK: ASSEMBLE PARAGRAPHS T1.1, T1.3, and T1.4-1 (Alt.) ON A NEW TAPE

STARTING STEPS:
a. **LIBRARY TAPE IN**
   RIGHT HOLDER
b. **WORK TAPE IN**
   LEFT HOLDER
c. **SAME**
d. **TRANSFER**
e. **REWIND**

HOW TO DO:
Assemble Paragraphs T1.1, T1.3, T1.4-1 (Alt.) on a new tape.
1. Transfer paragraph T1.1.
   SEARCH
   (CODE m) *T1.2*
   SEARCH
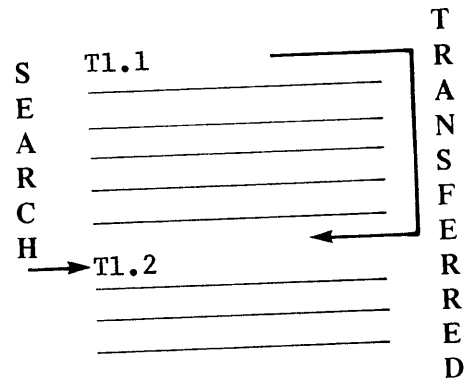
> **NOTE:**
> *You must search the Memo Code for the next paragraph in order to transfer paragraph T1.1. Everything prior to the Memo Code being searched is transferred. Memo Codes are transferred along with the paragraph.*

2. Skip paragraph *T1.2*
   Depress **PLAY** and **RIGHT**.
   SKIP the paragraph by searching the Memo Code
of the paragraph you wish to transfer.
   SEARCH
   (CODE m) *T1.3*
   SEARCH

```
                                              T1.1
                        IN PLAY   _____
                                  _____
                   S    ┌───── T1.2           ┐      S
                   E    │      _____  │      K
                   A  T │      _____  │      I
                   R  O │      _____  │      P
                   C    │      _____ ─┘      P
                   H    └─► T1.3                       E
                                                       D
```

+---+
| NOTE: |
| *The right tape advances forward to the Memo* |
| *Code of the paragraph you wish to Transfer,* |
| *bypassing the unwanted paragraph.* |
+---+

3. Transfer paragraph T1.3.
   Depress **TRANSFER**.
   Transfer T1.3 by
   SEARCH
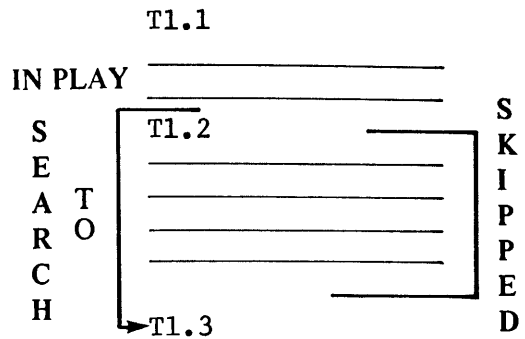   **(CODE m)** *T1.3-4*
   SEARCH

```
                                            T
                           IN TRANSFER      R
                                            A
               S    ┌── T1.3          ┐     N
               E    │   _____  │     S
               A    │   _____  │     F
               R    │   _____  │     E
               C    │   _____ ─┘     R
               H    └─► T1.3-4              R
                                            E
                                            D
```
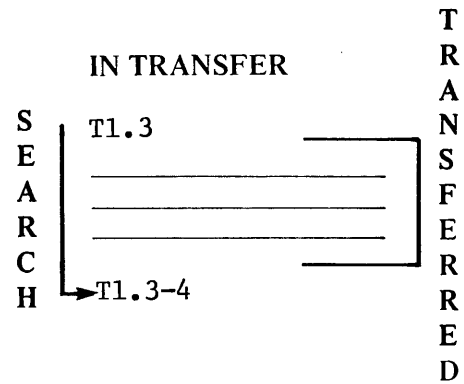
4. Skip paragraphs T1.3-4, T1.4, T1.4-1.
   Depress **PLAY** and **RIGHT**.
   SEARCH
   (CODE m) *T1.4-1 (Alt.)*
   SEARCH
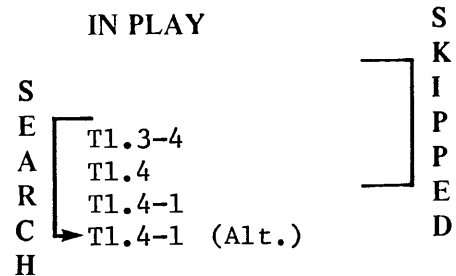
```
                           IN PLAY          S
                                            K
               S                    ┐       I
               E    ┌─ T1.3-4       │       P
               A    │  T1.4         │       P
               R    │  T1.4-1      ─┘       E
               C    └─► T1.4-1  (Alt.)      D
               H
```

5. Transfer paragraph T1.4-1 (Alt.)
   Depress TRANSFER
   SEARCH
   SEARCH

```
         IN TRANSFER                  T
                                      R
 S                                    A
 E    T1.4-1 (AH.)    ┌──             N
 A    ─────────────── │               S
 R    ─────────────── │               F
 C    ─────────────── │               E
 H └─► /               └──            R
                                      R
                                      E
                                      D
```
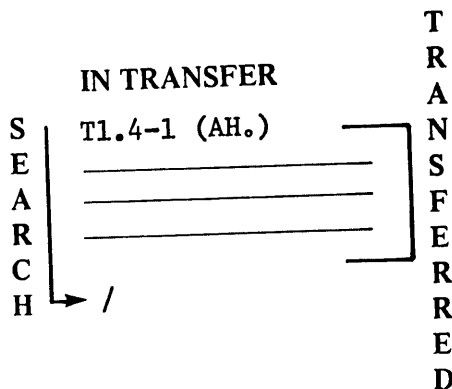
6. REWIND

   . PLAY, SAME, and LEFT

   . AUTO/START

Verify that you have assembled the
correct paragraphs.

PROGRAMMED ASSEMBLY

With Programmed Document Assembly, an operator-prepared Program Tape is combined with a Library Tape of standard sentences, paragraphs or pages, to produce a new document automatically without operator attendance.

Programmed Assembly is a special machine condition. You must type the command learn (c) before combining the Program Tape and the Library Tape. The command learn (d) cancels the Programmed Assembly condition.

Each paragraph on the Library Tape must be preceded by a unique Memo Code, and must be followed by a SWITCH READ Code to return control to the Program Tape. Each paragraph also can contain normal SWITCH READ Codes for adding variable information.

The Program Tape must contain the Memo Codes in the order the document is to be assembled, along with any variable or new information, and any needed REWIND codes (necessary when, for example, in the assembled document, the paragraph recorded as M4 on the Library Tape is to precede the paragraph m1). In the learn (c) condition, the REWIND Code (CODE w) causes the tape in the opposite holder (the Library Tape) to rewind.

CHAPTER 13
DOCUMENT ASSEMBLY, PROGRAMMED DOCUMENT ASSEMBLY, AND MASKED SEARCH

TASK: RECORD THE LIBRARY TAPE AS SHOWN BELOW

STARTING STEPS:
a. WORK TAPE IN
   RIGHT HOLDER
b. RECORD
c. SAME
d. RIGHT
e. REWIND

```
m1
A medical examination is required before
a student will be accepted.
[RETURN]
4
m2
Transcripts of undergraduate records
must be submitted with applications.
[RETURN]
4
m3
Five references from professional or scholastic
sources are required from each applicant.
[RETURN]
4
m4
The Graduate Record Examination will be given
on[CODE 4]
[space]at the college。
[RETURN]
4
/
```

HOW TO DO:

1. Type the first line of the example and **RETURN**.

```
CODE
m1
```

---

2. Type the first paragraph and **RETURN**.

```
m1
A medical examination is required before
a student will be accepted。
```

---

3. Touch **RETURN**, which ends the paragraph with a double **RETURN**.

```
m1
A medical examination is required before
a student will be accepted。
```

---

4. Touch **CODE**, type *4*, which directs the System 1200 to switch to the Program Tape.

```
m1
A medical examination is required before
a student will be accepted.
4
▲
```

```
                                        m2
                                        Transcripts of undergraduate records
                                        must be submitted with applications.
                                        [RETURN]
                                        4
5  Type the rest of the Library Tape.  m3
                                        Five references from professional or scholastic
                                        sources are required from each applicant.
6  Rewind the Library Tape.            [RETURN]
                                        4
                                        m4
                                        The Graduate Record Examination will be given
                                        on[CODE 4]
                                        [space]at the college.
                                        [RETURN]
                                        4
                                        /
```

TASK: RECORD THE PROGRAM TAPE AS FOLLOWS

STARTING STEPS:

a. A SECOND WORK
   TAPE IN
   LEFT HOLDER
b. RECORD
c. LEFT
d. REWIND
e. LEFT MARGIN AT 15

```
[CODE m]2
[CODE m]4
[space]July 3, 1974[CODE 4]
[CODE w]  (This causes the Library Tape
                     to be rewound.)
[CODE m]1
[CODE EOD]
```

HOW TO DO:

1 Record on the tape a format with a line length
  of 55 characters.

```
learn(format
15
@
b
```
)

2 You wish to assemble paragraphs m2, m4 and
  m1, in this order.
  Type the Memo Code for the first paragraph.

```
m2 - R
```

3. Type the Memo Code for the second paragraph.
   Paragraph 4 contains a SWITCH Code for variable
   information.
   Type in the variable information, preceded by a
   space, followed by a SWITCH code.

```
m2
m4 - R       CODE
 July 3, 1974 4
```

4. The next paragraph to be assembled is m1, which is before m4 on the Library Tape. You can search back on the tape by typing a RE-WIND Code (CODE w) which directs the System to rewind the Library Tape, and to begin searching for m1 from the beginning of the tape.

m2
m4   **CODE**
  July 3, 1974 4

w
▲

> **NOTE:**
> *Remember* **CODE** w *used with* learn (c) *condition directs the System to rewind the tape in the opposite holder. A* **CODE 9** *in the* learn (c) *condition causes the tape in the holder in use to rewind*

5. Type the last Memo Code (m1) and an EOD Code.

m2
m4   **CODE**
  July 3, 1974 4
w
m1
/

TASK: PLAY BACK BOTH TAPES ASSEMBLING PARAGRAPHS m2, m4 AND m1 ON PAPER

STARTING STEPS:
a. PROGRAM TAPE IN
   LEFT HOLDER
b. LIBRARY TAPE IN
   RIGHT HOLDER
c. LEFT
d. REWIND
e. PLAY
f. ADJUST

HOW TO DO:

1. Touch CODE, type ℓ, type *c*.
This directs the System to switch to the other tape when it reads a Memo Code, search for the Memo Code, and play out the text immediately following the Memo Code.

                          learn(c)

2. Touch **AUTO/START.**

EXAMPLE OF PLAYBACK

```
              Transcripts of undergraduate records must be submitted
              with applications.
                                          |
              The Graduate Record Examination will be given on July
              3, 1973 at the college.          `

              A medical examination is required before a student will
              be accepted.
```

> **NOTE:**
> *Remember, to cancel the Programmed Assembly condition, touch* **CODE**, *type* ℓ, *type d.*

```
learn(d)
cancels
learn(c)
```

TASK: APPLICATION EXAMPLE - CREATING INDIVIDUAL LETTERS

A college admissions office needs to reply (personally, if possible) to all applicants who write in requesting information about requirements, forms, fees, dormitory information, opening dates, etc. Not all applicants ask the same questions, nor are the questions in any letter in a specific order. Programmed Assembly is the perfect answer - you choose the answers and the order for each individual letter.

STARTING STEPS:

a. WORK TAPE IN
   RIGHT HOLDER
b. RECORD
c. SAME
d. RIGHT
e. REWIND

HOW TO DO:

RECORD THE
LIBRARY TAPE
AS SHOWN

```
[CODE m 1] (Opening Paragraph)
Thank you for your interest in Alpha University.  I hope the following
information answers the questions you raised about admissions policies.
[RETURN]
[CODE 4]
[CODE m 2] (College Boards)
Alpha University requires that all applicants take the College Board
Aptitude Tests and at least two Achievement tests in English and math-
ematics.
[RETURN]
[CODE 4]
[CODE m 3] (High School Grade Standards)
High school grades can help your chances of admission, particularly if
you have a B average or higher.  However, no strict rule is adhered to
in this regard.
[RETURN]
[CODE 4]
[CODE m 4] (Medical Forms)
We are enclosing a medical examination form to be filled out by your
physician.  We also require a small pox vaccination within the last
five years.
[RETURN]
[CODE 4]
[CODE m 5] (Recommendations)
Alpha University requires at least two recommendations from non-rela-
tives, preferably teachers, clergymen or employers.
```

```
[RETURN]
[CODE 4]
[CODE m 6] (Opening Day)
The University begins classes on September 17, 1973.  All paperwork
should be completed prior to this date.
[RETURN]
[CODE 4]
[CODE m 7] (Tuition Fees)
Tuition at the university is $2,500 per year or $1,750 per semester.
Tuition fees must be paid within a week of the opening day of classes.
Refunds will not be made if the student withdraws from the university.
[RETURN]
[CODE 4]
[CODE m 8] (Dormitory Information)
Information about the dormitories and student apartments available on
campus is enclosed in our publication "Living on Campus".
[RETURN]
[CODE 4]
[CODE m 9] (Closing Paragraph)
If you have any further questions regarding the above or other matters,
please contact us again.
[RETURN]
Sincerely,
[RETURN]
[RETURN]
Ron Bellows CR
Dean of Admissions CR
[CODE 4]
/
```

TASK: CREATING INDIVIDUAL PROGRAM TAPES

When a student writes in asking how much the tuition is at Alpha University, if he should take college boards, and if the school has dormitories, the operator of the System 1200 records a Program Tape containing the date, name and address of the student, salutation, and a series of Memo Codes denoting the desired paragraphs.

If the applicant asks a non-standard question, the answer also is recorded on the Program Tape, at any point.

If you wish, you can record a whole series of names, addresses and paragraphs, and separate each with a (CODE w) (to rewind the Library Tape) and a CODE]=p. Set the System 1200 to stop at the end of a page or to eject (with continuous paper). It will stop or eject when it reaches the (CODE]=p). The letter must be played back in the Programmed Assembly condition (Code ℓ c).

STARTING STEPS:

a. SECOND WORK
   TAPE IN
   LEFT HOLDER
b. RECORD
c. LEFT
d. REWIND

CHAPTER 13
DOCUMENT ASSEMBLY, PROGRAMMED DOCUMENT
ASSEMBLY, AND MASKED SEARCH

HOW TO DO:

1. Record the program tape as follows:

```
March 23, 1973


Mr. William Anderson  CR
27 Park Lane  CR
Brigham, Pennsylvania  R
[RETURN]
Dear Mr. Anderson: R
[RETURN]
[CODE m 1]
[CODE m 7]
[CODE w]
(Because the next paragraph is located before the preceding paragraph
on the Library Tape, Code w directs the System 1200 to rewind the Library
Tape).
[CODE m 2]
[CODE m 8]
[CODE m 9]
CODE /
```


TASK: PLAY BACK THE INDIVIDUALIZED LETTER

STARTING STEPS:

a. REWIND BOTH
   TAPES
b. LEFT
c. PLAY
d. SAME

HOW TO DO:

1. Touch AUTO/START.

MASKED SEARCH

The Masked Search feature of the System 1200 utilizes the Programmed Assembly condition to sort automatically from a prerecorded list on tape.

Assume, as an example, you have 100 names and addresses on a list which you use for form letters. However, at times you want to send a mailing only to selected people on the list (doctors at one time, lawyers at another).

To set up the mailing list on a Library Tape, before each name and address, record a Memo Code that identifies the addressee's occupation. Include SWITCH Codes at the end of both the inside address and salutation. Be sure to record the Library Tape in NO ADJUST.

The Letter Program Tape includes the Memo Code of the desired occupation, recorded at the place where the address is to be played out, a SWITCH Code to return playback to the salutation, and the body of the letter.

Before playback, initiate Programmed Assembly (CODE ℓ c). Set an endpage condition (stop or eject), the appropriate page length command, and begin playback from the Letter Program Tape. Each time the letter tape rewinds and the System encounters CODEmLAWYER, it switches to the Library Tape, searches to the next lawyer on the list, plays back the inside address, switches to the letter Program Tape, then back to the Library Tape for the salutation, and then back to the program tape for the body of the letter. It continues until the EOD Code is reached on the Library Tape.

To play back only the address, on labels or envelopes, record an Address Program Tape as shown. The CODEmLAWYER again searches the Library Tape for the next LAWYER on the list. The SWITCH Code at the end of the address switches control back to the Address Program Tape. Either playback stops or the paper ejects (depending on the end page condition you use), the Address Program Tape rewinds, then the System again searches the Library Tape for the next LAWYER address.

LIBRARY TAPE

```
mLAWYER
Mr. Harvey Jones, Esq.
1 State Street
Boston, Massachusetts4
Dear Mr. Jones:4
mDOCTOR
Dr. Rudolph Longrin
250 Washington Street
Brighton, Pennsylvania4
Dear Dr. Longrin4
etc.
```

LETTER PROGRAM TAPE

```
November 3, 1974

mLAWYER

4

Body of Letter
]=p
9
/
```

ADDRESS PROGRAM TAPE

```
mLAWYER

]=p
9
/
```

A more sophisticated example of this application creates sublists that are small sections of mailing lists. Each sublist is included in a larger list, which again can be part of a larger list.

For example, your list is divided primarily among the various geographical areas in the country. You assign a digit to each area, so CODE m1 represents the Northeast. You break it down a little further, and assign a digit that represents the size of the city the addressee lives in. So CODE m1 2 represents the addressee lives in the Northeast in a city of 100,000 inhabitants. In a further breakdown, CODE m1 2 5, the 5 represents the addressee makes over $15,000 per year.

When you create your letter, use the Memo (ide that corresponds to the segment of the mailing list you want to use. If you want to reach everyone in the Northeast, type:

```
November 4, 1974
ml

Body of the Letter
]=p
9
/
```

Each time the System reads **CODE ml** in the letter, it switches to the other tape, and searches for any address preceded by **CODE ml**, or **CODE ml 5 7** or any Memo Code that begins with **CODE ml**.

If you wish to send the letter to the residents of large cities in the Northeast you type **CODE ml 2** in place of **CODE ml**.

The unique feature of Masked Search is the ability to select any of the Codes. If you want to send letters ily to those people making over $15,000 a year, type:

[CODE m]   [space]   [space]   5

The System 1200 finds all people making over $15,000, regardless where they are located, or what size city they live in. The System skips over any characters in place of the spaces, and reads only Memo Codes here the third character is 5.

Another variation of Masked Search allows you to sort lists with extensive categories. For example, ie Weber Distribution House wants to keep its est customers informed of its latest publications. Since the customers are interested in categories of ooks only related to their individual fields, the ddress list is set up with Memo Codes identifying only the publications related to each customer. The rst step is to set up a code system for the various ublication categories.

Category	Code
Art	001
Biology	002
Cooking	003
Drafting	004
Engineering	005
Fiction	006
Geography	007
History	008
Juvenile	009
Math	010
etc.	

The Library Tape is recorded with the various identifying codes, customer names and addresses, and, of course, appropriate switch codes. Again, be sure to record the list in **NO ADJUST**.

See the example to the right.

Clarence Seymore is interested only in drafting, engineering and math publications. Mary Clark wants only art, cooking and juvenile books. The entire mailing list is recorded accordingly.

```
m004
4
m005
4
m010
4
mADDRESS
Mr. Clarence Seymore
27 Lake Drive
Cincinnati, Ohio

Dear Mr. Seymore:
4
m001
4
m003
4
m009
4
mADDRESS
Mrs. Mary Clark
Honeydew Blvd.
Stowe, Vt.

Dear Mrs. Clark:
4
m002
4
m007
4
m008
4
mADDRESS
Mr. Paul Wheatcroft
Department Head
St. Joseph's Grammar School
Orlando, Florida

Dear Mr. Wheatcroft:
4
etc.
```

assume Weber received two new engineering books. The Program Tape is recorded as follows:

```
m005
mADDRESS

We are most pleased to inform you that we now have available the
following publications on engineering:

        1.   The Integrated Circuits Catalog for Design
             Engineers - by Texas Instruments Incorp. -
             First Edition @ $4.95

        2.   Nuclear News Buyers Guide 72 - by General
             Electric - @ $2.95

If you are interested simply fill in the appropriate information
on the enclosed card and mail today.

                          Sincerely yours,


                          Weber Distribution House

]=p
9
/
```

Be sure to type the Programmed Assembly command (CODE ℓ c), then touch AUTO/START. The System searches for m005 (engineering), switches back to the Program Tape where it is instructed to look for mADDRESS, plays out the appropriate address, switches back to the program tape, types out the body of the letter, rewinds and proceeds to locate the next m005 for engineering. This process is repeated until all the m005's for engineering are exhausted.

When new cooking publications arrive, the Program Tape is set up as follows:

```
m003
mADDRESS

Body of letter with appropriate listing of cooking publications.
]=p
9
/
```

Again, the System searches out all customer interested in cookbooks, and types out individual, personalized letters.

Do not use CODE w at the end of the letter, since it causes the Library Tape (in the Programmed Assembly condition) to rewind. Instead, use a CODE]=p before the CODE 9 and use the endpage=stop command.

CHAPTER 13
DOCUMENT ASSEMBLY, PROGRAMMED DOCUMENT
ASSEMBLY, AND MASKED SEARCH

CHAPTER REVIEW CHECK LIST
FOR DOCUMENT ASSEMBLY:

- When searching a Memo Code, be sure to type the Memo Code exactly as shown.
- When searching in TRANSFER, everything prior to the line or Memo Code being searched is transferred.
- SKIP unwanted paragraphs in PLAY. Search to the Memo Code you do want, and everything prior to that is skipped.
- If you play back a Memo Code, it is not transferred to the second tape. If you do not play back the Memo Code, it is transferred.
- When searching, if the tape continues to advance forward past where you think it should, and/or the EOD light illuminates, the System was not able to locate the line or Memo Code you described. Usually, you typed something incorrectly. Stop the SEARCH procedure by touching RESET. Either REWIND and SEARCH again, or, if you are in TRANSFER, SEARCH in PLAY to a point on each tape which you know is correct and continue from there.

FOR PROGRAMMED ASSEMBLY:

- In Programmed Assembly (CODE ℓ c), when the System 1200 encounters a Memo Code on a tape, it switches to the other tape, and searches for that same Memo Code. When it finds the Memo Code, it plays back the material following the Memo Code. CODE ℓ d cancels Programmed Assembly.
- The Library Tape contains a series of pages, paragraphs, sentences or words preceded by Memo Codes, and followed by SWITCH codes.
- The Program Tape contains a series of Memo Codes and/or text that directs which paragraphs are to be extracted from the Library Tape.
- CODE w in the Programmed Assembly condition directs the System 1200 to rewind the opposite tape. CODE 9 rewinds the same tape.
- The prerecorded paragraphs on the Library Tape can contain switch codes for variable information. The variable information can be recorded on the Program Tape along with the Memo Codes.
- Additional paragraphs that vary with each document can be recorded on the Program Tape, along with the Memo Codes.

Chapter 14
Formatting For
Publications

CHANGING FORMATS FOR PUBLICATIONS

Playout from the System 1200 which is to be used for publication purposes, can be designed with both style and variety by recording the proper format settings at the desired positions.

Consider the following example: you have recorded a document with standard margins and tab stops (see Figure A). You would like to have playback in **ADJUST** or **JUSTIFY** as shown in Figure B.
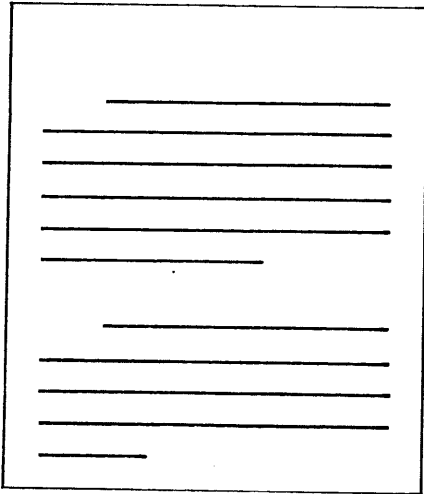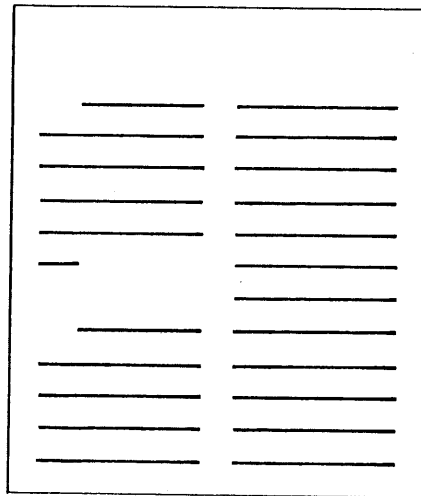
Figure A

Figure B

In order to playout a double column format, each column must be played out separately. This presents a problem because the System cannot accept a new format while part of a line of type is still in the memory. If you do move from one column to another and set a new format, part of the playout line will be lost.

The solution is as follows: set the left-hand margin control at the point you want the left margin of the left column. Type the format (using **NO PRINT** Mode, if desired), including tabs, adjust zone, and the appropriate right-hand margin to allow for a narrow column. Record this format on a blank tape, and rewind the tape.

Next, move the left-hand margin control at the point of the left-hand margin of the right-hand column. Recall the format form the rewound tape with **CODE MEMO OUT** (again, use the **NO PRINT** Key, if you have a System 1222). Both formats are now stored in the memory.

Now, set the left-hand margin control back at the position for the left column. Begin playback of the left column in either **ADJUST** or **JUSTIFY**. Be sure to set the proper line count, and an end page=stop command.

When playback stops at the bottom of the page, rotate the platen back by hand one line above the first ..ne of text in the left column. Space over and set the left-hand margin control at the appropriate position for the left margin of the right column. Carrier return once to clear the spaces from the memory. Do not)uch the **RESET** Key because you will lose the text in the memory. Touch **AUTO/START** to play back ..1e second column. Remember to allow for the carrier return in setting up the line count.

When the second column is complete, again set the left-hand margin control back at the position of the ft column. Carrier return, and continue playback on a new sheet of paper.

```
learn(format   learn(format
@   T        ) @   T         )
```
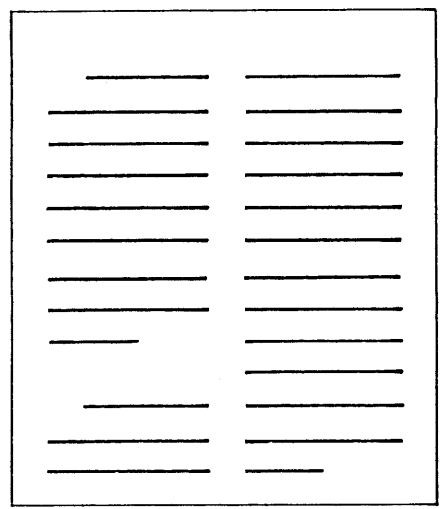
Consider this next example: you wish to obtain a "run-around" effect.

In the previous example, you learned the System ?00 can retain two or more format settings, as long as the format settings do not overlap. In this example, the two formats being used overlap, and ,e System cannot accept both at the same time.

You first must play back the text next to the photograph. Set the left-hand margin control far lough in to allow room for the photograph (for example, 45 on the scale). Carrier return once, set the format with tabs, the adjust zone and the right- ind margin at the desired positions (using the

PHOTO
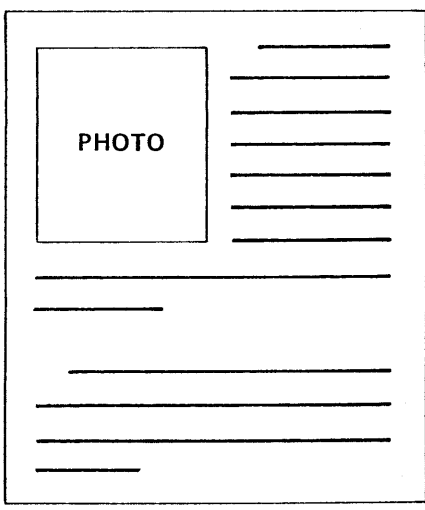
i,O PRINT Mode with the System 1222). Play back the text in **ADJUST** or **JUSTIFY**, up to the desired location on the paper. You must stop playback at the end of a paragraph.

Unfortunately, a paragraph cannot be split, as in the first example, because you must touch **RESET** and ..iange the format setting. If you stop in the middle of a line, you will lose the text in memory when you touch **RESET**.

Touch **RESET**, which positions the carrier at the far-left of the carriage, enter the new format setting ,..sing **NO PRINT** Mode), roll back the platen to compensate for the carrier returns supplied by **RESET** and the formatting, and continue playback of the remaining text.

Chapter 15
Automatic Page
Numbering And Titling

INTRODUCTION

In Chapter 9 you learned how to play out a multi-page document automatically by using end page (stop or eject), page length and lines-per-page commands. By using the second tape drive on your System 1200, along with **SWITCH READ** codes, end page* (stop or eject) commands, and lines-per-page commands, you simultaneously can number and/or title each page automatically, at the top or the bottom of the page.
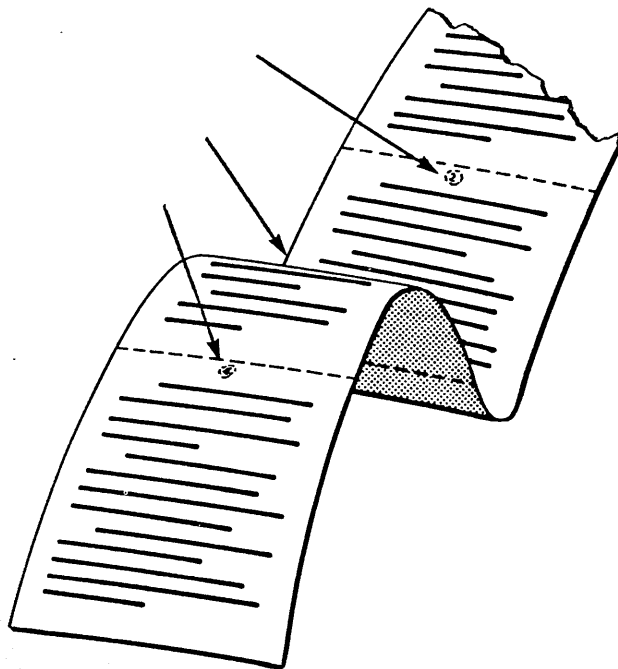
AT THE TOP

In this lesson, you are to play back a document tape (Prerecorded Tape) with titles and numbers at the top of each page. If you wish, use your own document tape.

To number and/or title pages at the top automatically, you must prepare a page numbering tape containing:

the page numbers and/or titles,
adequate carrier returns to separate the title from the body of the document,
and **SWITCH READ** codes to return control to the document tape after the number and/or title is played out.

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CHAPTER 15
AUTOMATIC PAGE NUMBERING AND TITLING

TASK: RECORD THE PAGE NUMBERING TAPE AS SHOWN

```
Legal Document              -2-           Dec. 1, 1972
[Return]
[Return]
[Code 4]
Legal Document              -3-           Dec. 1, 1972
[Return]
[Return]
[Code 4]
Legal Document              -4-           Dec. 1, 1972
[Return]
[Return]
[Code 4]
```

STARTING STEPS:
a. WORK TAPE IN
   LEFT HOLDER
b. RECORD
c. SAME
d. LEFT
e. REWIND

HOW TO DO: RECORD THE PAGE NUMBERING TAPE

1. Type **CODE** ℓ **(naj).**
2. Type the first line of the example.

Legal Document   -2-   Dec. 1, 1972

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3. Touch **RETURN** twice.
   The extra **RETURNS** must be included to separate the page number and/or title from the body of the document.

Legal Document   -2-   Dec. 1, 1972

↑

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4. Touch **CODE,** type **4.**
   This **SWITCH READ** code returns control to the document tape so the System can play out the next page of the document.

Legal Document   -2-   Dec. 1, 1972

4
↑

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5. Type the rest of the page numbers and titles as
   as shown in the example.

6. Type an **EOD** Code.

TASK: PLAY BACK BOTH TAPES AUTOMATICALLY NUMBERING EACH PAGE AT THE TOP

STARTING STEPS:

a. PRERECORDED TAPE IN
   RIGHT HOLDER

b. PAGE NUMBERING TAPE
   IN LEFT HOLDER

c. REWIND BOTH TAPES

d. RIGHT

e. PLAY

f. SAME

HOW TO DO: PAGE NUMBER IN PLAYBACK

learn(endpage=*eject)

1. Type the following command:
   CODE ℓ e * e
   (or for single-sheet paper
   CODE ℓ e * s)
   End page * (eject or stop) directs the System
   200 to play out a page of material, eject the paper
   (CODE ℓ e * e), or stop (CODE ℓ e * s), and then
   switch to the other tape drive (containing the page
   numbering tape). The normal endpage commands
   (CODE ℓ e e or CODE ℓ e s) do not cause the
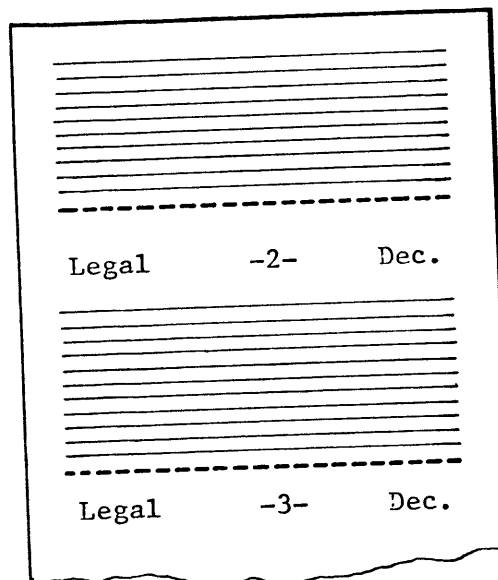   System to switch to the other tape drive.
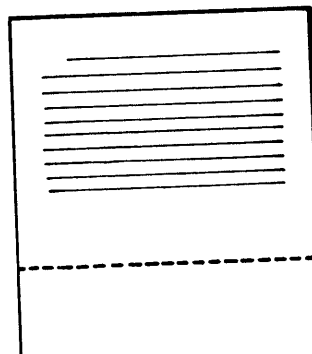
2. Touch **RESET**.

3. Roll the platen down so the typing line is posi-
   tioned where you want the title played out on a
   clean sheet of paper (about *eight* lines from the
   top of the paper).

4. Touch **AUTO/START**.

5. Play back *two* or *three* pages.

6. Place the System back in normal playback con-
   dition (CODE ℓ e p).

Legal   -2-   Dec.

Legal   -3-   Dec.

OTHER HELPFUL HINTS

If you want only a page number with no title or date, simply record the second tape as illustrated:

```
[CODE o]-2-
RETURN
RETURN
[CODE 4]
[CODE o]-3-
RETURN
RETURN
[CODE 4]
 etc.
```

Remember, the hyphens before and after the number must be coded hyphens. You cannot use an uncoded hyphen immeidately following a center code.

The page number and title plus the extra carrier returns are counted along with the body of the document as part of the line count. Therefore, in the above example, page 1 contains fifty lines of document text, while pages 2, 3, and 4 contain the title line, two carrier returns and 47 lines of text. If you prefer longer sections of text, change the lines-per-page command to 53 (CODE ℓ ℓ 53) to compensate for the title and **RETURNS.**

It makes no difference if the document is in the right or left tape drive, or if the page numbering tape is in the right or left tape drive. When playing back, depress the button for the tape drive that contains the document.

In the example you did not number page 1. If you wish to number page 1, record the page number and title at the beginning of your page numbering tape. Play back with the tape control button depressed for the drive containing the page numbering tape.

AT THE BOTTOM

To play back a document tape with titles and/or numbers at the bottom of each page, you again must use the end page * eject command and a page numbering tape along with a lines-per-page command.

To properly record the page numbering tape, you must make the following decisions:

1. The **CODE learn (#/page = ??)** (the page size) of the paper you are using.
2. The number of lines of the document tape to be played out per page.
3. The number of lines down from the top of the paper the document is to be located (the top margin).
4. The number of lines down from the document the page number and/or title line(s) is to be located.
5. The amount of page number and/or title line(s).

In this lesson, you are to play back 50 lines of the document tape (Prerecorded Tape), beginning eight lines from the top of a sheet of standard size continuous paper. At the end of the 50 lines, you want to skip a line, switch to the page numbering tape, play out the page number and/or title line(s), carrier return until the typing line is eight lines from the top of the second sheet of continuous paper, then switch control back to the document tape to repeat the process.

CHAPTER 15
AUTOMATIC PAGE NUMBERING AND TITLING

Study the diagram. The answers to questions one through five are:
1. CODE learn (#/page = 66) (for standard paper).
2. 50
3. 8
4. 2
5. 1
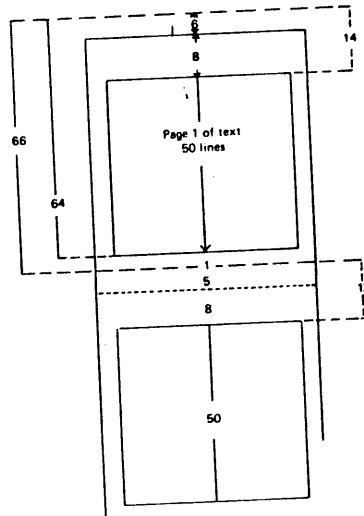
You now must:
6. Subtract Answer No. 4 (2) from Answer No. 1 (66) to find the correct CODE learn (lines/page = ??).
   Lines-per-page, in this lesson, equals 64.
7. Subtract Answer No. 2 (50) from Answer No. 6 (64) to find the proper number of carrier returns to
   record at the beginning of the page numbering tape (in this lesson, 14).
8. Subtract Answer No. 5 from Answer No. 7 to find the proper number of carrier returns to record
   after the first page (in this lesson, 13).
9. Subtract Answer No. 3 from Answer No. 7 to find the number of lines you must move the platen back
   above the top of the first page before starting the project (in this lesson, 6).

TASK: RECORD THE PAGE NUMBERING TAPE AS SHOWN

CODE ℓ (naj)	
RETURN	(14 times)
CODE 4	
CODE o - 1 -	(remember to code the hyphens)
RETURN	(13 times)
CODE 4	
CODE o - 2 -	(again, code the hyphens)
RETURN	(13 times)
CODE 4	
CODE o - 3 -	
RETURN	(13 times)
CODE 4	
etc.	
CODE /	

CHAPTER 15
AUTOMATIC PAGE NUMBERING AND TITLING

STARTING STEPS:
a. WORK TAPE IN
   RIGHT HOLDER
b. RECORD
c. SAME
d. LEFT
e. REWIND

HOW TO DO:
Record as indicated above, including as many
page numbers as necessary before the End of
Document code.

TASK: PLAYBACK BOTH TAPES AUTOMATICALLY NUMBERING EACH PAGE
AT THE BOTTOM

STARTING STEPS:
a. PRERECORDED TAPE   c. REWIND BOTH
   IN LEFT HOLDER   TAPES
b. PAGE NUMBERING TAPE   d. RIGHT
   IN RIGHT HOLDER   e. PLAY
                             f. SAME

HOW TO DO:
1. Type CODE ℓ ℓ 64
2. Type CODE ℓ e * e
3. Insert continuous paper in the typewriter so the
   typing line is positioned at the top of the first
   page.
4. Roll the platen backward *six* lines.
5. Touch RESET, and roll the platen backward
   one line to compensate for the line feed generated
   by RESET.
6. Touch AUTO/START.
7. Play back two or three pages.

OTHER HELPFUL HINTS
For other than standard sized continuous paper, you must enter the CODE learn (#/page = xx) before
entering CODE ℓ e * e.
Use steps 1 through 9 in the beginning of this section as an easy guide when setting up page formatting.
It makes no difference in which tape drive the document and page numbering tapes are located. When
playing back, depress the button for the tape drive that contains the page numbering tape. Also, be sure to
touch RESET after typing the end page, lines-per-page and page length commands.
You can record permanent page numbering tapes to be used whenever needed.
Don't forget to start with CODE learn (naj) when recording the page numbering tape. Although not
necessary in this lesson, CODE learn (naj) must be recorded, when the document is to be played out in
ADJUST or JUSTIFY.