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ABSTRACT

The manual provides students with basic knowledge and practical applications needed in the efficient operation of the IBM Magnetic Tape Selectric Typewriter (MT/ST). It is designed for use as a text by business training students who have already completed one year of typewriting instruction while they are being instructed in the use of the MT/ST. Suggested adjuncts to the use of the manual are teacher demonstrations, visual aids, use of the IBM MT/ST Training Guide, and use of instructor devised supplemental practice. Fifty-eight lessons following the same basic format are provided. For each lesson an information section describes in detail (with illustrations) the part of the machine or procedure being taught. Comprehension is checked through use of an assignment consisting of several completion exercises. Some lessons also include practice experiences which give step-by-step directions in order to demonstrate a particular procedure on the machine. (Author/MS)

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MAGNETIC TAPE SELECTRIC TYPEWRITER

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E 004 849

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July 1974



DIVISION OF VOCATIONAL EDUCATION STEPHEN POLIACIK, ASSISTANT COMMISSIONER

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FOREWORD

This manual has been prepared to provide students with the basic knowledge and practical applications that are needed in the efficient operation of the IBM MAGNETIC TAPE SELECTRIC TYPEWRITER. In view of the needs of the students for whom it has been written, the lessons contained herein have been carefully written for easy reading and comprehension.

Training on the MT/ST is offered to Business Training students in their Office Practice class where uses of various office machines are also taught. The students entering the Office Practice class have already completed their first year of typewriting so are familiar with the basic applications in the typewriting field.

This manual has been designed to be used as a student text while they are being instructed in the use of the MAGNETIC TAPE SELECTRIC TYPEWRITER. It has been compiled to teach the students each new item of information which will eventually lead to the final stage of a complete knowledge of the machine operation. Instruction should be combined with demonstrations by the teacher and the use of as many visual aids as are available.

During the instructional phase, students will be asked to use the MT/ST to demonstrate that they have learned the information presented to them. Some practice exercises have been included in the manual but to supplement these, the IBM Magnetic Tape Selectric Typewriter Training Guide should be utilized to provide the students with a broader knowledge of efficient operation. It is also advisable to offer supplemental practice designed by the instructor depending on the individual needs of the students.

I would like to express my thanks to Dr. Charles M. Jochem, Superintendent of the school for his continued interest in granting me the opportunity to participate in this project and to Mr. Benjamin Shapiro for his assistance and guidance.

I would also like to express my appreciation to the International Business Machines Corporation for their permission to use the various illustrations used throughout the book.

i

Raymond F. Pieslak

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IBM

MAGNETIC

TAPE

SELECTRIC

TYPEWRITER





Basic Machine Information

Lesson 1

Objective:

To learn some basic information about the Magnetic Tape Selectric Typewriter.

Information:

The Magnetic Tape Selectric Typewriter is called the MT/ST.

If you will look at the picture of the machine, you will see that the IBM Magnetic Tape Selectric Typewriter consists of two parts: a "Selectric" Typewriter in a desk unit, and a tape control unit.

- 1. You record what you type on a magnetic tape and play it back automatically.
- 2. Recording is just as easy as typing your first draft, because typing errors are corrected on the tape by just backspacing and typing over the incorrect character.
- 3. This means you can type at your highest rate of speed and still make a perfect tape.
- 4. The tape can then be used to play back automatically.
- 5. The MT/ST print-out speed is about 185 words per minute. The net speed, however, averages less than this. It is about 130 to 150 words per minute because of the time taken for such actions as carrier returns, tabs, and shifting for capitals.
- 6. Remember, the machine will play back exactly what you record on it.
- 7. Magnetic tapes can be used over and over again. They can also be filed for future use.
- 8. The MT/ST can perform automatic letter writing by the hundreds and make every letter an original. We call these personalized letters.
- 9. Many times two different tapes are used. One will have the letter recorded on it, and the other tape will have names and addresses.



- 10. Think of all the retyping you have to do whenever changes have to be made. Often complete pages must be retyped for just a few corrections. With the MT/ST, this can be done so much faster without erasing.
- 11. You will learn how to do all this after you learn how to operate the machine.
- 12. It is very important that you learn how to use the machine the right way.
- 13. The MT/ST makes typing easier and much more convenient but you must learn all the parts of the machine and how to use them properly.
- 14. The MT/ST in our classroom is a Model IV with two Tape Stations.

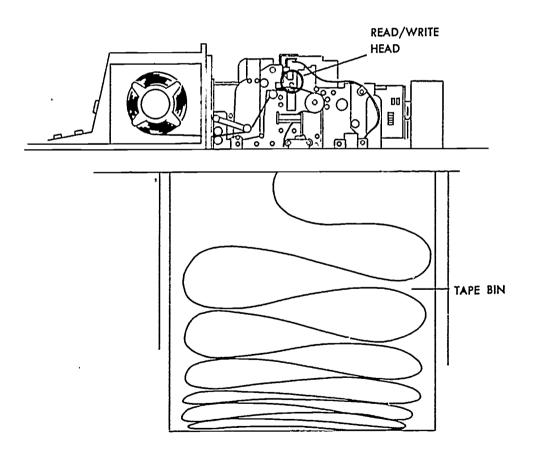
1.	The machine y	ou are about to leas	rn is the Model IV	
	M	T		T
2.	When you are		agnetic tape, typing	errors are corrected by
3.	The MT/ST con	nsists of two parts.	What are they?	
4.	The MT/ST c	an play back auto	-	nt-out speed of about



Typewriter I	Typewriter Keyboard Lesson		
Objective:	To learn about the Selectric Typewriter Keyboard on the MT/ST.		
Information:	You will feel at ease on your MT/ST because the typing unit is IBM "Selectric" Typewriter which you have used before.	a regular	
	1. You will use your usual typing techniques to record on magn	etic tape.	
	 The touch and keyboard arrangement are the same as "Selectric" Typewriter with only one difference. The index key has been replaced by the Revise CR key. discuss this key later. 		
	3. Remember, there is no Index key on the MT/ST.	×	
	4. Because the typing unit is a regular "Selectric" Typewriter, use it for straight typing anytime you choose not to record you would any other IBM "Selectric" Typewriter.	•	
	5. Power (electricity) is supplied to both the Selectric Typewriter Tape Control Unit by the ON-OFF key on the Selectric Typew		
Assignment:			
	ne touch and keyboard arrangement are the same on the MT/ST gularTypewriter.	as on a	
	here is one difference on the keyboard. The key blaced by the key.	has been	
3. Po	wer is supplied to both the Typewriter and th Unit by the key on the Selectric Typewriter.	e	







INSIDE VIEW OF TAPE CONTROL UNIT





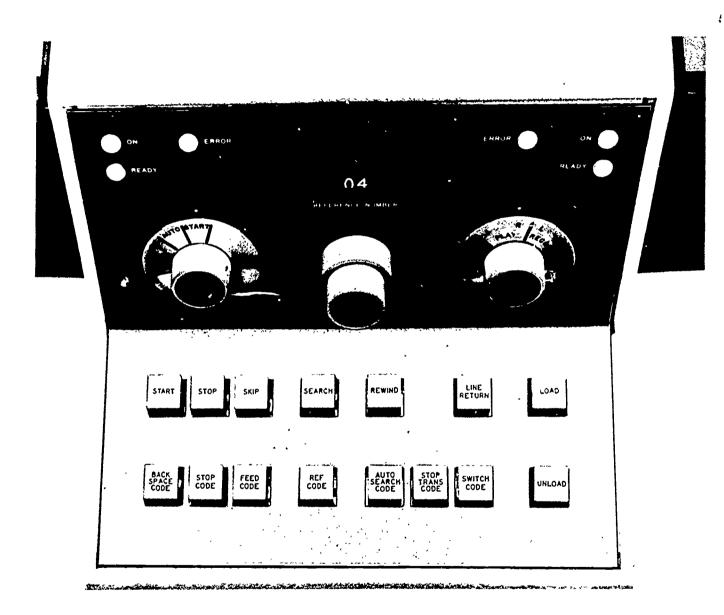
Tape Control	Tape Control Unit Lesson		
Objective:	To learn about the Tape Control Unit on the MT/ST.		
Information:	To the right of the typing station on the MT/ST is a Tape Control We also refer to it as the Tape Console. This unit is connected typing station with a cable.		
	1. The tape console holds the magnetic tape and has a tape-unit key and operational dials. See page 6 for an illustration of the tape keyboard.		
	2. The buttons on the tape console have been arranged so that you learn their location easily. When you depress a button on the control unit keyboard, just depress it and then release it. It is necessary to hold down the buttons.	tape	
	3. The buttons are placed in special groupings: the "action" buttor on the top row; buttons which record "codes" or special signals to machine, are on the bottom row, except the Unload Button.		
	4. To make it easy to learn their location, the buttons on the console have been labeled. The two dials are also marked.	tape	
	5. We will learn more about the buttons and dials later.		
Assignment:			
1. We	sometime refer to the tape control unit as a		
2. The		are	
3. To	nake it easier for you to find the buttons, they are all		



TAPE

CONTROL

UNIT





6

14

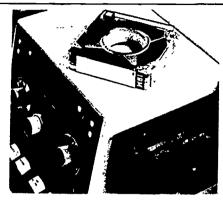
Magnetic Tape

Lesson 4

Objective:

To learn about the Magnetic Tape used on the MT/ST.

Information: The MT/ST enables you to record everything you type at the typewriter on magnetic tape which is located in the tape control unit.



- 1. After you record the information, the magnetic tape can be played back to produce as many originals of the message as are needed.
- 2. The MT/ST enables you to record on magnetic tape and then play back your recording.
- 3. The magnetic tape is completely enclosed (sealed) in a plastic cartridge. This makes it easier for handling and storage.
- 4. Look at this example:

Blank tape

= Space

Recorded tape The S entire S tape S is S

- 5. When a tape has been recorded, you cannot see the letters or other marks on it, but each column of tape contains one character of information.
- 6. A space and a tab code is also recorded on the tape in one column.



	7. Everything that is typed on the Selectric typewriter is recorded on the tape in a separate column except the carrier return code.
	8. The carrier return code requires two columns on the tape, as shown below:
	that S is C R
	9. Remember, each character takes up one tape column, even punctuation marks and spaces. BUT a carrier return (CR) takes two columns.
Assignmen	nt:
1.	The MT/ST enables you to on magnetic tape and then play back your
2.	The magnetic tape is completely enclosed in a
3.	When a tape has been recorded, each column of tape contains character of information.
4.	A space code is also recorded on the tape incolumn.
5.	A tab code is recorded on the tape in column.
6.	A carrier return requires columns.
7.	Fill in the strip of tape to show the way it would look if you had just recorded the following, with a carrier return after the comma:
	MT/ST is fast,
	and accurate.



Tape Stations

Lesson 5

Objective:

To learn about the Tape Stations on the tape control unit.

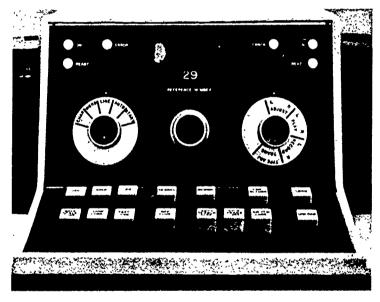
Information: The tape control unit on the Model IV MT/ST has two tape stations:

the right station

and

the left station.





Right Station

1. Each tape station is protected by the Station Cover. When this plastic cover is down, it is locked into place by a tiny pin in the upper, front corner of the cover.

You will learn how to unlock this cover later.



- 2. It is possible to record and play back from both the left and right tape stations.
- 3. Lights at each tape station indicate which one you are using.

Αç	sig	nm	าคท	1
4 140	3.5			

1.	The tape control unit on the Model IV MT/ST has two tape stations: the station and thestation.
2.	It is possible to record and play back from both theand
3.	at each tape station indicate which one you are using
1.	Each tape station is protected by the

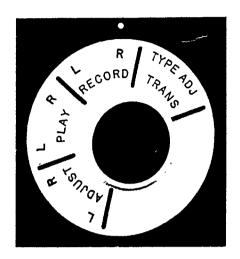


Objective:

To learn about the Operation Selector Dial on the tape control unit.

Information: On the right front panel of the tape control unit is the Operation Selector Dial.

> 1. The operation and the tape station on which you wish to perform the operation are selected by the Operation Selector Dial.



- 2. L on the dial means Left station and R means Right station. This means if you are going to work with the Left tape, the dial is set at L and on the Right tape at R.
- 3. The Operation Selector Dial controls the four basic functions of the machine.
- 4. RECORD When you set the dial for Record, everything that is typed is recorded on the tape.
- 5. Remember, when the machine is in Record and the carrier return key is depressed, a carrier return code is recorded. If the space bar is depressed, a space code is recorded. If a tab key is depressed, a tab code is recorded.
- 6. Information is recorded at the Left station when the dial is set for Record L, or at the Right station when it is set for Record R.
- 7. PLAY When you set the dial on Play L, the machine will automatically type out, or play back, information recorded on the Left tape. If it is set for Play R, it will play back from the Right tape.

(If you ever want to type and not record, set the Operation Selector Dial for Play).



- 8. ADJUST This is another playback setting but is different from the first (PLAY) in that the machine automatically adjusts the righr-hand margin if you insert or delete copy during playback or change your margins in any way. This will be explained more fully in a later lesson.
- 9. TRANSFER When the dial is set for Transfer, anything played out is at the same time recorded on the second tape.
- 10. DO NOT turn the Operation Selector Dial while the tape is moving. Wait until the action has stopped or depress the STOP button on the tape console.

1.	If you wanted to record at the Left tape station, you would simply turn the Operation Selector Dial to
2.	In order to record a message at the Right station, you would turn the Dial to
3.	When the Operation Selector Dial is in Record and the carrier return key is depressed code is recorded and it takes columns.
4.	The Operation Selector Dial has four basic functions. Name them.
5.	If the Operation Selector Dial is set on Play L, you are what is on the tape.



Objective:

To learn about the lights on each side of the console which indicate (show or point out) the position of the tape unit.

Information: Located at each station are three Indicator Lights: ON, READY, and ERROR lights.

- 1. The ON light merely points out that the power is being supplied, while the READY light shows that a tape is in the machine properly and that the machine is ready for operation.
- 2. If the right station is active and a tape is in the machine properly, both the READY and ON lights at the right station are on. If the dial is set for the left station action, the ON and READY lights on the left station are lighted.
- 3. If the machine were turned on, but no tapes were in the machine, only the ON light of the selected tape station would be lighted.
- 4. The ERROR light will come on, and the typewriter keyboard locks, when the tape has not received a complete signal. This could happen, for example, in fast typing from not depressing a key completely.
- 5. The ERROR light may come on at the time you are recording or during playback. If you are recording, unlock the machine by backspacing and recording again at the point of error. If you are playing back, depress the Start Button on the console. Sometimes one or two depressions will start playback again. If not, you must turn your dial to Record and backspace the tape and re-record the last letter printed plus the next character, which had not been completely recorded on the tape.



6. Remember to switch from Play to Record before backspacing. In Record, backspacing backs up the tape so you can re-record the necessary characters. In Play, the tape is not affected by anything you do at the typewriter.

1.	If you turned the machine on and you see the ON light at the left station is lighted, what does this tell you?
2.	Both the ON and READY lights are lighted at the right station. What does this mean?
3.	If the ERROR light came on, what does this mean?



Backspace Key

Lesson 8

Objective:

To learn about the use of the Backspace Key on the MT/ST.

Information: If you make a mistake in typing, while you are recording, simply backspace and type the correct character over the incorrect one.

- 1. In Record, the backspace key backspaces the tape and the carrier. For example, if you wanted to type "Now is" and you had typed instead "Now s" you would simply backspace and type an "i" over the "s" and then type the "s".
- 2. The act of backspacing backs up the tape and the carrier one space but does not erase the characters on the tape.
- 3. Since a character, punctuation mark, space or tab takes one column on the tape, you need to backspace only once to correct an error for any of these codes.
- 4. Even though backspacing does not erase the tape, you must retype everything from the point of error.
- 5. Let's look at an example: Suppose you had typed "Now si the" before you saw your error. You must backspace 6 times to be in a position to strike over the "s". You would type an "i" over the "s" and an "s" over the "i". You must now retype the space and word "the" before going on with your typing.
- 6. Let's see what would have happened if you had backspaced, retyped the word "is" and then spaced ahead to continue typing.

NowSsiSthe **Before** Now Sis SSSSStime After PPPPP



As you can see on page 15, spaces would record over the word "the" and the tape is incorrect.

Remember, if you backspace to correct an error, you must retype everything from the point of change.

1.	In Record, the backspace key backspaces both the and the
2.	Backspacing in Record (does/does not) erase the tape.
3.	The only way to erase old information on the tape is to new information over the old.
4.	To backspace over a carrier return code, you must depress the backspace key



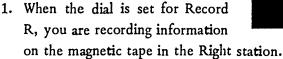
Record

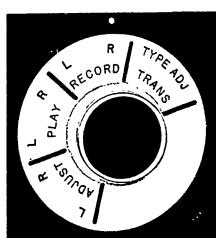
Lesson 9

Objective:

To be sure you understand what it means to Record on the MT/ST.

Information: You have learned that when the Operation Selector Dial is set for Record, everything you type at the typewriter will record on the magnetic tape.





- 2. When the dial is set for Record L, you are recording information on the magnetic tape in the Left station.
- 3. You must remember to set your margins and tab stops before you begin to Record. You cannot space or try your tabs when the dial is set for the Record because everything you touch on the typewriter will Record on the tape.
- 4. You must also remember that the tape is a continuous tape. It is one long tape; it is not broken or divided into strips or lines.

Assignment:

1. Suppose you have the machine in Record and a tape is on the tape station. You are going to record the following line:

The Operation Selector Dial is located on the right front



	Fill in the strip of tape for the above line. Begin with a carrier return followed by a tab.
	(You can use CR as an abbreviation for carrier return).
2.	Fill-in the strip of tape for the following two lines:
	When the MT/ST is in Record, everything that is typed on
	(Begin with a CR and a tab).



Play	Lesson 1
Objective:	To be sure you understand how to use PLAY on the MT/ST Operation Selector Dial.
Information:	You can play back a message from either the left or right tape stations.
	1. If you want to play back material from the Left tape station, you must turn the Operation Selector Dial to PLAY L.
	2. If you want to play back material from the Right tape station, you must turn the Operation Selector to PLAY R.
Assignment:	
1. To Op	play back the tape in your Right tape station, you must turn the eration Selector Dial to
2. To Sel	play back the tape in your Left tape station, you must turn the Operation



Start and Stop Buttons

Lesson 11

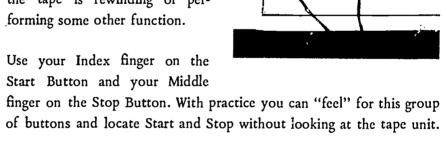
Objective:

To learn how to use the START and STOP Buttons on the tape control unit.

Information: When the Operation Selector Dial is set for PLAY, information on the tape will type out automatically by depressing the START Button on the tape control unit.

> It can be stopped by depressing the STOP Button.

- 1. Any time you want to interrupt the machine action for a moment, stop it with the Stop Button.
- 2. You can stop the tape by using the Stop Button when it is typing out automatically or when the tape is rewinding or performing some other function.
- 3. Use your Index finger on the Start Button and your Middle



1.	To start	the	playback	after	you	dialed	PLAY	on	the	Left	or	Right	station
	you depi	ress t	:he			butto	n on th	ie t	ape	contr	ol ı	ınit.	



2.	Playback is started by depressing the START button on the unit.
3.	What button is located next to the START button?
4.	If the START button is used to start playback, what do you think the STOP button does?
5.	What finger do you use on the START button?
6.	What finger do you use on the STOP button?



Objective:

To learn how to use the STOP CODE Button on the MT/ST tape control unit.

Information: Your MT/ST can do many things, but it has to be told each step. Once it starts typing out automatically, it will not stop until you tell it to. To stop playback automatically, a STOP CODE must be recorded on the magnetic tape at the point where you want the tape to stop. When the machine comes to this signal, the playback stops automatically.

- 1. The STOP CODE Button is located in the bottom row of buttons on the tape control unit. See page 20 for location of the button.
- 2. Use the Middle finger of your right hand to depress the STOP CODE Button.
- 3. Remember, the STOP CODE Button is used when you are recording.
- 4. Always remember to put a STOP CODE at the end of a recording.
- 5. If you forget to put a Stop Code at the end of a recording, when you play it back, the typing will not stop. Instead, the machine will continue typing whatever information was previously recorded at that point on the tape, if you are using a tape that was used for something before.
- 6. If you are playing a new tape with nothing previously recorded where you stopped typing, the typewriter keyboard will lock and the Error Light will come on. When the machine tries to read the blank tape, it gets no signal, does not know what to do and locks. It will unlock when you turn the Operation Selector Dial to Record or when you rewind the tape.



- 7. Always remember to record a STOP CODE at the end of the message or recording.
- 8. Sometime you will want the tape to stop automatically at the beginning of a letter to fill in the inside address or in the middle of a letter for other fill-ins.

 If you record a STOP CODE at these points, the tape will stop automatically and you can type the information needed. Then you
- depress the Start Button so the tape can continue.

 9. Remember, the STOP CODE is a code button and does record on the

Assignment:

tape.

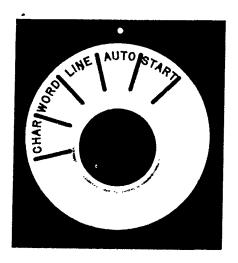
1.	When the machine reads a STOP CODE, the tape automatically	
2.	To stop playback automatically abe recorded on the magnetic tape.	must
3.	Where is the STOP CODE Button located?	
4.	Which finger do you use to depress the STOP CODE Button?	



Objective:

To learn how to use the Playback Mode Dial on the MT/ST tape control unit.

Information: On the left front panel of the tape control unit is the Mode Dial. See location of this dial on page 6. The amount of material which plays out when the START button is depressed is decided by the setting of the Mode Dial.



- 1. When the Playback Mode Dial is set for AUTO, the machine will play back a tape until it reads a recorded STOP CODE signal, at which time it will automatically stop.
- 2. When the Playback Mode Dial is set for LINE, it will play back one line each time the Start Button is depressed.
- 3. When the Playback Mode Dial is set for WORD, it will play back one word each time the Start Button is depressed.
- 4. When the Playback Mode Dial is set for CHAR (Character), it will play back one character each time the Start Button is depressed.
- 5. The Playback Mode Dial can be turned while the typewriter is typing out and the new setting is immediately in effect.

For example, if you switch the dial from AUTO to LINE, the machine will finish typing that line and stop.

Or, if you switched the dial to WORD, the machine would finish the word being typed and then stop.



6. The Playback Mode Dial has a fifth setting which is START. This is short for Automatic Start and you would not have to depress the Start Button each time a form letter is retyped in an automatic letter-writing application. We will discuss this in more detail later.

1.	When the Playback Mode Dial is set for AUTO, the machine will play back a tape until it reads a
2.	Name all the settings on the Playback Mode Dial.



Read/Write Head I				
Objective:	To learn about the Read/Write Head inside the Tape Control U	^J nit.		
Information:	Inside the Tape Control Unit is a device (a mechanical part Read/Write Head. Turn to page 4 and you will see where it inside the Tape Control Unit.			
	1. It is this Read/Write Head which does the recording and of the magnetic tape.	eading back		
	2. As you record, the tape moves under the Read/Write Head at a time.	one column		
	3. Before you begin to record, you must make sure the begin tape is at the Read/Write Head.	nning of the		
	4. You must do this to be sure you will be able to find you easily when you want to play it back.	ır recording		
Assignment:				
	s you record, the tape moves under thelumn at a time.	_ Head one		
	fore you begin to record, you must make sure the beginning of the Head.	f the tape is		
3. It	is this Read/Write Head which does the of the magnetic tape.	and		



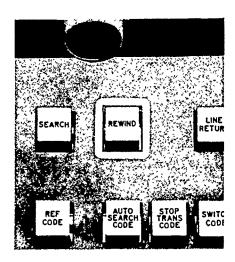
Lesson 15 **Rewind Button**

Objective:

To learn how to use the REWIND Button on the Tape Control Unit.

Information: The REWIND Button is in the top row of buttons on the tape console, the fifth button from the left. See page 6 for location of this button on the tape console.

> 1. When you depress the REWIND Button, it takes you back to the beginning of the magnetic tape.



- 2. It stops on the first recording space, a point which we call the Rewind Position. The first column is at the read/write head.
- 3. The REWIND Button always takes you to the Rewind Position. It does not matter if there is anything on the tape or not; the tape will always go back to the Rewind Position.
- 4. The REWIND Button works in both RECORD and PLAY.
- 5. REWIND is a high-speed operation (spinning about 45 inches of tape per second), and the machine does not read anything on the tape as it spins.
- 6. Rewinding is a silent operation until the machine "puts on the brakes" to stop. Then you hear (or can feel by placing your hand on the tape console), a clicking sound, and the Error Light flashes.
- 7. The Ready Light is Off while the tape rewinds.



- 8. The Ready Light comes back ON when the tape stops at the Rewind Position. Then you know that Rewinding is completed.
- 9. After you have finished recording, you will again have to depress the REWIND Button in order to return to the beginning of the tape and play back your recording.

•						
А	ssi	on	m	en	r	٠
	224	٠.,		C11		•

1.	To be sure the beginning of the tape is at the read/write head, you depress theButton.
2.	What light flashes while the tape is rewinding?
3.	What light is off while the tape rewinds?
4.	What light comes back on when the tape stops at the Rewind Position?
5.	After you finish recording, you will again have to depress the Button in order to return to the beginning of the tape and
	play back your recording.



Changing Tapes Lesso					
Objective:	To learn about changing tapes on the MT/ST.				
Informatio	on: Tapes can be changed on the MT/ST in a matter of seconds. The magnetic tape is completely enclosed in a plastic cartridge. This makes it easy to handle.				
	 Changing tapes is called Loading when putting a tape on and Unloading when removing a tape. 				
	2. Each tape station has a small wheel in the center which we call a hub.				
	3. When changing tapes, the tape cartridges are easily put on and taken off the station hub.				
	4. In the next two lessons you will learn how to Load and Unload tapes.				
Assignmen	t:				
1.	Changing tapes is called and				
2.	The tape cartridge is put on the station				
3.	The magnetic tapes are completely enclosed in a				



Loading a Tape

Lesson 17

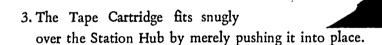
Objective:

To learn how to LOAD a tape on the MT/ST.

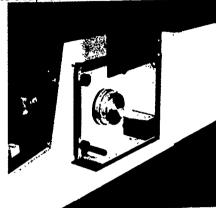
Information:

To LOAD, or put a tape cartridge on the MT/ST, turn ON the Selectric Typewriter. Remember, power (electricity) is supplied to both the Selectric Typewriter and the Tape Control Unit by the ON-OFF key on the Selectric Typewriter.

- Turn the Operation Selector Dial to Play R to load the Right Tape or Play L to load the Left Tape.
- Depress and hold the Unload
 Button as you lift the Tape
 Station Cover.
 See page 6 for location of Unload Button.



- 4. Hold the tape cartridge upright with the letters IBM in the upper far corner and the square hole in the lower corner towards you.
- 5. Position the cartridge so that the plastic eyelet of the tape fits over the pin and the square hole fits around the round peg.





- 6. Push the tape cartridge straight in on the hub. Make sure the plastic eyelet of the tape fits over the pin and the square hole fits around the round peg.
- 7. Close the Tape Station Cover.

 The tape Station Cover is now locked.



- 8. Now, depress the LOAD Button on the console. See page 6 for location of the LOAD Button.
- 9. The LOAD Button is used to pull the tape into the machine in position for recording. This is what we call Loading.
- 10. As the tape loads into the Tape Control Unit, the Error Light flashes and you will hear or feel a clicking sound.
- 11. When the tape is completely loaded into the MT/ST, the Error Light goes OFF.
- 12. The MT/ST is ready for you to use.

1.	To LOAD a tape cartridge on the MT/ST, you first turn
	the Selectric Typewriter.
2.	Turn the Operation Selector Dial to
3.	To unlock the Tape Station Cover, you depress and hold the Button.
1.	The tape cartridge fits over the Station by merely pushing it into place.



5.	You must be sure the plastic eyelet of the ta the square hole fits around the	pe fits over the peg.	and		
6.	Is the Tape Station Cover locked after you closed it?				
7.	7. Which button do you depress to pull the tape into the machine?				
	Button.				
8.	As the tape is loading, the	Light flashes.			
9.	When the tape is loaded the	Light goes OFF.			



Unloading a	a Tape	Lesson 18
Objective:	To learn how to UNLOAD a tape on the MT/ST.	
Information	To UNLOAD and remove a tape cartridge from the machine first turn ON the Selectric Typewriter (if it is not already on). See page 6 for location of UNLOAD Button.	, you must
	1. Turn the Operator Selector Dial to Play R to remove the or Play L to remove the Left Tape.	Right Tape
	2. Depress the Rewind button. You have learned that this witape to the Rewind Position, which is at the beginning of the Remember, wait for the flashing lights and clicking noise to	tape.
	3. Then, depress and hold the UNLOAD Button until a defin noise is heard or felt. The UNLOAD Button pulls the end of back into the cartridge so it may be removed from the mach The "thud" noise tells you the tape is back into the car ready to be unloaded from the MT/ST.	of the tape ine.
	4. You must continue to hold down the UNLOAD Button as y Tape Station Cover.	ou lift the
	5. Remove the tape cartridge by grasping the sides of the ca shown on page 30, and pulling it off with a sideways rocking	
	6. Close the Tape Station Cover.	
Assignment:		
1. To	o UNLOAD a tape cartridge, the Selectric Typewriter must be turn	ed
2. Ti	he Operator Selector Dial must be turned on	.
3. Th	hen you depress the Button.	*
4. Af	fter that you depress and the ntil a "thud" noise is heard or felt.	Button



Magnetic Recording and Automatic Playback

Lesson 19

Objective:

To learn the procedure to follow for all exercises.

Information:

You are now ready to Record and Play back some exercises.

The following instructions should be followed for all exercises to be recorded and played back on the MT/ST.

You cannot hurt the machine as long as you follow directions. The only time recording will take place is when you actually dial Record.

Type with ease, knowing that if you make an error, all you have to do is backspace and strike over the error — or revind and begin again.

- 1. Insert paper in the typewriter with the left edge of the paper lined up with the 0 point on the writing scale.
- 2. Set margins at 15 and 85.
- 3. Set a tab to indent five spaces for a paragraph.
- 4. Always begin a recording with one carrier return (CR).
- 5. Always end a recording with a STOP CODE.
- 6. Don't space before carrier returns.

ERROR PROCEDURES

If the keyboard should lock and an ERROR light come on, try the following steps in the order shown:

During Recording

Backspace and try to record the character again.



During Playback

- 1. Depress the START button again.
- 2. Switch to Record and record the desired character.
- 3. Return to Playback.

Assignment:

1.	In recording be sure your dial is set for
2.	When setting margins and tabs your dial should be set for
3.	If the keyboard should lock and an ERROR light come on while you are recording, what should you do?
4.	If the keyboard should lock and an ERROR light come on during playback, what should you do?

TURN TO PAGE 36 FOR PRACTICE EXERCISES

Practice Exercise 1

Practice Exercise 2

Practice Exercise 3



When you depress a button on the tape control unit, simply depress it and then release it. It is NOT necessary to hold down buttons on the tape control unit.

Do NOT turn the Operation Selector Dial while the tape is moving. Wait until the action has stopped or depress the STOP button on the tape control unit.

RECORD

- 1. Set the Operation Selector Dial for Play so no typewriter action will record at this time.
- 2. Set margins at 15 and 85.
- 3. Set a tab for a 5-space indention.
- 4. Insert a sheet of paper at "0" on the writing scale.
- 5. Turn the Operation Selector Dial to Record R.
- 6. Rewind. As the tape completes the Rewind Operation, the ERROR light will flash and you will hear or feel a clicking noise. This is meant to happen. When the clicking noise stops, the ERROR light will go out and the READY light will come on. Your machine is then ready to accept your recording.
- 7. Record the following paragraph. Be sure to begin with a carrier return and end with a Stop Code.
- (CR) Haven't you long wished for carefree typing, typing where you can zip along at a fast, easy pace and not be concerned about making typographical errors? How many times have we talked ourselves into making a misstroke because we were saying, "Don't make a mistake; don't make a mistake." With your MT/ST you have no worry. If you do make an error, backspace and strike over. (STOP CODE)

36



Play back the exercise you have just recorded by following these directions:

- 1. Set the Operation Selector Dial for Play R.
- 2. Rewind the tape by depressing the Rewind Button.
- 3. Set the Mode Dial to AUTO.
- 4. Depress the START button with the first finger of the right hand.

Practice Exercise 3

STOP BUTTON - use the Stop Button to stop playback.

- 1. Rewind the tape by depressing the Rewind Button.
- 2. Start and stop the playback every few words using the first finger on the START button and the middle finger on the STOP button.



Reference Code

Lesson 20

Objective:

To learn how and when to use a REFERENCE CODE on the MT/ST.

Information: A magnetic tape on the MT/ST is 100 feet long and on which you can record about 20 average-size letters. Sections of material on the tape can be "marked" for identification. Just as you number pages of a book, you can mark sections of information on the magnetic tape with Reference Codes.

- 1. Suppose you recorded 5 letters and then decided to rewind the tape to play back letter number one. Would it be good sense to play back, all the other letters just to reach the blank space on the tape that follows letter number 5 so that you could record more on that tape? Of course not.
- 2. You can locate the beginning or end of a message on the tape without playing back the entire tape through the use of a REFERENCE CODE.
- 3. A Reference Code is a place-mark recorded on the tape, which can be located without playing back the entire tape. For example, if you wished to be able to locate the beginning of letter number 10 on a tape without playing back letters 1 - 9, you could record a Reference Code at the beginning of letter number 10.
- 4. If you wanted to locate the end of the last letter, you would record a Reference Code at the end of the last letter.
- 5. Reference Codes are a way of separating one piece of recorded material from another on the tape.
- 6. Up to this time, in your practice exercises, you have been rewinding the tape each time you recorded or played back information.



- 7. Now you will learn how to use a Reference Code to separate one piece of recorded material from another.
- 8. The Reference Code Button is the fourth button to the right in the bottom row of buttons on the tape console.

 See page 6 for location of this button.
- 9. When the Operation Selector Dial is set to Record R or L and the Reference Code is depressed, a Reference Code is recorded on the tape.
- 10. A Reference Code takes up more than one column on the tape. You can hear or feel a Reference Code when it is recorded on the tape because it is a series of 61 codes. Sixty-one characters which takes about three inches of tape.

1.	One piece of recorded material is separated from another by a
	*
	•
2.	A Reference Code takes up more than one column on the tape. It is a series
	of Codes.
3.	You can locate the beginning or end of a message on the tape through the use
	of a



Recording Reference Codes

Lesson 21

Objective:

To learn about recording several Reference Codes on one tape.

Information: Reference Codes are different from page numbers because they are not actual numbers. All Reference Codes are identical (the same).

- 1. If you record several Reference Codes on one tape, all the Reference Codes would be identical.
- 2. The only way you can tell one Reference Code from another is by counting from the beginning of the tape.
- 3. This is true because all Reference Codes are the same.

For example:

Ref.	Letter A	Ref. Code	Letter B	Ref. Code	Letter C	Ref. Code	
						L 1	

4. Reference Codes are identified (are known) by counting from the beginning of the tape.

As you can see on the above, the Reference Code at the end of Letter B is Reference Code #3.

- 5. To avoid getting mixed up, you should record a Reference Code at the Rewind position of the tape (at the beginning of the tape) so the first letter or page is identified by the #1 Reference Code.
- 6. When you finish recording the first letter, you record a Stop Code and another Reference Code as shown here:

Ref. Letter	Ref.
Code #1	Code



- 7. To enable anyone to find the next available recording position on the tape at any time, the operator always completes the recording of each letter with a Reference Code.
- 8. If you had 3 letters or pages to be recorded on a new tape, here is a section of the tape showing the letters and Reference Codes.

- 9. By this time, you should have noticed that we have not numbered the Reference Codes in the examples. This is because a number is not recorded on the tape when the Reference Code is depressed.
- 10. There is only one Reference Code Button on the machine. For that reason, all Reference Codes are identical (the same).

Form a habit of always beginning a tape with a Reference Code, and ending each page with a Reference Code. That is, each page or each message.

This is important for two reasons:

- a. Ending every piece of recording with a Reference Code permits you to take a tape off the machine, if you have to, then put it on again later, and go directly to the next available recording position.
- b. Beginning a tape with a Reference Code simplifies numbering your recordings. It lets you search for Reference 01 to find the first message, Reference 02 to find the second message, etc.

In the next lesson, you will learn how to search for Reference Codes.

Assignment:

1. The only way you can tell one Reference Code from another is by
from the beginning of the tape.



When	you	are	recording	on	new tape, you should record _ before the message at the beginning of	
the tap	e whi	ch is a	t the Rewin	nd pos	tion.	,,
	^		1.		e, you record a Cod	

Search Lesson 22

Objective: To learn how to SEARCH or look for a Reference Code on the MT/ST.

Information: The MT/ST will SEARCH or look for your letter or message on the magnetic tape. The SEARCH Button tells the machine to position the tape at the beginning of a certain message.

- 1. Searching is actually a counting process.
- 2. To find a certain message of recorded material, the MT/ST "counts" Reference Codes.
- 3. To search a tape, you depress the SEARCH Button. See page 6 for location of this button.
- 4. When you depress the SEARCH Button, the MT/ST moves the tape past the "block" of 61 codes which make up the Reference Code to get to the beginning of the message you are looking for.
- 5. The Search Button is inactive (does not work) in Record.
- 6. Remember, you must set the Operator Selector Dial for Play L if you want to Search on the Left tape, or Play R if you want to search on the Right tape.
- 7. The Ready Light is Off while the machine is searching.
- 8. The tape spins very fast when it is searching for a Reference Code.
- 9. When the machine finds the Reference Code that you are looking for, the tape stops.
- 10. As the tape stops spinning, there is a clicking sound and the Ready Light comes back On.



11. The tape will stop on the space following the 61st column of the Reference Code.

Just as a car cannot stop immediately when the brakes are applied, so it is the same with the MT/ST; the tape needs time to stop when it finds the desired Reference Code. This is why a Reference Code is a series of 61 codes. This gives the tape time to stop when it locates the desired Reference Code.

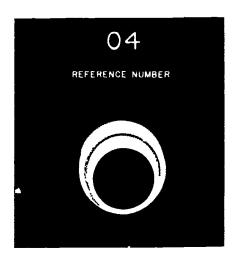
1.	1. To find a certain page of record Reference Codes.	ed material, the MT/ST
2.	2. What button do you use for search	ing?
3.	3. To Search means to	a Reference Code.
4.	4. The Search Button (does/does not)	work in
5.	5. In Searching, the tape stops spinn will stop on the space following the	ing when it finds the Reference Code and column.
6.	6. The Light is Off	while the machine searches.



Objective:

To learn how to use the REF-NUMBER DIAL on the **ERENCE** MT/ST.

Information: You tell the machine which Reference Code to locate by the number you dial in the REFER-ENCE NUMBER DIAL. In the Center of the front panel of the Tape Control Unit are a double dial and a window labeled Reference Number.



Since the dial selects the Reference Number, it is called the REFERENCE NUMBER DIAL.

Look at page 6 and you will see the location of the dial.

- 1. Any number from 01 to 79 can be dialed in the Reference Number window.
- 2. The units and tens position of the Reference Number Dial can be set separately.

The Reference Number Dial is actually two dials. The outer knob is for units, the inner knob for tens. You turn the dials clockwise to increase the numbers -- 1, 2, 3, 4, 5, etc. -- and in the opposite direction to lower the numbers.

- 3. In order to search to a Reference Code, the Operation Selector Dial must be dialed to either Adjust or Play.
- 4. The Reference Number showing in the Reference Number window has nothing to do with recording a Reference Code. It only tells the machine which Reference Code to locate for you.
- 5. Remember, it makes no difference where the Reference Number Dial is set when you Record a Reference Code.



- 6. The Reference Number Dial is only used for Searching when the Operation Selector Dial is set for Play.
 Set the Operation Selector Dial for Play L if you want to search on the Left tape or Play R if you want to search on the Right tape.
- 7. Here is the procedure to follow. Suppose you want to play back the letter at the 4th Reference Code on the left tape.
 - a. Dial the Operation Selector Dial to Play L.
 - b. Set the Reference Number Dial to 04.
 - c. Depress the Search button.
 - d. Then depress the Start button and the 4th letter will play out.
- 8. Remember, the Search Button is inactive in Record.

Assignment:

2.	Since the dial selects the Reference Number, it is called the Dial.
3.	On the Reference Number Dial, the outer knob is used to set for and the inner knob for
4.	Does it make any difference where the Reference Dial is set when you are Recording?
5.	Why?



Practice Exercise 6
Practice Exercise 7

- 1. Rewind the Right tape.
- 2. Record the 5 paragraphs shown below. Be sure to record the Reference and Stop Codes where they are indicated.
- 3. Do not play out any portion of this recording until you are told to do so.
- 4. After recording, turn to Exercise 5 on page 48.

REFERENCE CODE

(CR)

- Reference Codes identify sections of recorded information.
 (STOP CODE and Reference Code)
- 2. Only once is a Reference Code recorded before the message, and that is the first time you use a new tape. (STOP CODE and Reference Code)
- 3. Develop the habit of always recording a Reference Code at the end of every message. (STOP CODE and Reference Code)
- 4. A Reference Code at the end of a recording permits you to search to that spot on the tape any time you wish to record additional messages on the same tape. (STOP CODE and Reference Code)
- 5. The number showing in the Reference Number Dial has nothing to do with recording a Reference Code. (STOP CODE and Reference Code)

NOW TURN TO PAGE 48 FOR INSTRUCTIONS



You recorded 6 Reference Codes in Exercise 4.

As you do each section of Exercise 5 fill in the table below. Simply write the first three words that played out from your recorded material at each Reference Code.

Reference Code	Information
#1	
. 2	
#3	
#4	
#5	
#6	

Practice Exercise 5

- 1. Dial Play R.
- 2. Dial 01 in the Reference Number Window.
- 3. Depress the Search Button.
- 4. Play out paragraph 01 of Exercise 4. Fill in the table above.
- 5. Dial 02. Search and play out paragraph 02.
- 6. Do the same with paragraphs 03, 04, and 05.
- 7. Try 06.

TURN TO PAGE 49 FOR EXERCISE 6



Now that you have completed Exercise 5, your table should look like this:

Reference Code	Information	
# 1	Reference Codes identify	
# 2	Only once is	
# 3	Develop the habit	
# 4	A Reference Code	
# 5	The number showing	
# 6	(No information. The 6th	
	Reference Code tells you	
	the next available space	
	on the tape.)	

Practice Exercise 6

- 1. You can Search for and play out paragraphs in any order.
- 2. Play out paragraph 04.
- 3. Play out paragraph 01.

TURN TO PAGE 50 FOR EXERCISE 7



- 1. You were told that a Reference Code takes up more than one column on the tape.
- 2. Read the paragraph below so that you will fully understand about recording a Reference Code. It also explains the importance of the Search button.
- 3. Search the Left tape.
- 4. Record a Reference Code and then record the paragraph below.
- 1. A Reference Code is not a single column, but a combination of 61 special columns with a single meaning to the MT/ST when it is instructed to search. Bear in mind that searching is not the same as reading the tape. When the machine searches, the tape moves at high speed and the machine is looking only for the Reference Code. When it recognizes the Reference Code, it stops on the space following the 61st column. On the other hand, depressing the Start Button tells the machine to read, or "look at," each character individually and act accordingly. (STOP CODE AND REFERENCE CODE)
 - 5. Do not space before recording a carrier return.
 - 6. Play back your recording.
 - 7. Re-read this paragraph before going to the next lesson.



Logging		Lesson 2
Objective:	To learn how to keep a MT/ST.	record of the work you are recording on th
Information:	Reference Code position o Keeping a record of wha	keep a record of what is recorded at each a tape. At is recorded on the tape is done through a log means to keep a record of something you
	 A Logging system is a on the MT/ST. 	way of keeping a record of the work completed
	2. You should have a retraining time on the M	ecord of the work you are doing during you
	3. Two Logging charts wi for your Left tape.	ll be needed, one for your Right tape, the other
	4. As you record an exerging proper notation.	cise, refer to your Logging charts and make the
	5. In this way you will k	now where to find any recorded exercise at all
	6. In this lesson are two L	ogging Charts.
	TAPE: Right	
	Ref. Code	Description



TAPE: Left	
Ref. Code	Description
# 1	

1.	What do we mean by a Logging system?
2.	Why is it important to keep a record of the information you have recorded on the tapes?



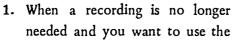
Objective:

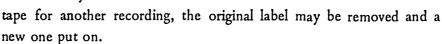
To learn how to label the Magnetic

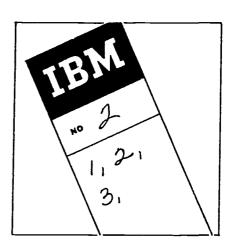
Tape Cartridges.

Information: Gummed labels may be attached to the plastic cartridges for identification.

> On the job you will be expected to know how to label the cartridges.







- 2. Tapes that are to be used at some future time may be filed but must be marked properly on the label.
- 3. The label should have a tape number and the search positions used up on the tape. This is important to let you know where on the tape you may record additional information at some later date.
- 4. At the same time you should put identification numbers on the typed papers to tell you on which tape and at what search position on the tape the material is recorded. A typed copy should be kept in the file for this purpose.

Assignment:

1.	Why	is	it	important	to	label	all	plastic	cartridges	properly?
----	-----	----	----	-----------	----	-------	-----	---------	------------	-----------

2. What kind of information would you mark on the label of a cartridge that is to be filed?



End-of-Tape Indication

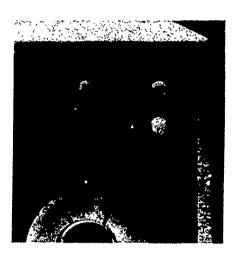
Lesson 26

Objective:

To learn what to do when you reach the end of a tape.

Information: A tape cartridge has 100 feet of magnetic tape. You can record about 10 pages of material on each tape.

> 1. When you reach the end of a tape, either recording or playing back, the Error Light will come on and the typewriter keyboard will lock.



- 2. Because the keyboard is locked, the Rewind button is inactive.
- 3. To unlock it, depress the Line Return Button or if you are in Record, backspace several times with the Backspace Key of your typewriter. You will learn more about the Line Return Button in a later lesson.
- 4. Then you can follow the usual procedure for removing a cartridge.

1.	A tape cartridge contains		feet of m	agnetic tape.	
2.	You can record about		pages of mai	erial on each ta	pe.
3.	What happens when you rea back?	ch the end	of a tape, eit	her recording or	· playing
4.	What do you do?				
		_			



Objective:

To point out some things that you should remember about Reference Codes and Searching.

Information:

Reference Codes and Searching are very important in using the MT/ST. In this lesson are listed some of the important things to remember.

- 1. Remember, it makes no difference where the Reference Number Dial is set when you record Reference Codes.
- 2. Remember, all Reference Codes are identical (the same).
- 3. Remember, when you depress the Search button, the tape automatically rewinds and begins to count Reference Codes. When it counts to the number in the Reference Number window, it stops.
- 4. Remember, the only time you must set the Reference Number Dial is when you want to Search the tape.
- 5. Remember that a Reference Code takes up more than one column on the tape. It is a combination of or a block of 61 special columns with a single meaning to the MT/ST when it is instructed to Search.
- 6. Remember, searching is not the same as reading the tape. When the machine searches, the tape moves at high speed and the machine is looking for the Reference Code which you set in the Reference Number window. When it finds the Reference Code, it glides through all the 61 columns and stops on the first space following the 61st column.
- 7. Remember that if you set the Reference Number Dial for #01 and depress the Search Button, the MT/ST will stop on the first space following the 61 columns of Reference Code #01.



- 8. Remember, if a letter was recorded after the Reference Code #01, you would depress the Start button and the letter would play out.
- 9. Remember, if the tape was blank after you search Reference Code #01, you would be ready to record additional information.
- 10. Remember, do not record another Reference Code after you have searched. There is already one recorded on the tape. The MT/ST recognized the already-recorded Reference Code, glided through the 61 columns, and had stopped at the first space following the 61st column. The MT/ST is now ready to receive additional recordings or play out information previously recorded.
- 11. Remember, Searching is a counting process. The MT/ST simply counts the number of Reference Codes as the tape is moving past the "read" mechanism.
- 12. Remember, the MT/ST stops the tape after it has read as many Reference Codes as are shown in the Reference Number Dial.

Playback in Line

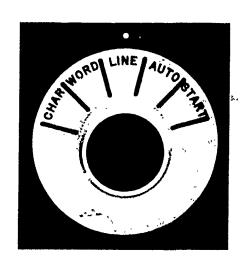
Lesson 28

Objective:

To learn how to play back in LINE.

Information: When the machine is in Play and the Mode Dial is set at LINE, each time you depress the START button, it causes one line to be played out.

> 1. When the Mode Dial is set at LINE, a Stop Code or Carrier Return Code will stop playback.



2. Look at this table:

MODE	CODES which stop playback	
AUTO	Stop	
LINE	Stop, Carrier Return	
WORD		
CHAR		

- 3. Lines can be of any length because the machine recognizes lines by the Stop Code or Carrier Return Code which you have recorded on the tape.
- 4. Since the MT/ST must read the Carrier Return Code in order to recognize a line, playback will stop after the Carrier has returned.

- 1. When the Mode Dial is set at LINE, each time you depress the Button, it causes a _____ to play out.
- 2. The MT/ST must read the Carrier Return Code in order to recognize a line and playback will stop (before/after)_____ the Carrier has returned.
- 3. Practice on machine for playback in LINE mode.

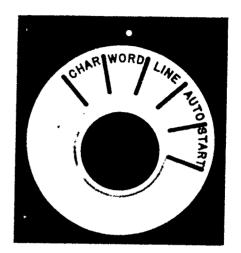


Objective: To learn how to play back in WORD.

Information: When the machine is in Play and the Mode Dial is set at WORD, each time you depress the START Button, it causes one word to be

played out.

1. When the Mode Dial is set at WORD, a Stop Code, a Carrier Return, a space, or tab code will cause playback to stop.



2. Look at this table:

MODE	CODES which stop playback
AUTO	Stop
LINE	Stop, Carrier Return
WORD	Stop, Carrier Return, Space, Tab
CHAR	

- 3. Since most words (unless they come at the end of a line) are followed by a *space*, the machine recognizes most words by the space code which follows them.
- 4. In the same manner, any punctuation that follows a word is considered part of the word.
- 5. Since the MT/ST must read the space code in order to recognize the end of a word, playback will stop after the carrier has spaced.
- 6. In the WORD Mode the MT/ST will stop after playing out a Stop Code, a Carrier Return, a Space, or a Tab.



- 7. Any group of letters, numbers, or symbols followed by a space is read as a word by the MT/ST.
- 8. In the WORD Mode if a word is followed by two spaces, the MT/ST will stop once after the first space is played out and again after the second space.
- 9. In the WORD Mode if a word is followed by two tabs, where will the MT/ST stop? One tab will play out with the word and the second will play by itself.

Assignment:

ι.	When the machine is in Play and the Mode Dial is set to WORD, each time you depress the button, it causes one to be played out.
2.	When the Mode Dial is set at WORD, a Code,, or Code will cause playback to stop.
3.	Since most words (unless they come at the end of a line) are followed by a space, the machine recognizes most we by the Code which follows them.
ţ.	Since the MT/ST must read the space code in order to recognize the end of a word, playback will stop after the carrier has
5.	In the WORD Mode the MT/ST will stop after playing out a Stop Code, a
ó.	Any group of letters, numbers or symbols followed by a space is read as a by the MT/ST.
7.	Does playback stop before or after the carrier returns when you are using the WORD Mode?



TURN TO PAGE 60 FOR PRACTICE EXERCISE 8

Record the following exercise just as you see it. When you are to record tabs, spaces, CR, etc., instructions will be in all caps. Set tabs for 25 and 50.

word. (SPACE) back. (SPACE, SPACE) impossible! (SPACE) 37698-02 (SPACE) (CR) mother-in-law (TAB, TAB) #?!,;: (CR) (TAB) word (SPACE)! (STOP CODE AND REFERENCE CODE)

Play back your recording in WORD mode. Remember to Search for Reference Code #01. Watch the MT/ST stop; mark your paper with a diagonal pencil line every time the MT/ST stops. Your playback copy should look like this:

word. back. impossible! 37698-02

mother-in-law

#?!,;:

word!

TURN TO PAGE 61 FOR ADDITIONAL PRACTICE IN THE WORD MODE.



This is to give you additional practice in the WORD mode.

Record the following paragraph. Remember, do not space before recording a carrier return.

(CR)

- 1. A Reference Code is not a single column, but a combination of 61 special columns with a single meaning to the MT/ST when it is instructed to search. Bear in mind that searching is not the same as reading the tape. When the machine searches, the tape moves at high speed and the machine is looking only for the Reference Code. When it recognizes the Reference Code, it stops on the space following the 61st column. (STOP CODE AND REFERENCE CODE)
- 1. Play back the recording in the WORD mode.
- 2. Does playback stop before or after the carrier spaces?
- 3. Does playback stop before or after the carrier returns when you are using the WORD mode?
- 4. How did punctuation marks print? With the preceding word, with the following word or with a separate depression of the START button?
- 5. When you recorded the paragraph, you double-spaced after the period after the word "search." Did the second space play with the word "search", with the word "Bear", or by itself?



Playback in Characte	Playback	in	Character
----------------------	----------	----	-----------

Lesson 30

Objective:

To learn how to play back in CHAR (CHARACTER).

Information: When the MT/ST is in Play and the Mode Dial is set to CHAR (CHARACTER), each time you depress the START button, it causes the tape to play out one character. If you will turn to page 58 you will see that it is the first setting marked on the Mode Dial.

1. Look at this table:

MODE	CODE which stops playback	
AUTO	Stop	
LINE	Stop, Carrier Return	
WORD	Stop, Carrier Return, Space, Tab	
CHAR	Each Charecter	

- 2. Each character code on the MT/ST takes up one column.
- 3. If you are not sure where you are on the tape, it is a good idea to use the CHARACTER Mode and play out a character at a time. If the wrong character plays out, you have only one character to erase instead of a whole word.

- 1. Each character code on the MT/ST uses ____ column on the tape.
- 2. Practice playing out in the CHARACTER Mode.



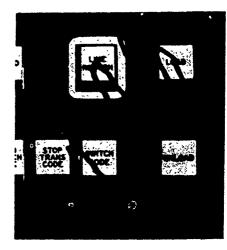
Line Return Button Lesson 31

Objective: To learn how to use the LINE RE-

TURN Button on the MT/ST.

Information: When you record you can correct errors by simply backspacing and striking over the error.

This method of correction works fine as long as you catch your error immediately after you make it. What about an error you notice only after you have typed a few other lines? It



would not be very efficient to backspace to the point of error and then retype everything.

- 1. To avoid (keep away from) this problem, the MT/ST is equipped with a LINE RETURN Button.
- 2. The LINE RETURN Button is next to the Load button on the tape console if you will look on page 6.
- 3. Backspacing backs up the tape and the typewriter carrier to the last column recorded, while the LINE RETURN Button backs up the tape one line at a time. It backs up the tape to the last Carrier Return recorded.
- 4. The LINE RETURN Button will not move the typewriter carrier. It moves the tape reel only. It moves the tape back so that the read-write mechanism is resting on the preceding Carrier Return Code.
- 5. If you put your Operation Selector Dial into Play, the machine will play out the Carrier Return. Or, it would erase the Carrier Return Code if you recorded at this point.



- 6. Remember, the first thing that the read/write head will read after a Line-Return operation will be a Carrier Return.
- 7. Remember, the carrier on the typewriter does not move when you Line-Return.
- 8. When you have used the Line Return and you are recording, you must record the carrier return again and type the entire line over. It is important to remember to type all of the line. If you space up to and/or from the point of correction, you will be erasing the printing on the tape with spaces.
- 9. The LINE RETURN Button can be used when the Operation Selector Dial is set for either Record or Play.

Assignment:

l.	The Line Return I	Button backs up the tape to the last	
2.	The Line Return	Button (does/does not)on the typewriter.	back up the
3.	When you have us	ed the Line Return and you are recording, yo	ou must record



- 1. Search the left tape to Reference Code #01.
- 2. Record the following at Reference Code #01.

BE SURE TO RECORD EXACTLY WHAT YOU SEE.

- (CR) The Line Return Button always moves the tape back to the preceding carrier Return Code. If you roll the
 - 1. Please note we made a mistake.

 The word carrier should have been typed with a capital C.
 - 2. Correct the error by using the Line Return button.
 - a. Line Return
 - b. Record a Carrier Return
 - c. Continue typing the paragraph beginning with the word "preceding".

preceding Carrier Return Code. If you roll the typewriter platen back with each depression of this button, the tape will be resting at the end of the line of copy just above the writing scale. (STOP CODE)

1. Search to Reference Code #01 on the left tape and play back the recording.

When an error is made near the beginning of the line of typing, it is often faster to Line Return rather than to backspace to correct the error.

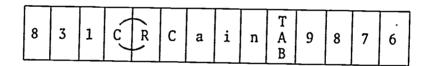


- 1. Make sure the Operation Selector Dial is not in Record when setting tabs.
- 2. Set tab stops at 40 and 60.
- 3. Search the Left tape and record the following at Reference Code #01.

Abate	1764	3421
Brooks	721	831
Cain	9876	

1. We have just made another mistake. The name should be Crain and not Cain. We have only one tab on the tape to take care of the spaces between the name and the first number.

The tape looks like this --



If we backspaced with the backspace key, we would backspace through the spaces and that would take us back too far on the tape. Line-Return to correct the error. Record the carrier return and type the entire line again.

Crain

9876

9854 (STOP CODE AND REFERENCE CODE)

You should get into the habit of thinking in terms of a continuous piece of tape rather than lines on your paper. If something happens that you don't understand, draw a strip of tape and fill in the columns.

a. Search to your recording and play it back to check your correction.



Search your left tape and record the following at Reference Code #01.

- (CR) The Line Return Button always moves the tape back to the preceding Carrier Return Code. If you roll the typewriter platen back with each depression of this button, the tape will be resting at the end of the line of copy just above your writing scale. (STOP CODE AND REFERENCE CODE)
 - 1. Search to Reference Code #1 and play back the recording.

The Line Return button works in Play as well as Record. Suppose that after you have played this paragraph back, you see that you have omitted a word. (See second line of typed paragraph below.)

- a. Line-Return until you are at the carrier return between the words "the" and "preceding."
- b. Place the Mode Dial in WORD.
- c. Play out the words through the word "you."
- d. Go to Record L and record the word "will" and the balance of the paragraph.
- (CR) The Line Return Button always moves the tape back to the preceding Carrier Return Code. If you will roll the typewriter platen back with each depression of this button, the tape will be resting at the end of the line of copy just above your writing scale. (STOP CODE AND REFERENCE CODE)
 - 1. Search to Reference Code #1 and play it back to see that your correction is right.



MAGNETIC TAPE SELECTRIC TYPEWRITER

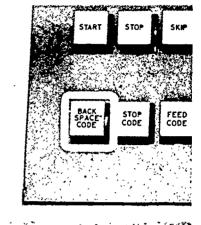
Backspace Code Button and Underscoring

Lesson 32

Objective:

To learn how to use the BACK-SPACE CODE Button on the MT/ST.

Information: The BACKSPACE CODE Button records a Code on the tape which tells the machine to back up the typewriter carrier. (It also backs up the carrier at the same time it records the code).



The BACKSPACE CODE Button is

used instead of the Backspace Key on the typewriter for underscoring and centering.

- 1. When the MT/ST is in Record, the tape and the carrier move forward. When you depress the Backspace Key in Record, both the tape and the carrier back up.
- 2. How do you underscore on any other typewriter? You type the word or words, backspace on the typewriter, shift and underscore.
- 3. We will try this on the MT/ST. On the left tape search to Reference Code #01, record the word "business." Backspace and underscore it. Now play it back. What plays out?
- 4. The underscore plays out because by backspacing and recording the underscore, you erased the word.
- 5. Remember, the backspace key will cause both the carrier and the tape to back up.
- 6. In order to underscore you must be able to back up the carrier without backing up the tape.



- 7. We can do this on the MT/ST by using the BACKSPACE CODE Button on the tape control unit.
- 8. Look at page 6 and locate the BACKSPACE CODE Button. Use the first finger of the right hand to depress it.

 (The word backspace is always written as one word. It is written as 2 words on the button in order to fit it on the button).
- 9. We will again go to the MT/ST and record the word "business." This time depress the BACKSPACE CODE Button on the tape control unit once for every character to be underscored.
- 10. Look at the carrier and see where it is now. You will notice that it is at the beginning of the word.
- 11. Now underscore the word "business" and see how it will play back.
- 12. The carrier can be backed up one space at a time by using the BACKSPACE CODE Button on the tape control unit.
- 13. The MT/ST must be told to do everything that it can by the magnetic tape. When the BACKSPACE CODE Button is depressed, a code is recorded on the tape which will cause the carrier to back up when the Code is read during playback.
- 14. Even though the carrier backspaces when the BACKSPACE CODE Button is depressed, the tape advances (moves forward).
- 15. Here is an illustration showing how a piece of tape would look if we had underscored the word tape.

BSC=BACKSPACE CODE

t	а	р	е	B S C	B S C	B S C	B S C	-	-	-	-	S P	
---	---	---	---	-------------	-------------	-------------	-------------	---	---	---	---	--------	--



- 16. If the word you want to underscore is followed by a punctuation mark, type the word, BACKSPACE CODE, underscore, and then type the punctuation mark and space. If you do this you will avoid underscoring punctuation marks following a word.
- 17. On the MT/ST, underscoring is normally done one word at a time. In other words, in recording and underscoring the words to be or, you would first type the word "to", record the Backspace Codes, underscore and space. Next you would type the word "be", record the Backspace Codes, underscore and space, etc.
- 18. You do this because the MT/ST recognizes words by reading a space. The underscore has to be typed as part of the word.
- 19. The BACKSPACE CODE Button is also used for centering.
- 20. For centering, tabulate to the center of the page. Depress the BACKSPACE CODE Button for every other character in the line (every second character).

Assignment:

1.	Remember, the backspace key will cause both the carrier and th
2.	When the Backspace Code Button is depressed, a code is recorded on the tape which tells the MT/ST to when the code is read during playback.
3.	Even though the carrier backspaces when the Backspace Code is depressed, the tape
	If the word you want to underscore is followed by a punctuation mark, explain the procedurc:
•	b the word.
	d

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5.	Fill in the o	olu	ınns	on	the	e taļ	oe fo	or u	nde	rsco	ring	the	wo:	rd <u>c</u>	ode	•			
6.	If you were				d a	nd 1	ande	ersco	ore	the	wo	ords	<u>to b</u>	e <u>or</u>	, h	ow	wo	uld	you
	t o																		
7.	What is the	pro	ocec	lure	yo	u fo	llov	v in	rec	ordi	ng a	a ce	ntero	ed li	ne o	on t	he	MT/	ST?



- 1. Search the left tape for Reference Code #01.
- 2. Record the following paragraph.
- 3. Use the Backspace Code Button when underscoring.

There will be times when you will want to record the signal "backspace" on a tape, an instruction that during playback will cause the typewriter carrier to backspace. For example, this would be done when a word or phrase is to be underlined. From what you have read about correcting typographical errors, you can readily see that the typewriter Backspace Key would not be used for this purpose.

- 4. Play back your recording.
- 5. Did you remember to record a Stop Code and a Reference Code at the end of the paragraph?

TURN TO PAGE 73 FOR EXERCISE 13.

- 1. Set the Operation Selector Dial for Play R.
- 2. Set a tab for the center of your paper.
- 3. Search to Reference Code #02.
- 4. Dial Record R.
- 5. Record the four lines shown below.

 Center each line on the paper.
 - a. For each line, tabulate to the center of the page.
 - b. Depress Backspace Code Button for every other character in the line.

Magnetic Tape "Selectric" Typewriter Seminar
INTERNATIONAL BUSINESS MACHINES CORPORATION
590 Madison Avenue

New York, New York 10022

- 6. Did you remember to end the recording with a Stop Code and Reference Code?
- 7. Playback the recording.



Objective:

To learn how to use the SKIP Button on the MT/ST.

Information: It is possible to by-pass or skip information on the tape so that it does not print on the paper. When you use the SKIP Button, the tape moves but the typewriter does nothing. Skipping does not erase the tape.



- 1. In Play, you can skip information on the tape by depressing the SKIP Button. See page 6 for location of this button on the console. The SKIP Button is depressed with the third finger of the right hand.
- 2. You have learned that the setting on the Mode Dial determines the amount of material to be typed out when the Start Button is depressed.

3. SKIP in AUTO

A Stop Code will stop a skipping action when the Mode Dial is set at AUTO and the SKIP Button is depressed.

4. SKIP in LINE

When the Mode Dial is set at LINE, the MT/ST will skip a line when the SKIP Button is depressed. In other words, a SKIP stops after reading a Stop Code or Carrier Return Code.

5. We will go to the MT/ST and record some lines. You are to record the lines exactly as you see them. Turn to top of page 75 for the lines to be recorded.



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Here are the lines to be recorded:

When you press
the line-return button
on your MT/ST, the tape will
back up so that the read/write
head lies directly on the carrier return. (STOP CODE)

Now set the Mode Dial at LINE and the Operation Selector Dial in Play.

Play out the first line.

Now depress the SKIP Button. Give the machine time to skip. Then play out the next line.

It should play out:

on your MT/ST the tape will

6. Now go back to the beginning and play back the entire recording in AUTO. Is the second line there? Did skipping erase the tape?

7. SKIP in WORD

In the WORD setting, a SKIP stops after a Stop Code, Carrier Return, Space, or a Tab. Record the same material you did in Practice Exercise 8 on page 60. After you record it, set your Mode Dial in WORD and Operation Selector Dial in Play.

Follow the procedure of playing once and skipping once throughout the exercise.

Your paper should look like this:

word. 37698-02 mother-in-law #?!,;:

word

8. SKIP in CHARACTER

When the Mode Dial is set at CHARACTER, skipping takes place one character at a time.

9. In Play, both the Start and Skip Buttons work in connection with the Mode Dial.



- 10. The Stop Button can also stop the Skipping action just as it stops typing action.
- 11. If you cannot hear the sound in Skipping, you can feel it by placing your hand on the tape control unit.

	•			
Αs	sigi	٦m	en	t:
	٠٠۶٠			٠.

1.	Does Skipping erase the tape?
2.	The MT/ST will SKIP according to the setting on the Dial.
3.	The Button can also stop the skipping action just as it stops typing action.
4.	A Stop Code will stop a Skipping action when the Mode Dial is set at
5.	When the Mode Dial is set at LINE, a SKIP action stops after reading a Code or Code.
6.	When the Mode Dial is set at WORD, a SKIP stops after a
7.	When the Mode Dial is set at CHARACTER, skipping takes place character at a time.

- 1. Record the following paragraph on the Right Tape at Reference Code #01.

 (CR) Haven't you long wished for carefree typing, typing where you can zip along at a fast, easy pace and not be concerned about making typographical errors? How many times have we talked ourselves into making a misstroke because we were saying, "Don't make a mistake; don't make a mistake." With your MT/ST you have no worry. If you do make an error, backspace and strike over. (STOP CODE AND REFERENCE CODE)
 - 2. Play back your recording, making the changes shown below. Do NOT attempt to change the tape. Add words to your paper copy. To do this you must:
 - a. Play back your recording until a word is to be inserted.
 - b. While still in Play Mode, type in the word or phrase on your paper.
 - c. Space after adding each word.

To insure that your MT/ST will stop playback at the correct position use the Word Mode as you approach the insertion. Use the Line Mode for the balance of the exercise.

- 3. When you do this practice you will not end up with a good right margin because you have added words. Do not worry about this now.
- (CR) Haven't you long wished for carefree typing, typing where you accurate,
 can zip along at a fast, / easy pace and not be concerned about making
 typographical errors? How many times have we talked ourselves into or omitting a line
 making a misstroke/because we were saying, ''Don't make a mistake;
 don't make a mistake.'' With your MT/ST you have no worry. If you simply
 do make an error, /backspace and strike over. (STOP CODE AND
 REFERENCE CODE)



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- 1. Search the Right Tape to Reference Code #01.
- 2. Play back your recording, making the changes shown below. Do NOT attempt to change the tape.
- 3. Listen to or feel the sound of the words as they skip.
- 4. Again, your right margin will not be correct but do not worry about this now.
- (CR) Haven't you long wished for carefree typing, typing where you can zip along at a fast; easy pace and not be concerned about making typographical errors? How many times have we talked ourselves into making a misstroke because we were saying, "Don't make a mistake; don't make a mistake." With your MT/ST you have no worry. If you do make an error, backspace and strike over. (STOP CODE AND REFERENCE CODE)

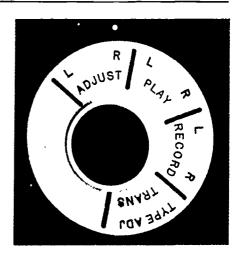


Objective:

To learn how to play back in AD-JUST Mode.

Information: You have seen that the line endings on the last two exercises have been uneven.

> Although you deleted words in some lines and added in other lines, the MT/ST obeyed the carrier returns as they were recorded. When the MT/ST is in Play, the only time the



carrier returns is when you have recorded it on the tape.

If we could make the MT/ST ignore (pay no attention to) the recorded carrier returns and look at the setting of the right margin instead, our line endings would look much better.

- 1. On the Operation Selector Dial, just to the left of the Play setting, are settings marked ADJUST L or ADJUST R.
- 2. When the Operation Selector Dial is set to ADJUST, the MT/ST does not pay attention to carrier returns on the tape and returns the carrier by looking for the setting on the right margin stop.
- 3. For example, in the following paragraph, you can easily see that the first line would end in the middle of the line if Carrier Return Codes on the tape were played out as recorded, and the second line would run off the right side of the paper.

Please call at your carliest convenience tomorrow. whether or not we should make eager to hear your views on, the proposed announcement.

The schedule will be a difficult one, but I believe it is realistic.



- 4. Therefore, the MT/ST has been made so that it will not pay attention to the Carrier Return Codes when the Operation Selector Dial is set for ADJUST Play.
- 5. Then the machine itself "decides" when to return the carrier to adjust the right-hand margin.
- 6. To make allowances for words which are skipped or added, the operator must play back the message in ADJUST R or L.
- 7. When the MT/ST is set to ADJUST, carrier returns depend on the setting of the right margin stop and not the Carrier Return Codes on the magnetic tape.
- 8. The ADJUST operation of the MT/ST permits you to have a more even right hand margin if words have been added to or deleted from the original copy.
- 9. It returns on the first space or Carrier Return Code it reads after the carrier has entered the last inch of writing line, which is referred to as the Margin Adjust Zone.
 We will learn more about this in the next lesson.

Assignment:

1.	When the Operation Selector Dial is set to ADJUST, the MT/ST ignores
	Carrier Return Codes on the tape and returns by looking for the setting on
	thestop.
2.	The ADJUST operation of the MT/ST allows you to have even right-hand if words have been added to or deleted from the original
	copy.
3.	In ADJUST Play, the MT/ST decides to return the carrier after the carrier has
	entered the last of the writing line

Objective:

To learn how to use the Margin Adjust Zone on the MT/ST.

Information:

The last inch of the writing line is called the Margin Adjust Zone. So, the Margin Adjust Zone is one inch long.

- 1. There are 10 Pica spaces to an inch and 12 Elite spaces to the inch. Therefore, the Margin Adjust Zone is about 10 spaces long on a Pica machine and about 12 spaces long on an Elite machine.
- 2. If the right margin stop were set at 75 on a Pica machine, the Margin Adjust Zone would be from 65 to 75.
- 3. If the right margin stop were set at 85 on an Elite machine, the Margin Adjust Zone would be from 73 to 85.
- 4. When the Operation Selector Dial is set to Adjust, the carrier returns when the first Space Code, Hyphen Code, or Carrier Return Code is read while the element is typing in the Margin Adjust Zone.
- 5. In Adjust if a carrier return is read *outside* of the Margin Adjust Zone, the element simply spaces; however, carrier returns read inside the Margin Adjust Zone are obeyed.
- 6. Because paragraphs are identified by 2 successive (following in order) carrier returns or a carrier return followed by a tab, all multiple (more than one) carrier returns or carrier returns followed by a tab are obeyed when they are read from the tape.
- 7. So remember, in Adjust, the MT/ST obeys all carrier returns followed by a tab and all multiple carrier returns.
- 8. The amount of material typed out in Adjust depends on the setting of the Mode Dial just as it does in Play.



- 9. In Adjust, when the Mode Dial is set to AUTO, playout is automatically stopped when a Stop Code is read from the Tape.
- 10. In Adjust, as in Play, it is possible to control playout in the AUTO, LINE, WORD and CHARACTER modes.
- 11. It is also possible to Skip in Adjust in the AUTO, LINE, WORD and CHARACTER modes.
- 12. In Adjust, line skipping or line playback is not stopped by the Margin Adjust Zone, but is still stopped by the recorded carrier return codes.
- 13. In Adjust, it is important to remember that line skipping and line playback are stopped by Recorded Carrier Returns and not the Margin Adjust Zone.

RIGHT MARGIN SETTING

Because of the number of short words used in the average business writing, a space is often read soon after the typewriter carrier enters the Margin Adjust Zone.

Many lines, therefore, end several spaces short of the right-hand margin stop.

For more balanced placement of material on the page, you can set the right margin five or ten spaces to the right of where you want the average line to really end.

The exact setting will depend on the kind of words being typed.

This you will have to decide for yourself.



Assignment:

1. The lastZone.	of the writing line is called the Margin Adjust
	Zone on a Pica machine is about spaces long about paces long.
3. If the right margin stop Zone would be from	were set at 85 on an Elite machine, the Margin Adjust
	lector Dial is set to Adjust, the carrier returns when Code or
Code is read while the el	lement is typing in the Margin Adjust Zone.
5. In Adjust, if a carrier relement	eturn is read <i>outside</i> of the Margin Adjust Zone, the
6. Carrier return Codes reac	l inside the Margin Adjust Zone are
7. In Adjust, the MT/S followed by a	T obeys all carrier returns.
	Play, it is possible to control play out in, and modes.
9. Is it possible to Skip in A	djust?
	and line playback are stopped by, and not the Margin Adjust Zone.





MAGNETIC TAPE SELECTRIC TYPEWRITER

Words Longer Than the Margin Adjust Zone

Lesson 36

Objective:

To learn how to take care of a longer-than-average word when it begins a space or two before the carrier enters the Margin Adjust Zone.

Information:

Sometime a longer-than-average word will begin to play out a space or two before the carrier enters the Margin Adjust Zone and will not be completed by the time the carrier has reached the right margin stop.

- 1. When this happens, the typewriter stops typing at the margin to give you the choice of hyphenating the word or letting it type out beyond the margin.
- 2. Depress the START Button to finish typing the word if you do not wish to hyphenate the word.
- 3. The number of times you press it will be different from time to time. Sometimes it will print out one character at a time for two or three depressions of the Start Button, and then it will go into automatic typing.
- 4. If the machine stopped at the end of a syllable and you wish to hyphenate the word, just type the hyphen, return the carrier, and depress the Start Button to start playback again.
- 5. If, however, you need to finish playing out a syllable before you can insert the hyphen, turn the Playback Mode Dial to Character before using the Start Button to type out as many characters as you want, type in the hyphen, and return the carrier before you start playback again.
- 6. Once in a while you may be playing out automatically in Adjust, and the carrier will return to the left margin and stop.

7. This may happen if a word ends exactly on the right margin. The machine normally stops when it comes to the right margin and has not read a space in the Margin Adjust Zone.

But the MT/ST works so fast that sometimes it reads the space following the word and returns the carrier before it has time to stop. So, it stops at the left margin. This does not happen very often, and when it does, all you have to do is depress the Start Button to go on with playback.

Assignment:

1.	If a longer-than-average word will begin to play out a space or two before the carrier enters the Margin Adjust Zone and is not completed by the time the carrier has reached the right margin, you can hyphenate the word. How?
2.	If you do not want to hyphenate the word, what do you do?
3.	If you need to finish playing out a syllable before you can insert a hyphen, what do you do?
1.	Once in a while you may be playing out automatically in Adjust, and the carrier will return to the left margin and stop. What do you do?



Objective:

To learn how important it is not to space before a carrier return.

Information:

As you have learned, a Carrier Return Code is ignored in Adjust. It really is not ignored. The machine reads it but knows the carrier should not yet be returned to the left margin. Instead of returning to the left margin, the machine spaces because it is in Adjust. This space is needed to separate the word just typed from the one which directly follows the Carrier Return Code.

- 1. If a sentence should end at the right margin, when you are recording, space once after the period and then return the carrier.
- 2. With both a space and a Carrier Return Code on the tape, you will get the two spaces needed after the period if the end of the sentence ever falls in the middle of a line in Adjust Play.
- 3. When a line does not end with a period, when you are recording, do not space before a carrier return.
- 4. In magnetic-tape typing, the space is recorded and the machine will always space when it reads it.
- 5. For that reason, when the space and Carrier Return Code come in the middle of a line in Adjust Play, your copy will have two spaces between words. The machine will space when it reads the space, and it will space again when it reads the Carrier Return Code.
- 6. It is also a good idea for you to space once after the period ending a paragraph. Reasons for this will be explained later.



Assignment:

1.	When you are recording and a sentence should end at the right margin, spac after the period and then
2.	Why?
3.	When a line does not end with a period, (do/do not) space before a, because your copy will have spaces between words if you should use Adjust Play





MAGNETIC TAPE SELECTRIC TYPEWRITER

Line Return	in Adjust Lesson 38
Objective:	To learn how the Line Return Button does not work in Adjust.
Information:	When you play back in Adjust, you have learned that the lines on the copy are not the same as the recorded lines on the tape.
	 Because the lines on the copy do not agree with the recorded lines, the Line Return Button does not work in Adjust.
	2. Remember, the Line Return Button does not operate in Adjust.
Assignment:	
1. Th	e Line Return Button (does/does not) work in Adjust.
2. Wh	y?
	cause the lines on the copy in Play Adjust do not agree with the lines.

Objective:

To learn how to record hyphenated words.

Information:

If a hyphen is recorded to divide a word at the end of a line, that hyphen should not print if the word ever appears in the middle of a line in Adjust Play. You may be wondering what happens to a word which was hyphenated at the end of the line and falls outside of the Margin Adjust Zone when the message is played back in Adjust. Hyphens which are not part of the word are automatically dropped when the word prints outside the Margin Adjust Zone during Adjust playback.

- 1. The MT/ST has the ability to drop the hyphen if this instruction has been recorded on the tape with the hyphen.
- 2. You must tell the typewriter which hyphens may be dropped, since some hyphens are part of a word (as in mother-in-law) and should always be printed.
- 3. Hyphens which are not part of a word must be recorded in a special way so the machine knows to drop them if the message is ever typed in Adjust.
- 4. In Record, when it is necessary to hyphenate a word at the end of a line, you must follow this procedure:
 - a. Type to the point where you wish to place the hyphen, space once (with the typewriter space bar), record a Backspace Code and then record a hyphen.
 - b. For example, you may be near the end of a line and want to divide the word "foreground." (See the next page.)

Type:

f
o
r
e
space
Backspace Code
hyphen
Carrier Return
finish typing the word

- 5. Hyphens which are part of the word and should print regardless of where the word falls on a line are recorded in the usual manner.
- 6. In Adjust, the MT/ST will always return the carrier if a hyphen is read in the Margin Adjust Zone and will finish the word in the next line.

Assignment:

1. If a hyphen is recorded to divide a word at the end of a line, and you do not want that hyphen to play out if the word prints in the middle of a line in Adjust Play, you Record to the point where you wish to place the hyphen, and then Record the hyphen.

2. How do you Record words with hyphens that are part of the word?



- 1. Set the Operation Selector Dial to Adjust R.
- 2. Search to Reference Code #1 on the Right Tape.
- 3. Set the Mode Dial to AUTO.
- 4. Return the carrier.
- 5. Move the right margin stop to 72.
- 6. Depress the START button.

Notice that the carrier returns read outside of the margin adjust zone have been treated as spaces and the carrier returned on the first space, hyphen, or carrier return code that was read in the margin adjust zone.

Practice Exercise 16

- 1. Again, Search to the same recording.
- 2. Set the Mode Dial to LINE.
- 3. Play out the message one line at a time.

Did playback stop in the margin adjust zone?

If you said No, you are correct. The only way the MT/ST can identify lines is by the carrier returns that are recorded on the tape.

Practice Exercise 17

- 1. IMPORTANT!!! Do not try to move the right margin stop when the printing position indicator is near it. Always return the carrier before moving the right margin stop.
- 2. Set the right margin stop at 85.
- 3. Again, Search to the beginning of the exercise. This time, revise in Adjust as indicated on the next page.



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(CR) Haven't you long wished for carefree typing, typing where you accurate can zip along at a fast,/easy pace and not be concerned about making typographical errors? How many times have we talked ourselves into or omitting a line making a misstroke/because we were saying, "Don't make a mistake; don't make a mistake." With your MT/ST you have no worry. If you simply do make an error,/backspace and strike over. (STOP CODE AND REFERENCE CODE)

DO YOUR LINE ENDINGS LOOK BETTER THIS TIME?

Practice Exercise 18

- 1. Search to Reference Code #1 on the Right Tape.
- 2. Play back in Adjust and make the following revisions.
- (CR) Haven't you long wished for carefree typing, typing where you can zip along at a fast, easy pace and not be concerned about making typographical errors? How many times have we talked ourselves into making a misstroke because we were saying, "Don't make a mistake; don't make a mistake." With your MT/ST you have no worry. If you do make an error, backspace and strike over. (STOP CODE AND REFERENCE CODE)

Practice Exercise 19

- 1. Make it a habit to skip before you do any typing. It will make it easier for you to remember where you are if you make it a habit to always skip first.
- 2. Search to Reference Code #1 on the Right Tape.
- 3. Play back in Adjust.
- 4. Listen to (or feel) the sound of skipping.
- 5. Say the words to yourself as you play and skip. After a while, you will find that you only glance at the typewriter once in a while as you START and Skip.



(CR) Haven't you long wished for carefree typing, typing where you rapid can zip along at a fast, easy pace and not be concerned about making typographical errors? How many times have we talked ourselves into an error making a misstake because we were saying, "Don't make a mistake; don't make a mistake." With your MT/ST you have no worry. If you a typing do make/an error, backspace and strike over. (STOP CODE AND REFERENCE CODE)

Practice Exercise 20

- 1. Record the following on the Right Tape at Reference Code #1.
- 2. Remember to underscore one word at a time.

When underscoring words, <u>always</u> <u>underscore</u> <u>them one at a time</u>.

You may want to skip the second of a series of three words when revising material. You can do this if each word was underscored individually.

A series of underscored words which were on one line when recorded <u>may be divided when playing back in Adjust</u>. This is another reason <u>you should underscore words individually</u>.

- 3. Play this recording back in Adjust.
- 4. If each word does not have its own underscore with it, you have spaces before your Backspace Codes.

Practice Exercise 21

- Do the revision indicated below.
 Do NOT attempt to change the tape.
- 2. Remember, it will be easier for you if you always Skip before you type.
- 3. Listen to (or feel) the sound of skipping. You will find that it takes longer because the Backspace Codes and underscores must also skip.
- 4. Search the right tape to the proper Reference Code.



When underscoring words, always underscore $\frac{\text{the words}}{\text{them one at a}}$ time.

You may want to skip the second of a series of three words when revising material. You can do this if each word was underscored individually.

may fall
A series of underscored words which were on one line when you are recording. But this same series of words recorded/may be divided when playing back in Adjust. This is another reason you should underscore words individually.

Did your underscoring skip with the words? If it didn't you must have spaced before Backspace Coding.



MAGNETIC TAPE SELECTRIC TYPEWRITER

Recording	Dashes Lesson 40
Objective:	To learn how to Record dashes on the MT/ST.
Information	In ordinary typing, dashes are usually typed as two hyphens. With the MT/ST, however, you will follow a different procedure, as described in this lesson.
	1. You will Record a dash as <i>one</i> hyphen with a space before and a space following the hyphen to set it off from the words it separates.
	2. This form is used because of the way the machine is inade to drop hyphens in Adjust.
	3. If you record more than one hyphen in a row, the MT/ST will print out only the first one.
Assignment	: :
1.	How do you Record a dash on the MT/ST?
2. \	Why?



- 1. Record the following exercise on the Right Tape at Reference Code #1.
- 2. When recording hyphenated words such as mother-in-law, type them just as you see them no special procedure is necessary.
- 3. When dividing a word at the end of a line, use the following procedure:

Space

Backspace Code

Hyphen

Carrier Return

It does not matter whether the hyphen appears in a hyphenated word such as mother-in-law, father-in-law, sister-in-law, or brother-in-law, or whether the hyphen had been typed to divide an exception-ally long word at the end of a line. In either situation, the carrier will return to the left margin in adjusted playback if this hyphen falls in the Margin Adjust Zone. In Adjust, the typewriter carrier always returns when the machine reads a space, hyphen, or carrier return in the Margin Adjust Zone.

- 4. Change margins to 20 and 80.
- 5. Set a tab at 25.
- 6. Search and play back your recording in Adjust.
- 7. Watch playback very carefully to see which hyphens print and which do not.
- 8. Notice the carrier return on a hyphen when it is read in the margin-adjust zone.
- 9. Did you remember to begin with a CR and end the recording with a Stop Code and Reference Code?

Practice Exercise 23

In normal typing dashes are typed as two hyphens. With the MT/ST, you must follow a different procedure. You will record a dash as a SPACE HYPHEN SPACE. This is necessary because the machine is made to drop hyphens in Adjust. If you record more than one hyphen in a row, your machine will print only the first one.



- 1. Move your margins back to 15 and 85.
- 2. Be sure you have a tab set for the 5-space paragraph indention.
- 3. Record the following paragraph on the Left tape at Reference Code 1.

Much of our work today has to go through many revisions before it is completed. Quantities of typewritten material are typed over and over - often for minor changes.

Storing magnetically - with the advantages of fast playback and right-margin alignment - saves time. With an MT/ST, you have to type only the part of a manuscript which is changed. The rest you can play back automatically.

Do not play back; go to the next exercise.

Practice Exercise 24

- 1. Play the recording back in Adjust, making the revisions indicated below.
- 2. It is possible to turn the Mode Dial while the MT/ST is typing.
- Begin this revision with the Mode Dial in AUTO. Turn to WORD immediately before you must make the change.
 Do this for each revision.

Much of our work today has to go through many revisions before finally it is/completed. Quantities of typewritten material are typed over and over - often for minor changes.

Storing/magnetically - with the advantages of fast playback and manually right-margin alignment - saves time. With an MT/ST, you have to type/only the part of a manuscript which is changed. The rest you can play back automatically.

Did you remember to space after each word you inserted?



There are, of course, words which are 10 or more characters long. If one of them is typing out and no Carrier Return, Space or Hyphen Code is read in the Margin Adjust Zone, the MT/ST halts at the right margin stop.

At this point, the operator can manually hyphenate or play out the remainder of the word. She then returns the carrier and pushes the START button to continue.

1. Search the Left Tape and record the following paragraph at Reference Code #1.

There are times when extremely long words, such as "inaccessibleness," "multinucleolated," "hydromechanics," "Nonprofessional," "Examinatorial," will begin before and not be completed within the Margin Adjust Zone.

PLAYBACK

- 1. Play back with right margin at 85, just as it was when recording.
- 2. Watch the carrier stop at the right margin before completing "inaccessibleness" at the end of the first line.
- 3. Switch to CHARACTER Mode.
- 4. Depress START button as many times as needed to play out the rest of "inaccessibleness."

PLAY BACK AGAIN

Experiment with moving right margin to a point where the carrier will stop at a letter in "inaccessibleness," so you will want to play out another letter or two and then hyphenate to finish the word on the next line.

For example, if the carrier should stop on the letter "b" you would:

- 1. Set Playback Mode Dial for CHARACTER.
- 2. Depress START button twice to play out "le."
- 3. Type a hyphen.
- 4. Depress Carrier Return Key.
- 5. Set Playback Mode Dial for AUTOMATIC.
- 6. Depress START button to complete playback.



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Lesson 41

Objective:

To learn more things about Skipping when you are making changes in the tape.

Information: If a part of a word is to be changed, Skip the whole word and type it in correctly.

For example:

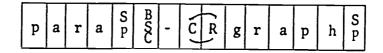
"If you wish to spacing after words"

If you want to change the word "spacing" to "space" you would skip the word spacing and type in space.

- 1. This method is faster than using the Character Mode to play out the unchanged part of the word and to Skip the deleted letters.
- 2. Another example is inserting words at the beginning of a sentence which requires changing the original capital letter to lower case. For example:

"We are accustomed to spacing" If you wanted to add "In rapid typing" before the word "We" you would Skip We and type "In rapid typing, we."

- 3. In the Word Mode, you must depress the Start Button three times to play out or skip a word divided at the end of a line.
- 4. Remember, the MT/ST thinks a word ends when it comes to a space or carrier return, and there are three of these in a hyphenated word.
- 5. If you were typing the word "paragraph" and the syllable "para" fell at the end of the line, this is the way it would record on the tape:





- 6. When you make changes in punctuation, remember the things you learned about skipping.
- 7. To remind you, punctuation prints with the word it follows. So, if you want to delete a comma, period, etc., skip the word which precedes this punctuation mark in order to get rid of the punctuation mark, and then manually retype the word.
- 8. The second space after a period ending a sentence is skipped as a separate word, so be sure to skip this second space if you are combining (joining together) sentences.

9. For example:

Type: Listen to the machine because it is an aid to skipping.

Skip: machine (to delete the period)

Skip: the second space

Skip: It (to make the capital I lower case)

Type: machine, because it

- 10. A space plays out after a word in Word Mode Playback, so if you want to insert a comma or other punctuation after a word, backspace and type it.
- 11. A space, tab, or carrier return is read as one word if read alone. So if you are combining paragraphs and they are indented, remember to skip once for the tab.
- 12. In an earlier lesson, you learned to space once before returning the carrier at the end of a paragraph.
- 13. It is convenient to have this space on the tape any time you need to skip the last word of a paragraph.
- 14. This space, not the carrier return which is needed to separate paragraphs, will skip the last word.



15. For example, if you are making the following change: .

to be typed over and over again.

Another advantage to an MT/ST is automatic letter writing. If there is data which must be

With a space recorded after the period, skipping the word again takes place as follows:

				7														
o v e	r Sp	a	g	a	i	n	•	S P	C	T A B	A	n	0	t	h	е	r	

16. Without the space on the tape, you will skip the first Carrier Return Code:

					skipped																
r		<u>, </u>				7															
0	v l	е	r	S P	a	g	a	i	n		C	R	T A B	Α	n	0	t	h	е	r	

If this should happen, just return the carrier manually by depressing the Carrier Return Key at the typewriter before going on with the next paragraph.

17. Make this manual carrier return before playing out the second one from the tape. When you do this, the second Carrier Return Code causes the carrier to return. But, if you depress the Start Button for that second return directly after the skipping action, the carrier does not move and you have to make both returns manually.

Assignment:

- 1. If part of a word is to be changed it is better to _____ the whole word and ____ it in correctly.
- 2. If you are skipping a hyphenated word at the end of a line in the Word Mode, how many times do you depress the Start Button?

Explain.____

3.	If you are making a change in the tape and you want to delete a punctuation mark, you the word which precedes the punctuation ma and then manually the word.	
4.	If you want to insert a comma or other punctuation mark after a word you turn the Mode Dial to, and type the punctuation mark.	
5.	You must remember that in the Word Mode Playback, a,	
	or is read as one word.	



Procedure for Projects of More Than One Page

Lesson 42

Objective:

To learn how to Record when you have a report of many pages which later may have changes.

Information:

Because corrected typing means adding and deleting words and phrases, pages or revised copy do not match pages as they were recorded.

- 1. Page three of the original draft may not be page three in the final copy.
- 2. What was originally the first line of page three may become the tenth line because of additions to page two.
- 3. Therefore, the following procedures are recommended for recording projects of more than one page:

4. Page headings

Record only the heading for page one. If the pages that follow have headings, type them in manually. There is a strong chance they would not fall at the top of a page of revised copy, so they would have to be skipped and manually typed anyway.

5. Page numbers

The same would apply with page numbers as with headings. Do not record them.

6. Footnotes.

Since these have to appear at the bottom of the page containing the footnote notation, footnotes, like page headings, should be typed in manually.

7. Beginning carrier returns

Record only one carrier return at the beginning of each page (except the first).



- 8. In Adjust Play, the typewriter carrier often will be in the middle of a line when one page of recording has typed out. You will want to continue playback at the mid-point on the line, not at the left margin.
- 9. The MT/ST will change the Carrier Return Code into one space needed between words.
- 10. If your carrier should happen to be at the left margin after searching, you do not want the playback to begin with that one space, so Skip the Carrier Return Code before depressing the Start Button.

A	SS	ign	m	en	t	:
		יים:			-	

1.	This lesson is about recording a report of many pages which later									
	·									
2.	Because the pages in a revised report do not match pages as they are recorded, it is a good idea not to record and									
	·									
3.	On the first page of a report that may be revised, the first page may have the number of carrier returns needed at the top of the page, but all other pages should have only carrier return at the beginning of the page.									

Continuous	Tape as	Compared	to	Lines	of	Copy
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Lesson 43

Objective:

To learn that the MT/ST works with a continuous magnetic tape.

Information: Up to now, we have been talking about lines of copy on the MT/ST. But we must keep in mind that the tape on the MT/ST is one long tape.

- 1. We have been talking about lines of typing, but you must remember that you are working with a continuous tape and that you must start thinking about what is recorded on this continuous tape instead of what you see in the lines of copy on the typewritten page.
- 2. You must think of the machine reading consecutive (following without interruption) characters and codes.
- 3. Because you will be learning how to delete and add characters on the tape, this will be very important to remember.
- 4. Whenever you are not sure of why the machine is acting as it does, or you wonder what will happen when you depress a certain button, just draw a diagram of the tape on a long piece of paper and fill it in. It will answer your questions.

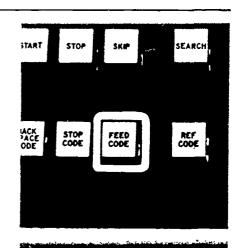
- 1. You must start thinking of the tape on the MT/ST as a tape and stop thinking about the lines of copy you see on the printed page.
- 2. You must "picture" what is recorded on the tape and form a mental picture of the machine reading _____ characters and codes.

Correcting Ta	pes Lesson 4
Objective:	To learn how to make a corrected recording of a tape.
Information:	Up to now, you have learned to produce a good copy by skipping and adding words to make changes on the printed copy. However, if a recording is to be used again at a later date, you would want to have a correct tape on file. Or, if several copies are to be printed from the original tape, you would want a corrected tape for this job.
	1. You have learned how to make the corrections on a tape if it calls for typing one letter over another, or one word over another of the same length.
	2. But, some corrections include adding letters or codes or leaving them out.
	3. You will now learn how to block out and add characters to a tape.
	4. Any number of characters may be blocked out.
	5. However, only a certain number of characters may be added to the tape.
	6. As we go on to the next lessons, these things will be explained to you more fully.
Assignment:	
	a recording is to be used again at a later date, or several copies are to be nted at the same time, you would want to have ae.
2. Any	number of characters may beout.
3. Onl	y a certain number of characters may be to the tape.

To learn how to use the FEED CODE Button on tape control unit.

Information: A FEED CODE is a "no-action" code recorded to block out or delete any unwanted characters on the tape.

> Most of the time, errors are found when they happen, so you backspace and correct them as they occur. A FEED CODE is useful when an error



is discovered several paragraphs or pages after it was made.

- 1. For example, suppose you finish recording a page, and you notice in the first part of the page you typed allready for already.
- 2. You can block out the extra "1" by playing out the first part of the page, down to the word allready.
- 3. At this point, turn the Playback Mode Dial to the Character Mode and play back al. Then switch from Playback to Record, and record a FEED CODE to block out or delete the second "1".
- 4. Now switch to Playback, depress the Start Button, and watch the rest of the word play out.
- 5. You can block out an entire sentence this same way.
- 6. The FEED CODE Button is the third button on the bottom row of buttons on the tape control unit. See page 6 for location of this button on the tape control unit.

- 7. Remember, yo' must be sure the dial is in Record when you use the FEED CODE Button.
- 8. After you have used the FEED CODE Button to block out and then play back the page, the machine just pays no attention to the Feed Code spot on the tape. It skips over it as though it were not there. The typewriter prints nothing, does not space, just waits for the tape to move to the next character.

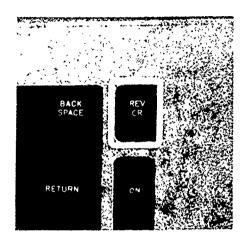
1.	A FEED CODE is no-action code	to	any
	unwanted character on the tape.		
2.	The Operator Selector Dial must alway use the Feed Code button.	s be set on	when you
3.	In Playback, the machine pays no attention the tape. The typewriter prints the tape to move to the next		spot ce, just waits for

Revise Carrier Return Key

Objective:

To learn how to use the REVISE CARRIER RETURN Key on the MT/ST.

Information: The REVISE CARRIER RETURN Key (REV CR) on the Selectric Typewriter keyboard on the MT/ST returns the typewriter carrier to the left-hand margin, just as the regular Return Key does.



- 1. You have learned that a Carrier Return Code takes two columns (two codes) on the tape when you are recording. One Code is a Carrier Return Code and one is a Feed Code.
- 2. When you use the REVISE CARRIER RETURN Key (REV CR), it records only a Carrier Return Code, no Feed Code.
- 3. This gives you the ability to use one space or column to record a return signal and allows you to use the Feed Code space to add a character.
- 4. You just retype the line in which the error is found, adding the required space or character.
- 5. Because the line is now one character longer than it was the first time, the last letter will record over the previous Carrier Return Code.
- 6. Therefore, you want to depress the REVISE CARRIER RETURN Key to record the Carrier Return Code over the Feed Code.
- 7. For example, you may have typed a page, and in proofreading you find the following spacing error in one paragraph.

to permit thetypist to add one character to any line of typing without having to

This is what your tape looks like before and after.

	BEFORE																										
t o Sp	ре	r	m		t	Sp	t	h	е	t	у	р	j	s	t	Sp	t	0	Sp	а	d	d	Sp	0	n	е	Sp
t o Sp	ое	r	m	i	t	Sp	t	h	е	Sp	t	у	р	i	s	t	Sp	t	0	Sp	a	d	d	Sp	0	n	е
	AFTER																										

8. If you ended the corrected line with the regular Carrier Return Key, you would have erased the first letter of the next line and your new copy would have a new error:

to permit the typist to add one character o any line of typing without having to

9. Remember:

Make the correction, adding the extra character. Retype the remainder of the line. Return the carrier with the REVISE CARRIER RETURN Key.

1.	A Carrier Return takes two columns and records two codes on the tape. One is a Code and one a
2.	The REVISE CARRIER RETURN Key records only a
	When you are correcting a tape, you can add a character or space by retyping the line and using the to record the carrier return.



To learn how more than one character may be added to any line by the use of the Revise Return Key.

Information: In lesson 46 you have learned how to add one character to a line. More than one character may be added to any line by using up the same number of Feed Codes as there are characters to insert.

- 1. Remember, the Carrier Return takes two columns (two codes), one a Carrier Return Code and one a Feed Code.
- 2. So, you can use up the Feed Codes to add more than one character.
- 3. Remember, you must retype all the material within the lines corrected.
- 4. For example, if you omitted the word "to" in the following paragraph:

The Revise Carrier Return Key lets you add a recording if you discover the omission when you are proofreading the copy. Do this only when you need to

You want to insert three characters: the word "to" and a space following it.

This means you need to use the space taken by three Feed Codes at the end of the lines.

- a. You can play back up to the point of correction.
- b. Dial to Record and retype the rest of the line correctly.
- c. End the line with a Revise Carrier Return.
- d. Type the next line. End that line with a Revise Carrier Return.



e. Type the next line. End that line with a Revise Carrier Return.

Your tape, before and after correction, will look like this:

				×		BE	FOF	RE			_																			
а	d	d	Sp	а	Sp	r	е	С	0	r	d	i	n	g	Sp	i	f	CR	FC	у	0	u	Sp	d	i	s	С	0	٧	е
		,	Sp			Sp		0					Γ	Γ												$\overline{}$		<u> </u>		
a	d	d	₩	t	0	υþ	а	Sp	r	е	С	0	r	d	i	n	g	Sp	i	f	CR	у	0	u	Sp	d	i	s	С	0

- 5. There is another way you can correct it.
 - a. Set the Playback Mode Dial for the Line Mode and play out the first line. Your tape will stop so the read/write mechanism is resting on the Feed Code.
 - b. At this point, switch to Record, and begin typing the next line.
 - c. The letter "l" of the word lets will record on the Feed Code.
 - d. After you have typed the line, adding the word to and the space following it, return the carrier with the Revise Carrier Return.
 - e. Type the next line and end it with the Revise Carrier Return.
 - f. At this point, you have used up three Feed Codes, and your correction is complete.

This idea of starting your recording on a Feed Code can also be used when your correction requires only one character to a line.

1.	More than	one char	acter	may	be	added	to	any	line	by	using	uр	the	same
	number of		Code	s as t	her	e are ch	ara	cters	to in	seri	·.			

2.	If you want to	insert three characters	to a line,	it means	you	need	to	use	the
	space taken by	Feed Codes.							



Revision Typing With Two Tapes

Lesson 48

Objective:

To learn how to make a second tape at the same time you are making changes and corrections of the first tape.

Information: You have learned how to correct a tape through the use of the MT/ST's special convenience features - automatic playback, skipping, and automatic margin adjust.

> You have learned how to save yourself needless retyping by making your first recording of a tape and using this tape to make a corrected copy of the original draft.

- 1. Now you will learn how you can make a second tape at the same time you are doing the corrected typing.
- 2. You will find it very convenient to have a new corrected tape to match the new changes, especially when the recorded material may be changed several times.
- 3. Since our Model IV MT/ST has two tape stations, we can make a new corrected tape of each tape that is changed.
- 4. This does not change the first tape.
- 5. The original tape stays the same.
- 6. The corrected tape is a new tape a second tape.
- 7. In the next few lessons, procedures for revision typing with two tapes will be discussed. They will include other parts of the machine that you will need to know.

Assignment:

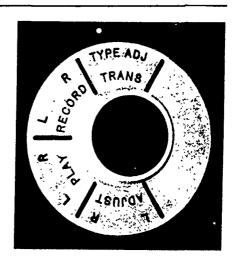
1. We are now going to learn how to make corrections and changes of our original recording and make a _____ new tape.

2.	This can be done	on the Model IV MT/S	ST because it has
	tape stations.		

3. This will not change the _____ tape.

To learn how to use the TYPE (PLAY) TRANSFER setting on the Operation Selector Dial.

Information: With the Operation Selector Dial set for TYPE (PLAY) TRANSFER, you can transfer (put in) information from the Right Station tape to the Left Station tape. The MT/ST reads information from the Right Station and records it on the Left Station tape at the same time it types out the copy.



- 1. All codes on the Right tape are duplicated (repeated) on the Left Tape.
- 2. Transferring does not erase the original tape the Right tape stays the same.
- 3. Remember, the only way you can erase a tape is by typing over it.
- 4. In the Type (Play) Transfer setting, the carrier returns are controlled by Carrier Return Codes on the tape, the same way they are in straight Playback.
- 5. The lights at both stations are ON when the Operation Selector Dial is set for Type (Play) Transfer.

Assignment:

1. When the Operation Selector Dial is set for Type (Play) Transfer, you can information from the Right Station tape to the Left Station tape.



2.	The MT/ST		information	at the	Right	Station	and
		_ it on the Left	Station tape	at the	same time	it types	out
	the copy.		-	,		71	
3.	The lights at b	ooth	are	_	when tl	he Opera	tion
	Selector Dial is se	et for Type (Play)	Transfer.		-	•	

Stop Trans	fer Code Lesson 50
Objective:	To learn how to use the STOP TRANSFER CODE on the MT/ST.
Informatio	n: Up to now, when recording, you have been using a Stop Code to end pages or messages. When you expect to transfer recorded material to a second tape, you may want to record STOP TRANSFER CODES instead of Stop Codes.
	 In a transfer operation, the Stop Code will be read at the Right Station, the code will be transferred to the Left tape, but the machine will not stop. If, however, you do want the machine to stop playback when transferring, record Stop Transfer Codes instead of Stop Codes.
	2. A Stop Transfer Code will do both, transfer to the Left tape and stop the playback.
	The STOP TRANSFER CODE Button is the third button from the right on the bottom row of buttons on the tape control unit. See page 6 for location.
	4. It is the middle button in a group of three buttons and can be easily reached with your middle finger.
	5. A Reference Code is usually recorded after a Stop Transfer Code.
Assignment	::
	If you expect to transfer recorded material to a second tape, you may want to record instead of Stop Codes.
	In a transfer operation, the Stop Code will be transferred to the Left tape, but the machine (will/will not)stop.
3.	If you want the machine to stop playback when transferring, recordinstead of Stop Codes
4.	A Code is usually recorded after a Stop Transfer Code.

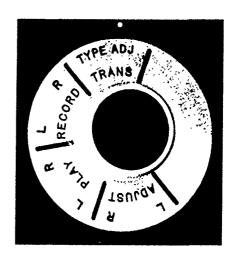


Transferring	Reference Codes Lesson 51
Objective:	To learn how to transfer Reference Codes in a transfer operation.
Information	: Reference Codes can be transferred by just depressing the Start Button. As a Reference Code transfers, a series of 15 2's and 30 z's will print out to show you that the transfer is taking place.
	1. If you do not want the 2's and z's to show on your printed page, Skip or Search past the Reference Code.
	2. It can then be put on your new tape by turning to Record, Left Station, and depressing the Reference Code Button.
	3. You must be at the <i>beginning</i> of a Reference Code when you depress the Start Button, so, for you to transfer the <i>first</i> Reference Code on a tape, <i>rewind</i> to get back to the first of the 61 characters.
	Be sure, also, that your Left tape is in the Rewind position.
Assignment:	•
	eference Codes can be transferred by just depressing the
2. W	hen a Reference Code transfers, a series of 15 and 30 will print out on the paper.
R	you do not want the 2's and z's to show on your printed page, the eference Code can be put on your new tape by turning to Station and depressing the
4. To	transfer the first Reference Code on a tape, you must be sure to

the Right and Left tapes.

To learn how to use the ADJUST TRANSFER Setting on the Operation Selector Dial.

Information: ADJUST TRANSFER is another way of transferring information to a second tape. It is similar to Adjust Play in that Carrier Return Codes on the tape are ignored and the carrier returns when a space, tab, carrier return, or hyphen is read in the Margin Adjust Zone.



- 1. ADJUST TRANSFER is used for projects requiring an updated (brought up to date) tape plus the Adjust feature for aligning right margins of typed copy.
- 2. All codes on the Right Station tape are transferred to the Left tape exactly (the same) as they are on the original tape.
- 3. Therefore, in ADJUST TRANSFER the Carrier Return Codes on the right tape are transferred as Carrier Return Codes on the left tape, even though they act as spaces in printing out the copy.
- 4. When the carrier returns because a space is read in the Margin Adjust Zone on the right tape, the space is transferred to the Left tape as a space, not as a Carrier Return Code.
- 5. The lights at both stations are ON when the Dial is set for ADJUST TRANSFER.

1.	In ADJUST TRANSFER all codes on the Right Station tape are transferred to								
	the	_ tape	as they are on the original						
	tape.		, ,						
2.	Therefore, in ADJUST	TRANSFER, the Carr	rier Return Codes on the Right						
	Tape are transferred as Carrier Return Codes on the								
3.			returns because a space is read the Left tape as a space, not						
	as a	Code.							
4.	The lights at	stations are	when the Dial is set for						



Skipping in	Transfer Lesson 53
Objective:	To learn how to skip in Transfer.
Information	1: You can Skip during a transfer operation on the MT/ST.
	 Depressing the Skip Button affects only the Right Station tape. This is important to remember.
	2. The new tape on the Left Station does not move.
	3. The tape in the Left Station just stays where it is, waiting to record the next information to be played back.
	4. The lights at the Left Station go out during the Skipping process. This is to show you that the Left tape is doing nothing.
Assignment	:
1.	You (can/cannot) Skip in Transfer.
2.	Depressing the Skip Button affects only the Station Tape.
3.	The Left Station tape (does/does not) move.
4.	The lights at the Left Station go during the Skipping process.



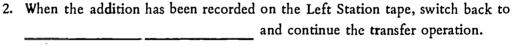
Recording Additions on Second Tape	Lesson 54

Objective: To learn how to record additions on the second (new) tape.

Information: Words to be added to corrected copy are recorded on the new tape by switching from Adjust Transfer to Record, *Left Station* and recording the additions as they are typed.

- 1. When the addition has been recorded on the Left Station tape, switch back to Adjust Transfer and continue the transfer operation.
- 2. Again to remind you, material is always transferred from the Right Station to the Left Station.
- 3. If after you make a corrected tape on the Left Station tape and it must be changed again, it is placed on the Right Station and again you transfer from the Right to the Left Station.

1.	Words to switching					are	recorded	on	the	new	tape	by
	Station and recording the additions.								*			





Switch Code Lesson 55

Objective: To learn how to use the SWITCH CODE on the MT/ST.

Information: A SWITCH CODE read on one tape will switch (change over) the machine action from one tape to the other automatically.

That is, if you are playing back from the Right Station and the machine comes to a Switch Code, it will switch to the Left Station and begin playing back from the Left tape.

- 1. You will see the Station Lights change as the machine switches Stations.
- 2. This is so that you will know by looking at the lights which tape station is active.
- 3. The switching process is internal (inside the machine). The Operation Selector Dial on the tape console does not move or change.
- 4. Therefore, it is possible that a switching operation may end with the lights ON at one Station while the Operation Selector Dial is set for the opposite. The lights are always right.
- 5. To have the lights ON to be the same as the Dial, turn the Dial to match or agree with the lights and then set to any operation you want.
- 6. For example, a switching project has just been completed, and you want to record new material on the Right tape. As you look at the tape unit, you see the lights are ON at the Left Station, but the Operation Selector Dial is set for Adjust, Right Station.
- 7. To make the Right Station active, turn the Operation Selector Dial to a Left Station setting.



- 8. Now the Dial and the lights agree.
- 9. Turn the Operation Selector Dial to Record, Right Station. The lights will change with the Dial setting.
- 10. The SWITCH CODE Button is the second button from the right (next to the Unload Button) on the bottom row of buttons on the console. See page 6 for location of this button.
- 11. So, a Switch Code is recorded on a tape whenever you want the machine to switch to the opposite station automatically.
- 12. When you want to play back a tape with recorded Switch Codes just to check it out for accuracy, and you do not want to merge or combine information from two tapes, place a tape on the opposite station which contains nothing but a series of Switch Codes. This means you would have to get a tape and record only Switch Codes on it.
- 13. This way, as you play back and come to a Switch Code, the machine switches to the opposite station. There it reads another Switch Code, which switches you back to the first tape to start playback again.

1.	A Switch Code read on one tape the machine action from one tape to the
2.	If you have a tape playing back from the Right Station and the machine comes to a Switch Code, it will switch to the Station and begin playing back from the tape.
3.	The Station lights (do/do not) change as the machine switches stations.
	NOW TURN TO PAGE 125 FOR SOME PRACTICE USING THE SWITCH CODES.



Practice Exercise 26

RECORD

- 1. Set Operation Selector Dial for Record, Right Station.
- 2. Type "The MT/ST has the ability to play from the Right Station,".
- 3. Space.
- 4. Record a SWITCH CODE.
- 5. Set Operation Selector Dial for Record, Left Station.
- 6. Type "the Left Station,".
- 7. Space
- 8. Record a SWITCH CODE.
- 9. Set Operation Selector Dial for Record, Right Station.
- 10. Follow above procedure for rest of sentence in the paragraph below, recording the phrase "the Right Station," on the right tape and "the Left Station," on the left tape.
- 11. End recording with Stop and Reference Codes on both tapes.

The MT/ST has the ability to play from the Right Station, the Left Station, the Right Station, the Left Station.

PLAYBACK

Start on right tape. Watch the indicator lights change every time the machine switches from station to station.

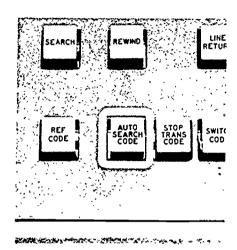
PLAY BACK AGAIN

Notice the indicator lights are ON at the Left Station, but the Operation Selector Dial is set for the Right Station. To search back to the beginning of this exercise and play back again, switch Operation Selector Dial to Left Station and back to the Right Station again.



To learn how to use the AUTO-MATIC SEARCH CODE Button on the MT/ST.

Information: In automatic letter writing, the same letter is typed over and over again. The MT/ST can automatically Search back to the beginning of the letter for each retyping. All you have to do is record an AUTOMATIC SEARCH CODE at the end of the letter.



- 1. Record the AUTOMATIC (AUTO) SEARCH CODE instead of the usual Stop or Stop Transfer Code.
- 2. The tape will automatically Search back to the Reference Code shown in the number you set in the Reference Number Dial.
- 3. When you are ready to retype the letter or message, all you have to do is depress the Start Button.
- 4. After you record the AUTO SEARCH CODE, record a Reference Code so you can go to that point on the tape and record another message any time you wish.
- 5. You must do this because you cannot play through the letter to get to the next position on the tape.
- 6. When you play the letter, the machine reads the AUTO SEARCH CODE and it searches the tape again automatically.
- 7. The AUTO SEARCH CODE Button is the fifth button from the left in the bottom row of buttons on the tape console. See page 6 for location of this button.

- 1. In automatic letter writing, the MT/ST can automically search back to the beginning of the letter for each retyping if an ______ Code is recorded on the tape.
- 2. After you record an Automatic Search Code on the tape, you should record a

 Code so that it will be easy to find this point on the tape if you want to record another message.
- 3. When you play back a letter, the machine will read the Automatic Search Code and will ______ the tape again.



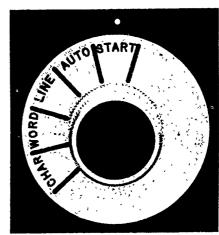
Start Setting on the Playback Mode Dial

Lesson 57

Objective:

To learn how to use the START setting on the Playback Mode Dial.

Information: Up to now, you have learned all the settings on the Playback Mode Dial except START. With the Playback Mode Dial set for START, the machine will start playback automatically after searching.



- 1. At all other times you start playback as usual by depressing the Start Button.
- 2. With continuous-form stationery, the MT/ST automatically types all letters by searching and starting automatically.

ι.	When	the	Playback	Mode	Dial	is	set	for	START,	the	machine	will
	playback automatically after											
2.	With o	contin	uous-form	statione	ery, th	ne N	AT/ST		automatical		type all le	tters



To learn how letters can be typed automatically by merging (combining or joining together) information from two tapes into one typewritten message.

Information: The MT/ST has the ability to switch between two tapes, which makes it possible to perform personalized automatic letter writing. With the names and addresses of a mailing list recorded on one tape and the letter recorded on another, the material can be merged by means of recorded Switch Codes.

- 1. First you would record the addresses on one tape and the letter on another.
- 2. With your understanding of all special codes Stop, Automatic Search, Switch, etc. - you can now program recording procedures for automatic letter writing to suit the needs of your particular application.
- 3. Stop Codes would be used so the machine would stop at certain points in the letter if you have any fill-ins to type manually.
- 4. Of course, if you are using continuous-form stationery, playback can be continuous too, by using the Automatic Search Code and Automatic Start setting of the Playback Mode Dial.
- 5. The placement of codes is programmed to fit individual jobs.
- 6. With continuous-form stationery, you just depress the Start Button to begin the first letter, and the machine automatically types all your letters.
- 7. The address tape may then be used for addressing the envelopes automatically.



Assignment:

1. Letters can be done automatically on the MT/ST by information from two tapes into one typewritten message.

2. The address tape then may be used for automatic addressing of ______.

3. If you are using continuous-form stationery, playback can be continuous by using the ______ Code and _____ setting of the Playback Mode Dial.

