

PANEL OPERATION AT 59TH JUNCTION

The automatic interlocking at 59th Junction routes regularly scheduled SOUTHBOUND trains through the interlocking in an alternating Englewood-Jackson Park sequence. All NORTHBOUND trains are routed through the plant on a first come-first served basis. The interlocking can also be operated by the Towerman at 61st. He takes control when a southbound work train or train out of sequence interrupts the normal Englewood-Jackson Park sequencing, or to route a train through the cross-over.

However, if for any reason the Towerman cannot control the interlocking from the 61st panel, the interlocking must be operated locally at 59th junction from a control panel or, under extreme conditions, it may be thrown by hand and flagged.

This pamphlet contains a description of the 59th junction control panel and instructions for its use.

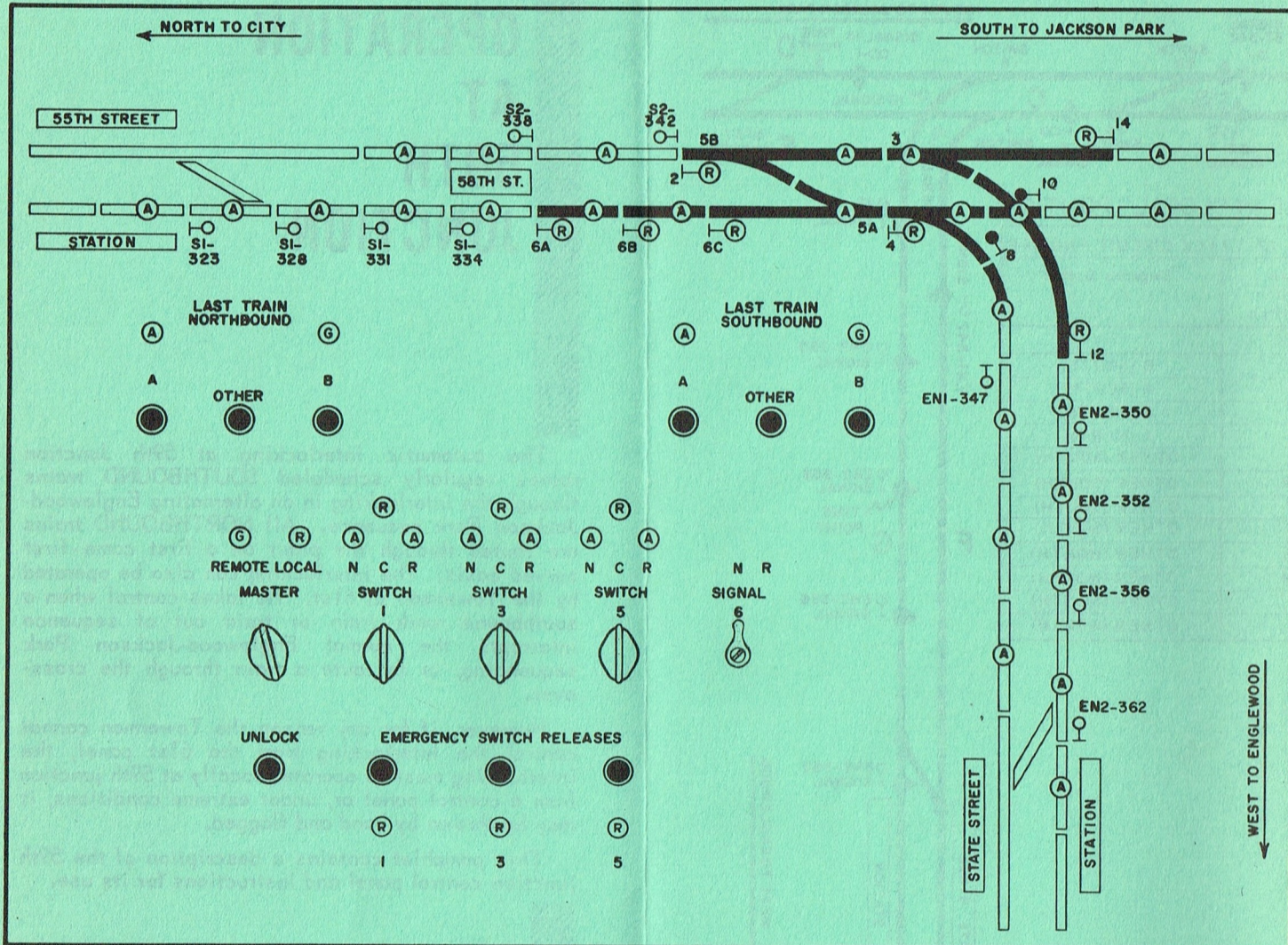
METROPOLITAN

TRANSIT



CHICAGO TRANSIT AUTHORITY
TRAINING AND ACCIDENT PREVENTION DEPARTMENT
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59TH JUNCTION CONTROL BOARD



CONTROL PANEL

The control panel is reached by means of a foot walk leading from the structure to the 59th junction relay house. The panel is in a metal cabinet recessed into the wall at the left of the relay house door. The cabinet is unlocked with a switch key.

The control panel contains a track diagram, a Master control lever, and push buttons and levers

for operating switches and signals.

Track Diagram

The track diagram shows the location of the switches, signals, and crossover in the interlocking.

Amber track occupancy indicator lights illuminate to show the location of trains in the interlocking.

Red signal indicator lights illuminate to show

the condition of their associated signals and trips.

- A steady red light indicates that the associated signal is displaying the "stop" indication. The light goes out when the signal has cleared.
- A flashing red light indicates that the associated signal is displaying the "stop" indication but the trip is not in the tripping position, or the signal is displaying the "call-on" indication and the track trip manual release has not yet been operated.

Master Control Lever

The Master control lever and the associated "Unlock" button are used to take local control or to return the plant to remote control.

Switch Levers

Switch levers are used to operate switches normal or reverse provided they are not locked. A red indicator light is located above the switch lever, and when illuminated indicates that the switch is locked and cannot be manipulated by the lever. Amber indicator lights located above the normal and reverse positions of the switch lever illuminate when the switch has moved to correspond to the normal or reverse position of the lever. Emergency switch release buttons have been provided under each switch lever to permit operation of the track switches when they cannot be operated by normal manipulation of the switch levers. The procedure for operating these emergency switch release buttons is outlined under "Procedure In The Event of Track Circuit Failure."

Signal Lever

A signal lever is provided only for Signal #6 when it may be desired to hold southbound trains clear of #5 crossover.

Pushbuttons

Route selection pushbuttons are used to select complete routes.

"Last Train" Indicating Lights

Indicate on which route last train movement occurred. Amber light indicates an Englewood train movement; green light indicates a Jackson Pk. train movement.

OPERATING PROCEDURES

With the master control lever in the "local" posi-

tion, control of all switches, signals, and trips in the interlocking is transferred to their respective buttons and levers on the panel. The person operating the panel is then responsible for setting up all routes. As soon as the reason for taking panel control has been cleared up, the interlocking must be restored to remote control.

A. PROCEDURE IN THE EVENT OF REMOTE CONTROL FAILURE

1. Pull out (cancel) all route selection buttons and check that switch levers are in C (center) position and signal lever is in N (normal) position.
2. Depress and hold "unlock" button while moving master lever to "local" position. Wait for red indicator light above "local" position to illuminate.
3. Position levers and depress route selection button for desired route as shown on manipulation chart under "Procedure in Event of Remote Control Failure."
4. After each move is completed, cancel the route as shown in step 1 above, and set up the next route.

B. PROCEDURE IN THE EVENT OF TRACK CIRCUIT FAILURE

1. Pull out (cancel) all route selection buttons and check that switch levers are in C (center) position and signal lever is in N (normal) position.
2. Depress and hold "unlock" button while moving master lever to "local" position. Wait for red indicator light above "local" position to illuminate.
3. Place the switch lever in the position to which you desire to move the track switch (follow the procedure as shown on the manipulation chart under "Procedure in the Event of Track Circuit Failure").
4. After first ascertaining that there is no train standing on the switch or moving on to it, break the seal on the emergency release button directly beneath the corresponding switch lever, push the button in and hold it until the red indicator light beneath the button illuminates.

Pull the same button out and hold it until the amber indicator light above the switch lever position illuminates, indicating that the track switch has moved to the desired position. (If the red emergency release light does not appear, recheck Step 1 above. When all conditions have been met, another attempt may be made.)

5. Depress the route button for the desired route. On the approach of a train, after a time lapse of about fifteen seconds, the "call-on" aspect will appear on the signal in the field and the red signal indicator light on the panel will begin flashing.
6. After each move has been completed, set up the next route as outlined in Step 1 through 5 above.

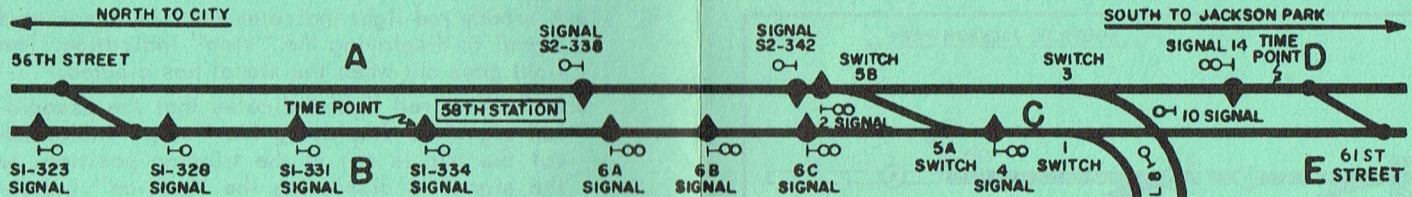
NOTE: The emergency release must be operated for each change of switch position during emergency operation.

NOTIFY THE SIGNAL MAINTAINER TO RENEW THE SEAL.

RETURNING INTERLOCKING TO REMOTE CONTROL.

1. Call the 61st Towerman and inform him that 59th Junction is being returned to remote control. Ask him to cancel all route selection buttons on his panel, place switch levers in C (center) position, place signal lever in N (normal) position, and place "Manual-Auto" lever in "manual" position.
2. Cancel all route selection buttons on 59th panel, place all switch levers in C (center) position, and signal lever in N (normal) position. (If No. 5 crossover lever has been reversed, it must first be moved to N (normal) position, then after indication confirms that crossover is normal, lever No. 5 must be placed in C (center) position.)
3. Move Master lever to "Remote" position.
4. Verify with 61st Towerman that he now has control.
5. Close and lock the cabinet door.
6. Stand by until satisfied that plant operation is normal.

59TH JUNCTION CONTROL PANEL TRACK DIAGRAM



MANIPULATION CHART (MASTER CONTROL LEVER MUST BE IN "LOCAL" POSITION)

FROM	TO	PROCEDURE IN EVENT OF REMOTE CONTROL FAILURE		PROCEDURE IN EVENT OF TRACK CIRCUIT FAILURE	
		POSITION LEVER	DEPRESS BUTTON	Position Levers, Then Operate Emergency Switch Release For Locked Switch	Depress Button
B	C	6R		6R 5N	
C	E		B (SOUTH)	3N 1N	B (SOUTH)
C	F		A (SOUTH)	1R	A (SOUTH)
D	A		B (NORTH)	3N 5N	B (NORTH)
G	A		A (NORTH)	1R 3R 5N	A (NORTH)
A	D	3N 5N	OTHER (SOUTH)	3N 5N	OTHER (SOUTH)
A	E	6N 3N 1N 5R	OTHER (SOUTH)	6N 3N 1N 5R	OTHER (SOUTH)
A	F	6N 1R 5R	OTHER (SOUTH)	6N 1R 5R	OTHER (SOUTH)
A	G	1R 3R 5N	OTHER (SOUTH)	1R 3R 5N	OTHER (SOUTH)
E	A	6N 3N 1N 5R	OTHER (NORTH)	6N 3N 1N 5R	OTHER (NORTH)
E	B	6N 3N 1N 5N	OTHER (NORTH)	6N 3N 1N 5N	OTHER (NORTH)
F	A	6N 1R 5R	OTHER (NORTH)	6N 1R 5R	OTHER (NORTH)
F	B	6N 1R 5N	OTHER (NORTH)	6N 1R 5N	OTHER (NORTH)

OPERATION OF SWITCH MACHINES BY HAND CRANK

If the above listed troubles cannot be corrected by operation of the 59th control panel, it will be necessary to operate the switch machines by hand crank.

1. Using the switch key, unlock the hasp and insert the crank.
2. Position the switch by operating the crank in the desired direction (clockwise or counter-clockwise) as far as it will go.
3. Check the switch points.
4. Place switch point block in the open point.
5. Flag the train.
6. Hand operation must be continued until a Signal Maintainer clears the trouble.

