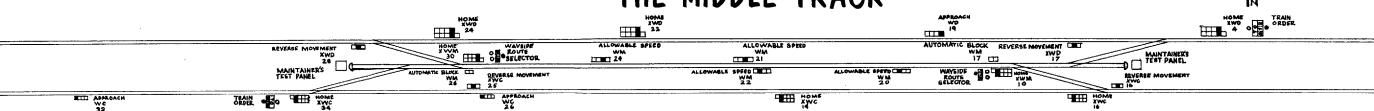
THE MIDDLE TRACK



The Middle Track is located between Racine Avenue and Morgan Street. Trains can enter or leave from either end in the normal direction of traffic. The Middle Track is approximately 824 feet long, with track space for 16 cars. All switches and track trips are electrically operated and heated.

PURPOSE

The Middle Track permits various emergency train movements such as switchbacks, single track movements in conjunction with emergency crossovers, by-passing trouble on the Main Line between ends of the Middle Track, and storage of defective trains to clear the Main Line.

SIGNALS LOCATED ON MAIN LINE IN THE VICINITY OF THE MIDDLE TRACK

On each Main Line, an Approach Signal and a Home Signal govern the Entrance to the Middle Track, and an Approach Signal and two Home Signals govern the Exit from the Middle Track. When no trains are in the vicinity, all of these Home Signals display a Red over Red aspect; if it is safe for approaching trains to proceed, these signals clear.

SIGNALS LOCATED IN MIDDLE TRACK AREA

Standard Automatic Block signals, Allowable Speed signals, and Home signals govern operation on the Middle Track. The maximum favorable aspect on any of these signals is Yellow.

TRAIN ORDER SIGNAL

Fifteen feet in advance of the entrance to the Middle Track, in each direction, is a Train Order (T.O.) Signal having a single White lens. Normally, the lens is dark. If the light is "On", the Motorman must stop at the T.O. Signal and call the Line Supervisor. The T.O. Signal is equipped with a Talk-Back Speaker which provides two-way communication between the Motorman and the Line Supervisor. The T.O. Signal also has a control board containing three (3) levers marked "N", "T", and "R". The "T" (talk) Lever is depressed when the Motorman is to talk, and is released when he is to listen; the "R"

(reverse) Lever is depressed to line up the switches for entry to the Middle Track; if the switches are set for entrance to the Middle Track but this line up is improper, depress the "N" (normal) Lever to set the switches for the Main Line.

WAYSIDE ROUTE SELECTOR

A Wayside Route Selector is installed at each end of the Middle Track, approximately fifteen feet from the Home Signal, These Wayside Route Selectors are similar to those at the T.O. Signals. They are equipped with a Talk-Back Speaker, and three levers marked "N", "T" and "R". The "T" (talk) Lever permits the Motorman to talk to the Line Supervisor. The "R" (reverse) Lever operates the switches for entry to the Main Line. The "N" (normal) Lever is used if the switches are set for entry to the Main Line and the Motorman wishes to return

them to their normal position. Above the levers are two Track Occupancy Indicating Lights, one Red and one Green. If the Red Indicating Light is "On", there is a train approaching on the Main Line in the direction in which the train is to be moved, and the Motorman must not depress the "R" Lever until the approaching train has passed. If the Green Indicating Light is "On", no train is approaching on the Main Line and the Motorman may operate the switches.

OPERATING PROCEDURES

IF THE T.O. SIGNAL DISPLAYS THE WHITE LIGHT

- 1. Stop the train with the cab alongside the T.O. Signal
- 2. Depress the "T" Lever, hold depressed and give name, run number, and location to the Line Supervisor
- 3. Release the "T" Lever and receive Train Order from the Line Supervisor
- 4. Depress the "T" Lever and repeat the Train Order word for word 2

IF THE TRAIN ORDER IS TO ENTER THE MIDDLE TRACK

- 1. Depress the "R" (reverse) Lever and wait 30 seconds for the switches to line up for entry to the Middle Track.
- 2. If the signal aspects are proper, move the train over the crossover and into the Middle Track. (When the train has cleared the crossover, the switches will return to normal automatically)

IF THE TRAIN ORDER IS TO ENTER THE MIDDLE TRACK AND SWITCH BACK IN THE OPPOSITE DIRECTION

- 1. Enter the Middle Track as in the procedure above
- 2. Stop the train with the front end of the train at the car stop marker appropriate for the length of the train. The rear cab will be alongside the Wayside Route Selector
- 3. Change ends
 - NOTE: Should it be necessary to talk to the Line Supervisor, depress the "T" (talk) Lever, and give name, run number, and position in the Middle Track
- 4. Observe the Track Occupancy Indicating Lights on the Wayside Route Selector
 - IF the Red indicating light is "On", wait until the approaching train passes and the Green indicating light comes "On"
 - IF the Green indicating light is "On", no trains are approaching and it is safe to operate the switches
- 5. Depress the "R" Lever and wait 30 seconds for the switches to line up for entry to the Main Line
- 6. If the signal aspects are proper, move the train over the crossover and onto the Main Line. (After the train has cleared the crossover, the switches will return to normal automatically)

IF THE TRAIN ORDER IS TO ENTER THE MIDDLE TRACK AND RETURN TO THE MAIN LINE IN THE SAME DIRECTION

- 1. Enter the Middle Track as in the procedure above
- 2. Pull the train to the far end of the Middle Track and stop with the cab alongside the Wayside Route Selector NOTE. Should it be necessary to talk to the Line Supervisor, depress the "T" Lever and give name, run number, and position in the Middle Track
- 3. Observe the Track Occupancy Indicating Lights on the Wayside Route Selector
 - IF the Red indicating light is "On", wait until the approaching train has passed and the Green indicating light comes "On"
 - IF the Green indicating light is "On", no train is approaching and it is safe to operate the switches
- 4. Depress the "R" Lever and wait 30 seconds for the switches to line up for entry to the Main Line
- 5. If the signal aspects are proper, move the train over the crossover and onto the Main Line. (After the train has cleared the crossover, the switches will return to normal automatically)

REVERSE MOVES

Trains can enter or leave the Middle Track in the opposing direction of traffic, but such reverse moves can be made only under the direction of Supervisory Personnel. The controls to adjust switches for reverse moves are located in a Maintainer's Test Panel, one panel located at each end of the Middle Track area. At the present time, the Reverse Movement signals are inoperative, and until they become operative, trains making reverse moves must be flagged through by hand, flag, or lamp signal.

> CHICAGO TRANSIT AUTHORITY TRAINING AND ACCIDENT PREVENTION DEPARTMENT 58-20-T (1) REV. 8/62

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EMERGENCY CROSSOVERS EQUIPPED WITH TIME RELEASES AND ELECTRIC LOCKS

LOCATION

There are seven emergency crossovers on the Congress Route. The crossovers at Western, Pulaski, Lombard, and Harlem are diamond crossovers; the crossovers at Kedzie, Lavergne, and DesPlaines are single right-hand crossovers. All seven emergency crossovers are equipped with Time Releases and Electric Switch Locks.

PURPOSE

Emergency crossovers allow trains to be switched back, or to go to single track operation. Right-hand crossovers permit trains to pass from the opposing direction of traffic into the normal direction of traffic. Left-hand crossovers permit trains to pass from the normal direction of traffic into the opposing direction of traffic. Diamond crossovers are made up of one left-hand crossover and one right-hand crossover.

SPECIAL SAFETY DEVICES

Because movements over emergency crossovers are unusual, special care must be exercised whenever such moves are to be made.

To provide a maximum of safety during these moves, emergency crossovers are equipped with special safety devices. These safety devices are Track Occupancy Indicating Lights, Electric Switch Locks, and a Time Release.

TRACK OCCUPANCY INDICATING LIGHTS

Two green Track Occupancy Indicating Lights are located in the metal box containing the Time Release. One is on the lower left hand side, the other on the lower right hand side. The light on the left indicates for the eastbound track, the light on the right indicates for the westbound track. A light "On" indicates no train is approaching the crossover. A light "Off" indicates that there is a train approaching the crossover.

SEAL O INDICATING LIGHTS

Diagram of metal box containing Indicating

ELECTRIC SWITCH LOCKS

Electric Locks lock the switch levers so that the crossover switches cannot be thrown until the locks are released by the Time Release.

TIME RELEASE

The Time Release is a timing device which, when operated, performs two functions: first, it sets the signals approaching the crossover at danger; then, when the time has run out (approximately one minute), it releases the Electric Switch Locks. This allows sufficient time for approaching trains to come to a stop before the crossover switches can be thrown.

OPERATING PROCEDURES

TO REVERSE CROSSOVER SWITCHES

- 1. Unlock the Time Release case door with a switch key and open the door
- 2. Observe the Track Occupancy Indicating Lights

IF the light on the left is "Off," an Eastbound train is approaching the crossover. If the light on the right is "Off," a Westbound train is approaching the crossover. Do not operate the Time Release when either or both lights are "Off." (NOTE: A train standing at the facing point switch of a left-hand crossover will cause one of the lights to go "Off")

IF both lights are "On," operate the Time Release as follows:

- a. Break the wire seal
- b. Remove the locking pin from the hole in the plunger shaft
- c. Pull the Time Release knob out as far as it will go
- 3. Unlock the switch lock with the switch key while the Time Release is running down
- Depress the lever marked "Depress to Apply Padlock" and remove the switch lock
- 5. IF the white indicating light on the switch stand lights, depress the foot lever release and throw the crossover switches (Both the facing point switch and the trailing point switch must be thrown)

IF the white indicating light fails to light within two minutes after the Time Release is operated and the foot

lever release cannot be depressed, operate the Emergency Release as follows:

- a. Notify the Line Supervisor immediately that the Emergency Release is to be used. A Signal Maintainer must be sent to restore it because three signals behind the switch in each direction will remain Red, and will not clear until the Emergency Release is restored
- b. Lift the small round cover on the end of the electric lock. This will expose a sealed emergency lever
- c. Break the seal and push the lever counter-clockwise as far as it will go
- d. Depress the foot lever release and throw the switch
- After the move over the crossover has been completed, the crossover switches must be returned to normal position unless following trains are to make the same move

TO RESTORE CROSSOVER SWITCHES TO NORMAL POSITION

- 1. Release the foot latch
- 2. Throw the switch
- Depress the lever marked "Depress to Apply Padlock" and insert and lock the switch lock
- 4. Depress the Time Release knob as far as it will go and insert the locking pin in the hole in the plunger shaft
- 5. Close and lock the case door

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AND

EMERGENCY CROSSOVERS

EMPLOYES' GUIDE TO

CONGRESS ROUTE

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