

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
ILLINOIS CENTRAL RAILROAD

CHICAGO, ILL.

NOVEMBER 22, 1937.

INVESTIGATION NO. 2226

SUMMARY

Inv-2226

Railroad: Illinois Central
Date: November 22, 1937.
Location: Chicago, Ill.
Kind of accident: Rear-end collision
Trains involved: Suburban passenger (electric)
Train numbers: 841 : 837
Consist: Three 2-car : Three 2-car
units : units
Speed: 35 m.p.h. : standing
Track: tangent
Weather: Clear
Time: 5:55 p.m.; dark
Casualties: 1 killed; 34 injured
Cause: Failure properly to control speed
of a train after entering an oc-
cupied block under the "stop; then
proceed" indication of an automatic
block signal.

December 17, 1937.

To the Commission:

On November 22, 1937, there was a rear-end collision between two passenger trains on the Illinois Central Railroad at Chicago, Ill., which resulted in the death of 1 passenger and the injury of 31 passengers and 3 employees. This accident was investigated in conjunction with the Illinois Commerce Commission.

Location and method of operation

This accident occurred on that part of the Chicago Terminal Division which extends between 67th Street and South Chicago, Ill., a distance of 4.71 miles. In the vicinity of the point of accident this is a double-track electric line over which trains are operated by timetable and an automatic block-signal system. Track 1 is the southward main track and track 2 is the northward main track. The accident occurred within yard limits on track 1, at the 83rd Street suburban passenger platform, at a point 232 feet south of 82nd Street. Approaching this point from the north the track is tangent for more than 1 mile, followed by a 10° curve to the right 580 feet in length and then 1,060 feet of tangent to the point of accident and for a distance of 429 feet beyond. The grade in this locality is slightly undulating but is level at the point of accident.

Automatic signal SC-277, located at 79th Street, 2,335 feet north of the point of collision, is of the 3-indication, color-light type. A green or a yellow indication permits continuous movement past the signal while a red indication requires a train to stop, then proceed at restricted speed. Restricted speed is defined as, "proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced."

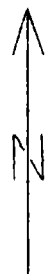
Special instruction 93 in the current timetable requires that trains or engines move within yard limits prepared to stop unless main track is seen or known to be clear. The yard limits extend from 82nd Street to 94th Street.

The maximum authorized speed for trains on the South Chicago District is 35 miles per hour, except at grade crossings immediately at the end of station platforms where it is 10 miles per hour.

From the south end of the station platform, a short distance north of 83rd Street, a facing-point cross-over switch leads from track 1 to track 2, and from the south switch of this cross-over another switch leads from track 2 to the 84th Street coach storage yard, located east of the main tracks. The terminal for No. 837 is at 83rd Street, where it is scheduled to

Signal SC#227-
79th Street

PC
10°
580 ft.



o 67th Street
3.64 mi.
X 83rd Street
1.07 mi.
o South Chicago, Ill.

PT
Direction of trains

1,660 ft.

Track 1
Track 2

82nd Street

Suburban passenger platform

Point of accident

Signal
Switch

83rd Street

Cross-over

To Yard

Inv. No. 2226
Illinois Central R.R.
Chicago, Ill.
Nov. 22, 1937

arrive at 5:47 p.m. It is the usual practice, after passengers have been discharged at this station, to store the train in the 84th Street coach yard. The station at 83rd Street is a regular stop for No. 841, its schedule time being at 5:53 p.m., and the schedule of this train continues through to South Chicago.

Electric suburban trains consist of a number of 2-car units, composed of motor and trailer, both of which carry passengers. All cars are equipped with electro-pneumatic brakes which are controlled by the engineman from his compartment at the right front corner of the leading car; the motor cars are also equipped with a dead-man control feature.

The weather was clear and it was dark at the time of the accident, which occurred about 5:53 p.m.

Description

No. 837, a south-bound suburban passenger train, consisted of three 2-car units coupled, of all steel construction, and was in charge of Conductor Darling and Engineman Redman. This train arrived at 83rd Street platform about 5:51 or 5:52 p.m., four or five minutes late, and while it was standing at the platform the rear end was struck by No. 841.

No. 841, a south-bound suburban passenger train, consisted of three 2-car units coupled, of all steel construction, and was in charge of Conductor Fugenschuh and Engineman Iseminger. This train stopped at Cheltenham station (79th Street) and departed on time; signal SC-277 at the south end of the platform at that station was displaying a red indication, and near 82nd Street it collided with the rear end of No. 837 while traveling at a speed estimated to have been about 25 miles per hour.

None of the equipment in either train was derailed; the front end of Motor 1129, of No. 841, was telescoped through the engineman's compartment by the frame of the rear car in No. 837. The employees injured were the engineman, conductor and flagman of No. 841.

Summary of evidence

Engineman Iseminger, of No. 841, stated that signal SC-277, at 79th Street was displaying a red indication when his train reached it. After rounding the curve near that station he noted that the next block signal, at the south end of the 83rd Street platform, was also displaying a red indication. When he did not see anything of No. 837 ahead he assumed that it had crossed over into 84th Street coach yard, and that the reason the 83rd Street

block signal was displaying a red indication was because the switches were still open for the cross-over movement. His headlight was burning with the dimmers on. The reflection from other lights, including automobile headlights on the streets, interfered with his vision. He did not see the train ahead until the rays from the headlight of his motor car shone upon the reflector of the headlight at the rear end of the motor car standing 5 or 6 car lengths ahead; at that time the speed of his train was about 25 or 30 miles per hour. At that time he also saw the markers of the train ahead, and a man flagging on the station platform, and he immediately shut off the power and applied the air brakes in emergency. He stated that his train follows No. 857 every night, but that on previous occasions the train ahead had always been in to clear in the coach yard when he arrived at 83rd Street, and it was his custom to move his train down to the cross-over switch opposite the south end of the platform and make his regular station stop there. He could not account for his failure to see the standing train ahead occupying the south-bound main track unless it was because of the reflection of other lights on the streets affecting his vision.

Conductor Fugenschuh, Collector Springer and Flagman Holmes, of No. 841, who were at different points in the train, were not aware of anything wrong until the air brakes were applied just before the accident occurred. Each stated that the air brakes worked properly en route, the train proceeded at average speed prior to the accident and schedule time was maintained. After the accident Collector Springer observed that the markers on the train ahead were lighted.

Flagman Moran, of No. 837, stated that after the passengers were discharged at 83rd Street platform, and station work was performed, he stepped back into the car and closed the door; at this time he was in the middle of the rear unit. He looked back and saw the approaching headlight, somewhere in the neighborhood of 81st Place, about 550 feet distant; he immediately opened the door, lighted a fusee and started along the platform, waving stop signals; he had reached a point 10 or 15 feet behind his own train when the collision occurred. The speed of No. 841 at the time of collision was about 25 miles per hour. His flag signals were not acknowledged. Instructions require flagmen to protect trains at all times and under abnormal conditions to go back a sufficient distance, but when making regular station stops they are not required to go out until the station work is finished and then only provided the train still remains at the platform. After the accident the markers on the rear of his own train were still lighted, and all of the lights in the cars were lit.

Collector Windal, of No. 837, stated that on arrival at 83rd Street platform he got off and immediately lined the first cross-over switch on track 1 for the movement of his train across and into the yard; this would cause the signal at 83rd Street to

display a red indication. An empty equipment train, which had just arrived from South Chicago, was standing opposite the platform on track 2 and he lined the yard switch for this train to precede his own train into the yard; after it had moved into the yard he lined track 2 cross-over switch for his own train. He did not see the following train, No. 841, and was not aware of anything wrong prior to the accident.

Conductor Darling, of No. 837, stated that his train was delayed en route from Randolph Street and arrived at 83rd Street platform about 5:51 or 5:52 p.m. After the station work had been completed he proceeded to the first cross-over switch on track 1 in order to be in position to restore the main track route after his train had crossed over, and while he was there the collision occurred. At that time his train had been standing at the platform about 1 minute. He did not see No. 841 prior to the accident.

Engineman Redman, of No. 837, stated that the brakes were released and he was about to start the train when the collision occurred.

H. S. Scott, Supervisor of Signals, stated that signal SC-277 at 79th Street is so located that trains make the station stop before reaching the signal. Immediately after the accident this signal was inspected and found to be operating properly.

J. D. Younger, General Electric Foreman, estimated that a six car train running at a speed of 35 miles per hour could be stopped with a service application in from 300 to 400 feet, and with an emergency application in about 150 feet.

Discussion

The evidence is to the effect that No. 841 was operating under a "stop; then proceed" block-signal indication after passing 79th Street station, and that it approached 83rd Street station at a speed of between 25 and 30 miles per hour. Although the markers and car lights of No. 837, which was standing at the platform of the 83rd Street station, were lighted, the engineman of No. 841 did not see them until his train was not more than 5 or 6 car lengths from the rear end, and it was then too late to accomplish any material reduction in the rate of speed. When making station stops on this line it is not the practice for flagmen to go back to protect their trains, and the evidence in this case is to the effect that No. 837 had been standing at the station about one minute when the accident occurred. The flagman of No. 837 did not notice the approach of No. 841 until the latter train was about 550 feet distant. He then gave signals with a fusee from the station platform.

No. 841 had received a red indication at the automatic block signal at 79th Street, due to the block being occupied by the preceding train; under this indication No. 841 was authorized to proceed only at restricted speed which is defined in the rules as being prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced. However, No. 841 was being operated on schedule time, and according to Engineman Iseminger's own statement he was running at a speed of 25 or 30 miles per hour when he discovered the preceding train such a short distance ahead that it was impossible to effect any material reduction in speed, notwithstanding efficient brakes, before the collision occurred. The only reason the engineman of No. 841 could give for his failure to see the preceding train sooner was that the reflection of other lights interfered with his vision. Had this train been operated at the reduced rate of speed which was required in this case, the preceding train might have gotten into clear or its presence on the track ahead might have been discovered in time to prevent this accident. In view of the conditions disclosed by this investigation responsible officers of this railroad company should promptly take necessary steps to insure that rules are adequate to safeguard the operation of trains and that employees have a correct understanding of rules and signal indications.

The line on which this accident occurred carries heavy suburban traffic; the records for the thirty-day period preceding the date of this accident show an average of 187 trains per day. In view of this volume of traffic and the circumstances in this case, the carrier should give careful consideration to the need of additional protection on this line.

Conclusion

This accident was caused by failure properly to control the speed of a train after entering an occupied block under the "stop; then proceed" indication of an automatic block signal.

Respectfully submitted,

W. J. PATTERSON,

Director.