

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN
RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED
ON THE ILLINOIS CENTRAL RAILROAD AT CHICAGO,
ILL., ON MARCH 3, 1926.

April 6, 1926.

To the Commission:

On March 3, 1926, there was a head-end collision between an Illinois Central passenger train and a Michigan Central express train on the tracks of the Illinois Central Railroad at Chicago, Ill., which resulted in the death of 1 passenger and 3 employees, and the injury of 6 passengers and 10 employees. This accident was investigated in conjunction with representatives of the Illinois Commerce Commission.

Location and method of operation

This accident occurred on the Chicago Terminal Division, which extends between Randolph Street, Chicago, and Richton, Ill., a distance of 29.03 miles. From Randolph Street southward to 67th Street tower there are eight tracks; south of 67th Street tower there are six tracks, over which trains are operated by time-table, train orders, and an automatic block-signal system. From west to east the tracks are numbered 1, 2, 3, 4, 5, and 6, tracks 1 and 2 being used for local suburban trains, tracks 3 and 4 for through passenger trains, and tracks 5 and 6 for express suburban trains; the even-numbered tracks are for northbound trains and the odd-numbered tracks are for southbound trains. Extending southward from a point opposite 67th Street tower, track 5 runs parallel with track 4 for a distance of approximately 950 feet and then loses its identity, curving to the right and forming a junction with tracks 4, 3, 2, and 1 by means of double-slip crossover switches, this being a temporary

arrangement made necessary by reason of reconstruction and development work. The interlocking machines which operate these switches and the signals governing the use thereof, are located in the 67th Street tower. The accident occurred about the middle of the double-slip switch which connects tracks 5 and 4, located 1,086 feet south of 67th Street tower. Approaching this point from either direction on track 4 the track is tangent for more than 1 mile; approaching from the north on track 5 the grade is undulating, due to development work, it is ascending from a short distance south of 67th Street to the point of accident.

The signals involved are of the color-light enclosed-disk type, southbound signals 74, 43 and 112, governing movements on track 5, are located 2,140 feet, 1,078 feet, and 317 feet, respectively, north of the point of accident. The top disk on each of these signals is equipped with three lenses, for the purpose of displaying red, yellow or green indications, signal 74, however, is the only one which displays a green indication, this being the case when the route is lined for a movement across tracks 4, 3 and 2 to track 1 and when at the same time signals 43 and 112 are displaying a yellow indication. The top disks of signals 43 and 112 also govern the same route, and, as previously indicated, display only two indications, red or yellow; signal 112, being the last of the signals governing the route to track 1, also governs as far as the first automatic signal on that track. Signals 74 and 43 are located on signal bridges, while signal 112 is located on a mast placed on the east side of track 5.

Approaching from the south on track 4, automatic signal 4-21 is located 5,242 feet south of home signal 81 and serves as the distant signal for the approach of a northbound train to the interlocking plant. Signal 81 is similar to signals 43 and 112 in its arrangement and is located on the east side of track 4 at a point 728 feet south of the center of the double-slip switch on which the accident occurred, the indication displayed from the top disk of this signal governs movements through the interlocking plant on track 4 as far as the next signal, north of the point where the accident occurred.

Northbound signal 81 and southbound signal 112 are mechanically locked so that both can

not be reversed. A test made after the accident indicated that with the route lined for a movement from track 5 across tracks 4, 3 and 2 to track 1 and with signal 112 in the clear position, it would take one minute and seven seconds after placing signal 112 at stop to change the route for a straight movement northbound on track 4 and clear signal 81; of this time, 54 seconds were required for the operation of the time release. A similar check with conditions reversed showed that it would take 1 minute and 5 seconds to place signal 81 in the stop position and clear signal 112, the time release consuming 55 seconds of this time.

It further appeared that the track circuit arrangement is such that as soon as a northbound train on track 4 had passed signal 81 it automatically holds signal 112 in the stop position, while as soon as a southbound train has passed signal 112 it automatically holds signal 81 in the stop position.

The weather was clear at the time of the accident, which occurred at about 12.30 a. m.

Description

Southbound Illinois Central passenger train No. 653 consisted of four suburban coaches, all of wooden construction, hauled by engine 1433, and was in charge of Conductor Benjamin and Engineman Tobin. It left Randolph Street station at 11.59 p. m., March 2nd, on time, passed signal 74 displaying a yellow indication and stopped at 67th Street platform at 12.28 a. m., March 3rd. After a stop of about one minute the train departed, passed signal 43, which was displaying a caution indication, passed signal 112, which was displaying a stop indication, and while traveling at a speed estimated to have been about 15 miles an hour collided with Michigan Central express train X27 at the junction of tracks 5 and 4.

Northbound Michigan Central express train X27 consisted of 11 express cars and 1 coach, hauled by engine 8330, and was in charge of Conductor Bayles and Engineman Chapman. It entered upon Illinois Central track 4 at Kensington, about 6 miles south of the point of accident, at 12.18 a. m., passed signals 4-21 and 81, both of which were displaying clear indications, and collided with train No. 653 while traveling at a speed estimated to have been between 15 and 20 miles an hour.

Both engines were derailed to the east of track 4 and came to rest in an upright position, locked together. The first coach in train No. 653 was practically demolished while the second coach was badly damaged. None of the cars in train X27 was derailed and only two of them were slightly damaged. The employees killed were the conductor and fireman of train No. 653, and another employee not on duty at the time who was riding on train No. 653.

Summary of evidence

Engineman Tobin, of Illinois Central train No. 653, said signal 74 was displaying a caution indication when his train passed it and that after stopping at 67th Street about one minute his train proceeded, passing signal 43 which was also displaying a caution indication. He said that as his train approached signal 112 his fireman called "middle yellow" and that he personally saw the indication and it was as stated by the fireman. He said he also observed that the rails were lined for the crossover movement towards track 1. The headlight on his engine was burning brightly and he said he saw the opposing train in time to apply the air brakes on his train before the impact of the collision. He further stated that the weather was clear and that no difficulty was experienced in observing signal indications.

Flagman Groth, of train No. 653, stated that after leaving the platform at 67th Street he was riding on the left side of the train and when about 10 car-lengths distant from signal 112 he observed that all three lights of that signal were displaying red or stop indications, and thinking the train was going to stop, he prepared to go back to protect the rear of his train, but while passing through the rear coach the collision occurred. Flagman Groth thought the speed of his train at the time of the accident was about 15 miles an hour.

Towerman Nitschke, who was on duty in 67th Street tower at the time of the accident, stated that train No. 653 received caution indications at signals 74 and 43 and a stop indication at signal 112. The route through the interlocking plant had been lined for the Michigan Central express train on track 4 before train No. 653 left the 67th Street platform and this

route had not been changed. Observing that train No. 653 was running at a rather high rate of speed to stop at signal 112, he watched the indicator and when that train passed the signal in stop position, he went to the telephone to notify the dispatcher of the accident which he knew was certain to occur. Toverman Nitschie said he had a clear view of signal 112 and was positive that that signal was in stop position when passed by train No. 653. Toverman's Helper Cunningham and Signal Maintainer Shea, who were also in the tower at the time, corroborated the toverman's statements.

Traveling Engineer Rogerson, of the Illinois Central Railroad, stated that he arrived at the scene of the accident about one hour after it occurred. From his inspection of the equipment he said it appeared that the collision had been almost head-on, occurring on the frog as the Illinois Central engine was straightening out on track 4. He said the trailer truck and the tender wheels of the Michigan Central engine were standing on track 4 and were not headed toward track 5. Roadmaster Desmond, of the Illinois Central Railroad, inspected the track shortly after the accident and said he found the switches lined for track 4.

General Foreman of Signal Construction Scott, of the Illinois Central Railroad, made a careful examination and test of the signal apparatus of the 67th Street interlocking plant after the accident and found that the signals were working properly and in perfect condition.

Engineman Chapman, of Michigan Central train X27, stated that he received clear indications at all signals after passing Kensington until he arrived at the signal just south of Grand Crossing, approximately 1 mile south of 67th Street, where a caution indication was received. Speed was reduced to about 35 miles an hour and as he could see at that time that the signals at 67th Street were set against him he further reduced speed to about 15 miles an hour. The signals at the interlocking plant then changed to caution and then cleared and speed was increased. He could see all the signals at the interlocking plant and observed that the route was lined for a high-speed movement on track 4. He also saw the headlight of the Illinois Central train but

did not realize that it was moving out on track 4 until it was too late to stop his own train. He said he did have time, however, to apply the air brakes and reduce the speed of his own train to about 15 miles an hour before the collision occurred. The statements of the fireman and other members of the crew of the Michigan Central train brought out no additional facts of importance.

Conclusions

This accident was caused by the failure of Engineman Tobin, of train No. 653, properly to observe and obey signal indications.

Engineman Tobin stated that signal 112 indicated that the route was lined for a movement from track 5 to track 1 and that he also saw that the rails were lined for such a movement. All the evidence, however, was to the contrary; the flagman of his own train and three men in the tower saw the signal displaying a stop indication, while the arrangement of the interlocking plant was such that he could not possibly have received a clear indication.

All the employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND

Director.