

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING
AN ACCIDENT ON THE LINE OF THE PORTLAND TERMINAL COMPANY
AT PORTLAND, ME., ON MARCH 16, 1933

May 24, 1933.

To the Commission:

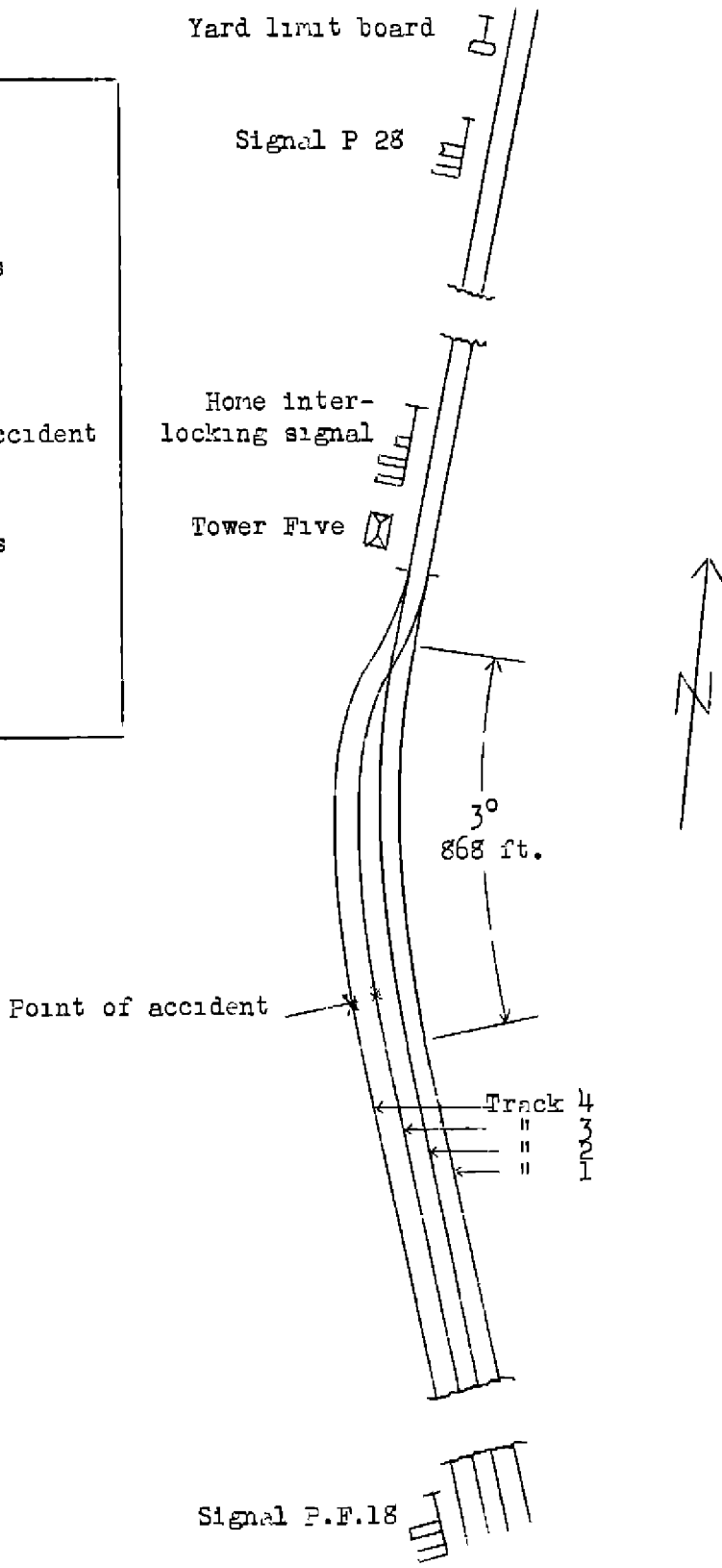
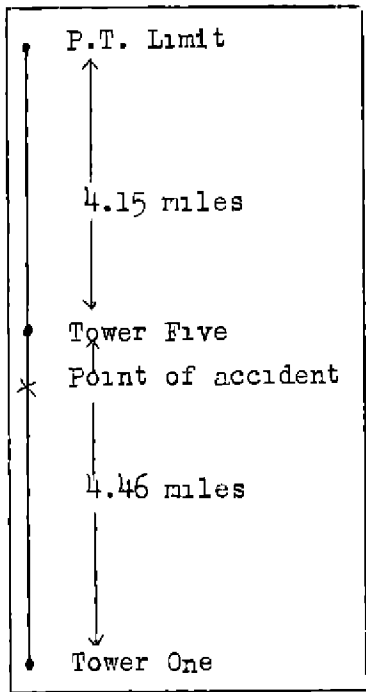
On March 16, 1933, there was a rear-end collision between two Maine Central Railroad freight trains on the line of the Portland Terminal Company at Portland, Me., which resulted in the injury of one employee.

Location and method of operation

This accident occurred on that part of the line extending between points known as P.T. Limit and Tower One, a distance of 8.61 miles, over which trains are operated by time-table, train orders, and an automatic block-signal system. West of Tower Five this is a four-track line, while east thereof it is a double-track line. The tracks west of Tower Five are numbered from north to south 4, 3, 2, and 1, these tracks being the west-bound freight track, east-bound freight track, west-bound passenger track, and east-bound passenger track, respectively. The collision occurred within interlocking and yard limits, on track 4, at a point about 900 feet west of Tower Five and about 2,950 feet west of the east yard-limit board. Approaching the point of accident from the east, the tracks are tangent for a distance of 1,910 feet, followed by a 3° curve to the left 868 feet in length, the accident occurring on this curve at a point about 75 feet from its western end. The grade for west-bound trains approaching Tower Five is generally descending, being 0.74 per cent for a considerable distance east of the tower; it levels off at the tower, following which it ascends at the rate of 0.5 per cent for a distance of 550 feet to the point of accident.

The interlocking home signal at Tower Five, located about 100 feet east of the tower, is a 3-arm signal; the top arm is a 2-position, lower quadrant, semiautomatic signal and governs movements over track 2; the middle arm is also a 2-position, lower-quadrant, semiautomatic signal and governs movements over track 4; the bottom arm is a manually-operated calling-on signal and is used to permit trains to pass Tower Five at restricted speed. Semiautomatic block signal P. 28, the west-bound distant signal, is located 1,635 feet east of the home signal at Tower Five.

Under signal definitions contained in Supplement No. 2 to the Rules of the Operating Department, 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." Rule 93-b of the Rules of the Operating Department requires that



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"extra trains must be under full control in entering yard limits, and responsibility for accident due to violation of the rules, will be held to rest with train entering yard."

Owing to the curve involved, the engineman's view from a west-bound engine is almost totally obscured by the front end of the engine, a view of a caboose standing at the point of accident can be had from the fireman's side of the cab for a maximum distance of 1,070 feet, or from a point about opposite the home signal, although the markers could not be plainly seen until a portion of the curve had been negotiated.

The weather was clear at the time of the accident, which occurred about 7:42 p.m.

Description

West-bound Maine Central freight train W-12 consisted of 64 cars and a caboose, hauled by engine 617, and was in charge of Conductor B. Hall and Engineman W. G. Hall. This train passed Tower Five at 7:24 p.m. and entered upon track 4, where it was brought to a stop with the caboose approximately 1,012 feet west of the home signal, following which some cars were set out. After this work was completed the engine coupled to the head end of the train and was about ready to proceed when the caboose was struck by extra 517.

West-bound Maine Central freight train extra 517 consisted of 52 cars and a caboose, hauled by engine 517, and was in charge of Conductor Giberson and Engineman Thompson. This train passed the east yard-limit board, passed signal P. 28, which was displaying a caution indication, passed the home signal at Tower Five, where the calling-on signal was displayed, and collided with train W-12 while traveling at a speed estimated to have been between 10 and 15 miles per hour.

The caboose and rear car of train W-12 were derailed but remained upright or nearly so. Engine 517 stopped on its left side, across and at right angles to track 4, headed north and was considerably damaged; its tender and the first car in the train also were derailed but remained upright. The employee injured was the engineman of extra 517.

Summary of evidence

Engineman Thompson, of extra 517, stated that he shut off steam west of Deering Junction, 1.78 miles west of Tower Five, and used the independent engine brake in reducing the speed of his train down the grade. Signal P. 28 was displaying an approach indication, his train passing it at a speed of between 13 and 15 miles per hour, and the bottom arm of the home signal was displaying a restricting indication. While rounding the curve beyond the signal his view was practically obscured and he depended to some extent upon Fireman Daily and Head Brakeman Nicholson to keep

him informed. On reaching a point a few car lengths from the caboose ahead, some one on the fireman's side shouted a warning of danger, having seen signal P. F. 18, located about 1,750 feet west of where the caboose stood, and calling "block is wrong"; about the same time, however, the markers on the caboose were seen and upon being notified of this fact the engineman immediately sounded the whistle, applied the air brakes in emergency, and jumped; he estimated the speed at the time of the collision to have been about the same as when passing the distant signal, that is, between 13 and 15 miles per hour. Engineman Thompson understood that he should have been operating his train under full control, prepared to stop short of train or obstruction, and he felt that he was doing so in this case, saying that he was depending somewhat, but not entirely, upon Fireman Daily and Head Brakeman Nicholson to inform him of conditions. Engineman Thompson also said that so far as he knew, the fireman and head brakeman were maintaining a lookout ahead and were not engaged in conversation. The air brakes had been tested and worked properly en route, and the headlight was burning brightly.

Fireman Daily, who was sitting on the seat box behind the head brakeman, said that after passing Tower Five he called the indication of signal P.F. 18, beyond the point of accident, and just after he had done so the head brakeman warned the engineman of the caboose immediately ahead. The fireman then looked out of the side window, which had been open all the time, saw the caboose and told the engineman to stop; Fireman Daily estimated that the caboose was 6 or 7 car lengths distant and at first he thought they would be able to stop without having an accident. Fireman Daily further stated that he was watching ahead as well as possible over the brakeman's shoulder and that he would have had a better view had he leaned out of the side window.

Head Brakeman Nicholson said he saw the caboose markers immediately after the fireman called the indication of signal P.F. 18 and at once notified the engineman and prepared to get off; he estimated that the markers were about 10 car-lengths distant when he saw them. Head Brakeman Nicholson also was using the front window, instead of the open side window, and was unable to explain why he did not see the caboose any earlier unless it was on account of the curvature of the track.

Conductor B. Hall, of train W-12, stated that both he and Flagman MacLearn were in their caboose when the conductor heard the rumble of the approaching train. Thinking that it was going to pass on track 2, the conductor went outside to watch it go by, but instead he saw it head in on track 4; he at once warned his flagman and they both got off before the accident occurred. Conductor Hall estimated the speed of extra 517 to have been between 12 and 15 miles per hour, and said that the markers on his caboose were burning properly and displaying a red indication to the rear. Flagman MacLearn gave testimony similar to that of Conductor Hall, except that he thought the speed of extra 517 was from 15 to 18 miles per hour. Towerman Eaton estimated its speed at 20 or 25 miles per hour as it started by the tower.

Shortly after the accident a test was made of the brakes on the cars in the train of extra 517 and it was found that all but three had a piston travel of 9 inches or less.

Conclusions

This accident was caused primarily by the failure of Fireman Daily and Head Brakeman Nicholson, of extra 517, to maintain a proper lookout when proceeding through yard limits and under a restricted-speed signal indication.

Engineman Thompson fully understood that he was required to operate his train under full control, prepared to stop short of any obstruction. The train sheet indicated that his train had consumed only about 4 minutes in traveling a distance of about 2 miles but it is not at all certain that the train was moving at excessive speed when it entered on track 4. Engineman Thompson was required to use extreme care after passing the restricted-speed signal, particularly when his view around the curve was obscured by the front end of the engine. The fireman and head brakeman, however, could see across the inside of the curve and should have been able to inform the engineman of conditions ahead in time to avert an accident. The left side window of the engine cab was open, but for some reason both Fireman Daily and Head Brakeman Nicholson were looking through the front window, the fireman watching over the shoulder of the head brakeman, and the result was that the markers on the rear end of the caboose ahead were not seen by them until it was only a few car lengths distant. There did not appear to be any reason why the exercise of proper vigilance by these employees, both of whom were promoted men, would not have enabled Engineman Thompson to stop his train in time to avert the collision.

Respectfully submitted,

W. P. BORLAND,

Director.