

December 19, 1911.

MEMORANDUM TO COMMISSIONER McCHORD
relative to accident on the Erie Railroad, November 2, 1911.

Draft submitted by the Chief Inspector of Safety Appliances
as a basis for the report of the Commission.

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At 7:59 P. M., November 2, 1911, a collision occurred on the Erie Railroad at BS Tower, near Smithboro, N. Y., between extra east-bound freight train No. 1666 and west-bound freight train No. 75.

Contrary to the usual practice, our inspectors did not reach the scene of this accident until six days after its occurrence. This delay is accounted for by the fact that at the time of this accident the Erie Railroad was disputing the right of the Commission to require telegraphic reports of accidents, their contention being that a mail report of an accident sent from the office of the company in New York would reach the Commission at a time amply sufficient for all purposes. This accident was accordingly reported by mail. Inspectors Craig and Gibbons were instructed to make an investigation, and the following is a synopsis of their report:

Extra east-bound freight train No. 1666, consisting of 55 cars and a caboose, and hauled by engine No. 1666, was called to leave Hornell, N. Y., at 7:30 A. M., November 2, 1911, in charge of Conductor Webb and Engineman Gilbert. This train arrived at BS Tower at 6:41 P. M., and backed over on the west-

bound track to allow east-bound train third No. 80 to go by. It then pulled over on the east-bound track in order to permit west-bound train No. 445 to pass, and again backed over on the west-bound track for the purpose of letting east-bound train No. 14 go by. After No. 14 had gone, it started to pull over to the east-bound track to continue eastward, and while it was pulling over, the collision occurred.

West-bound freight train No. 75, consisting of forty-three cars and caboose, and hauled by engine No. 2065, was called to leave Susquehanna, Pa., at 4:15 P. M., November 2, 1911, in charge of Conductor Bews and Engineer Rinehart. Approaching BS Tower, this train disregarded all signals and collided with extra No. 1666 on the cross-over, resulting in the death of Engineman Rinehart and slight injuries to Brakeman O'Neill, both of train No. 75. This collision also caused the derailment of the engine of train No. 75 and ten cars of both trains, some of them being quite badly damaged. BS Tower was also damaged, as was the interlocking plant at that point.

This division of the Erie Railroad is a two-track road equipped throughout with automatic block signals. The tracks are laid with 90 pound steel rails, in good condition, and well maintained. The grade at the place of accident is practically level.

Train movements are governed by the automatic signals, no train orders being used in ordinary operation. The signals clearly indicate whether the track is clear, or whether a train shall proceed at caution or come to a stop. The cross-over-on-

which the accident happened leads from the east-bound track to the west-bound track and thence to a west-bound passing track. All the switches and signals governing train movements over this cross-over are interlocked, and are handled by a towerman located in BS Tower. Both the home and distant signals governing west-bound train movements are automatic, and are so arranged that if a train is using the cross-over the distant signal will indicate caution and the home signal will indicate danger. BS Tower is on the north side of the track, 125 feet west of the home signal and 4,000 feet west of the distant signal governing west-bound traffic.

Engine crews of west-bound trains, approaching the distant signal, have a clear view of the signal on straight track for about 700 feet. About one-half mile west of the distant signal is the beginning of a curve of $2^{\circ} 45'$. This curve is over 1,000 feet long, and on the inside of it is a high embankment, which prevents engine crews from seeing the home signal until they are about 850 feet away from it.

In his testimony, Brakeman Straight, the flagman of No. 1666, stated that he placed two torpedoes on the track just east of the distant signal and then stood about two car lengths west of the signal. When No. 75 came in sight he swung his lantern. No attention was paid to it, however, and he continued to swing it until after the train had passed.

Brakeman Bellis was riding on the engine of No. 1666 as the train was pulling over on the east-bound track. He noticed that the engineman of No. 75 did not shut off steam when flagged by Brakeman Straight. He states that he then flagged No. 75 from the engine and also called to the engine crew as they passed.

Brakeman O'Neill, of train No. 75, was riding in the engine at the time of the collision. When passing the distant signal, he called the engineman's attention to the fact that the block was yellow. He then looked to see if a flagman was out and saw Flagman Straight swinging his lantern, and states that he told Engineman Rinehart that he was passing a flag. He then looked out again, noticed the danger signal at the tower and saw extra No. 1666 pulling over the cross-over. He called to the engineman to apply the brakes, at the same time starting across the cab to the engineman's side to apply the brakes himself. He states that the engineman then stood up, shut off the steam, applied the brakes and jumped. Brakeman O'Neill further stated that he heard the torpedoes explode just before reaching the distant signal.

Fireman Olson of train No. 75 states that he was busy working on his fire at the time his train passed the distant signal, and the flagman of extra No. 1666, and was not aware that anything was wrong until he saw the engineman get up from his seat, shut off the engine, and cry, "Look out", at the same time jumping from the engine. He further stated that he heard no torpedoes and that he did not hear Brakeman O'Neill call any signals to Engineman Rinehart.

The weather at the time of the accident was clear, and all signal lights appear to have been burning properly.

This accident was caused by the failure of Engineman Rinehart, of train No. 75, to observe and be governed by the signals and rules provided for the purpose of preventing an accident of this character, and also by his failure to stop when signalled by the flagman of extra No. 1666. Brakeman O'Neill could have prevented this accident by taking charge of the engine when he saw that the engineman was disregarding all signal indications, and he is to blame for his failure to do so.

As a preventive of accidents of this character, it is recommended that in all situations where accidents are likely to occur through the non-observance by enginemen of signals or rules calculated to insure safety, automatic train control apparatus should be provided to insure that trains will be brought to a stop in case the signals or rules are not properly observed.

Respectfully submitted,

Chief Inspector of
Safety Appliances.