

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHESAPEAKE & OHIO RAILWAY NEAR WURLAND, KY., ON MARCH 22, 1926.

May 6, 1926.

To the Commission:

On March 22, 1926, there was a rear-end collision between two freight trains on the Chesapeake & Ohio Railway near Wurland, Ky., the wreckage of which fouled an adjacent track and was struck by a passenger train, resulting in the death of one employee, and the injury of seven passengers, one mail clerk, and one employee.

Location and method of operation

This accident occurred on that part of the Cincinnati Division extending between Russell, Ky., and Cincinnati, Ohio, a distance of 141 miles; in the immediate vicinity of the point of accident this is a three-track line over which trains are operated by time-table and train orders. The tracks are numbered from north to south as follows: 1, 2 and 3, the accident occurring on track 1 at a point nearly 1 mile west of Wurland and 2,960 feet east of signal 5303.

At the west end of Russell yard, about 3 miles east of the point of accident, there is a track leading from the new yard to track 1. There is a two-arm interlocking home signal governing movements leaving this new yard and entering on track 1 and thence to the limits of the interlocking plant; this signal displays only two indications, stop, or proceed at slow speed prepared to stop. There is a similar signal on track 1 which governs straight movements on track 1 as far as the interlocking limits. There are no other signals west of these signals until signal 5303 is reached, a distance of about 3.5 miles, the last mentioned signal being an automatic signal. There is no block system in effect on track 1 between the limits of the interlocking plant and signal 5303.

At a point approximately 3.5 miles east of signal 5303, two home interlocking signals are located; these signals are of the two-arm, two-position, upper-quadrant type, and are controlled from M. S. Cabin, located near the west end of Russell terminal. One of these home interlocking signals is located immediately north of track 1 and just east of the trailing-point switch for westbound trains which connects what is known as the new yard track with track 1, while the other home interlocking signal is located just north of the new yard track and directly opposite the corresponding home interlocking signal. The new yard track is north of track 1.

Approaching this point from the east there is a 1° 20' curve to the right 1,400 feet in length, followed by 3,560 feet of tangent to the point of accident, this tangent extending for more than 1½ miles beyond; the grade is practically level.

There was a dense fog at the time of the accident, which occurred at about 6.35 a. m.

Description.

Westbound freight train extra 2324 consisted of 92 loaded cars and a caboose, hauled by engine 2324, and was in charge of Conductor Burris and Engineman Ohinn. This train passed M.S. Cabin at 5.50 a.m., according to the train sheet, received a caution signal indication authorizing a movement from the new yard track to track 1, and on reaching a point about 3.5 miles beyond was brought to a stop on account of signal 5303 displaying a stop indication. Shortly afterwards its rear end was struck by extra 1352.

Westbound freight train extra 1352 consisted of 25 loaded cars and a caboose, hauled by engine 1352, and was in charge of Conductor Thompson and Engineman Young. This train stood on track 1 at a point just east of the home interlocking signal while extra 2324 pulled out of the new yard track; shortly afterwards a caution indication was displayed on the interlocking signal, meaning to proceed at slow speed prepared to stop and extra 1352 departed, following extra 2324 westward on track 1, and on reaching a point almost 1 mile west of Wurtland, while traveling at a low rate of speed, it collided with the rear end of extra 2324.

Westbound second-class passenger train No. 17 consisted of one mail car, one express car, one combination car, and one coach, in the order named, hauled by engine 250, and was in charge of Conductor Wheeler and Engineman Caldwell. This train passed M. S. Cabin at 6.27 a. m., according to the train sheet, one minute late, entered upon track 2, made a brief stop at Wurtland, and shortly afterwards, while traveling at a speed estimated to have been about 30 or 35 miles an hour, collided with a steel coal car which fouled track 2./

The caboose of extra 2324 was demolished as a result of the collision and the steel coal car ahead of it came to rest on its side fouling tracks 2 and 3; two other cars in this train were derailed. Engine 1352 had only its truck derailed. Engine 250, of train No. 17, came to rest on its side, headed east, fouling tracks 2 and 3; the first car in this train was derailed and considerably damaged. The employee killed was the engineman of train No. 17.

Summary of evidence.

Conductor Burris, of extra 2324, stated that the speed of his train was between 8 and 12 miles an hour when pulling out upon track 1, that he saw extra 1352 standing on track 1 just east of the home interlocking signal, and assumed it would follow his own train closely. When signal 5303 was encountered his train made a sudden stop; he went out on the rear platform of the caboose and saw Flagman Miller 10 or 15 car-lengths distant, running eastward along the north side of track 1, violently waving a lighted fusee, and then the headlight of engine 1352 appeared through the fog. Conductor Burris then jumped off the caboose and also ran toward the approaching train, waving his hands and shouting a warning of danger, and he said that when the engine passed him it sounded as though the air brakes were being applied in emergency. Immediately after the occurrence of the accident he instructed the flagman to cross over and protect against train No. 17 on track 2, but before this protection could be afforded train No. 17 had collided with the wreckage fouling track 2. Although he said the flagman was 10 or 15 car-lengths distant when he first saw him, yet Conductor Burris estimated that his vision was restricted by the fog to about 5 or 6 car-lengths, but said he had not instructed Flagman Miller to throw off lighted fusees at proper intervals and that he did not realize his train was liable to be overtaken by extra 1352 until the stop was made at signal 5303, as he had expected that the following train would be operated under control, knowing that his own train was only a short distance ahead. Conductor Burris' suggestion to prevent the recurrence of a similar accident was that lighted fusees should be thrown off at proper intervals.

Flagman Miller, of extra 2324, stated that he saw extra 1352 standing on track 1 at the time his train pulled out from the new yard track, and expected that it would follow his own train closely. The markers on his caboose were burning properly while the speed was about 10 miles an hour as the train approached signal 5303; where it came to a sudden stop. Just before the train came to a stop at this point he got off the caboose and ran back about 8 or 10 car-lengths, flagging with a lighted fusee, but extra 1352 passed him, with the headlight burning properly, at a speed of about 15 miles an hour, without answering his stop signals. He then ran toward the point of accident and immediately afterwards Conductor Burris told him to protect against train No. 17 on track 2, but just as he crossed over through the gangway of engine 1352 the wreckage on track 2 was struck by train No. 17. Flagman Miller admitted that the accident probably would have been averted had he dropped off lighted fusees at proper intervals, as required by the rules, and said that in order to prevent the recurrence of a similar accident this should be done.

Engineman Young, of extra 1352, stated that he brought his train to a stop on reaching the home interlocking signal on track 1, which was displaying a stop indication, remaining at that point while extra 2324 pulled out of the new yard track. Just after the caboose of extra 2324 passed, a caution indication was displayed on the home interlocking signal on track 1 and he closely followed that train traveling at a speed of about 8 miles an hour. He said he sounded several road crossing signals on the engine whistle between the interlocking signal and the point of accident, and also instructed Fireman Hannon and Head Brakeman Baker to help him watch for extra 2324, not knowing that it would stop at signal 5303 but expecting that it would be held at Riverton, 5.7 miles west of M. S. Cabin, for train No. 17. The first intimation he had of anything wrong was on seeing the flagman of extra 2324, running towards him with a lighted fusee; he immediately applied the air brakes in emergency, reversed the engine, opened the throttle and sanders, and then saw Conductor Burris who was also giving stop signals. It was not until after this that he was able to see the caboose through the fog, the collision occurring immediately afterwards, at which time he estimated the speed of his train to have been about 2 miles an hour. Before there was time to flag train No. 17 it had collided with the wreckage on track 2, about one minute later. Engineman Young said he considered that he was operating his train under control and was expecting to find the track occupied, but that he was not properly flagged, estimating that he was within three or four-car-lengths of the caboose of extra 2324 when the flagman first appeared. The statements of Fireman Hannon and Head Brakeman Baker practically corroborated those of Engineman Young. After the accident both the engineman and fireman saw a burning fusee three car-lengths back from the rear of their tender.

Conductor Thompson and Flagman Goolsby, of extra 1352, were unaware of anything wrong prior to the accident. When the train came to a stop the conductor and flagman went outside the caboose, and just as the flagman got off and started back to flag, train No. 17 passed on track 2.

Fireman Chaffin, of train No. 17, stated that as his train was approaching the point of accident the speed was about 30 or 35 miles an hour, while on account of the fog his vision was restricted to about a car-length. He had just finished putting in a fire and was going toward his seat box when his engine struck the wreckage on track 2. None of the other members of this crew was aware of anything wrong prior to the accident.

Operator Ostraman stated that extra 2324 cleared the interlocking track circuit at about 6.11 a. m., and that he cleared the signal for extra 1352 at 6.15 a. m., which train cleared the interlocking circuits at about 6.20 a. m.

Conclusions

This accident was caused by the failure of Conductor Burris and Flagman Miller, of extra 2324, to afford proper protection to the rear end of their train, and by the failure of Enginemen Young, of extra 1352, to operate his train under proper control in view of the existing conditions.

Rule 99, of the Rules for the Government of the Operating Department, requires that when a train is moving under circumstances in which it may be overtaken by another train the flagman must throw off fusees at proper intervals, either at night, or by day when the view is obscured. Conductor Burris expected that extra 1352 would follow his train closely, but he did not instruct Flagman Miller to throw off lighted fusees at proper intervals, even though the fog was dense, assuming that the following train would be operated under full control and that the engine crew of the following train would be maintaining a proper lookout ahead; Flagman Miller also fully expected that extra 1352 would follow his train closely. Both of these employees admitted that had lighted fusees been thrown off at proper intervals, as required by the rules, the accident would probably have been prevented.

Engineman Young was fully aware that extra 2324 had a long, heavy train and was only a short distance ahead of his train, but although he also knew another train had preceded extra 2324, yet he did not think it would stop at signal 5303, and had expected to find it at Riverton. The evidence was that his train cleared the interlocking plant nine minutes behind extra 2324, indicating that it was operated at a considerably higher rate of speed en route. Had he operated his train under full control, the accident would not have occurred.

This is simply another case of the conductor and flagman of the first train assuming that the engineman of the following train would look out for their train, with the engineman of the following train assuming that the first train would afford proper flag protection.

Track 1, which is used exclusively for westbound freight-train movements, was placed in service on July 16, 1925, by means of bulletin O-5042, which required all trains to limit their speed to 10 miles an hour and to keep a careful watch for trains or other obstructions. Bulletin No. 119, issued January 30, 1926, placed in service the interlocking signals mentioned in this report, effective February 2, 1926, and stated that the provisions of this

bulletin superseded all previous rules and special instructions inconsistent therewith. Bulletin No. 110, however, made no reference to the use of track 1 beyond the interlocking limits or to any block system governing the movement of trains between the interlocking limits and signal 5303, a distance of approximately 3 miles. The statements of various officials and employees indicated that they considered the interlocking signals in question as block signals governing track 1 as far as signal 5303; no authority for such opinion, however, was produced. The superintendent also stated that freight trains could attain a maximum speed of 30 miles an hour on this track, but the record contained nothing to prove that the 10-miles-an-hour speed restriction contained in bulletin O-5042 had ever been modified. It did not appear that these conditions had any direct bearing on the occurrence of this accident, but they indicate the existence of a situation which should be remedied at the earliest possible moment; there is no room on any railroad for doubt as to the meaning of signal indications or for any differences of opinion as to the prescribed rates of speed at which trains may be operated.

Had an adequate automatic train stop or train control device been in use, this accident would have been averted.

All of 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.