

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
 INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
 THE TOLEDO TERMINAL RAILROAD NEAR TOLEDO, OHIO,  
 ON NOVEMBER 8, 1929.

February 19, 1930.

To the Commission:

In November 8, 1929, there was a rear-end collision between a Pennsylvania Railroad transfer train and a Toledo Terminal Railroad transfer train on the tracks of the latter railroad near Toledo, Ohio, resulting in the death of one employee and the injury of one employee.

Location and method of operation

The Toledo Terminal Railroad skirts the City of Toledo, making a complete loop and covering a distance of 28.59 miles; it connects with several railroads at various points. The greater portion of this loop is double-track line, which was the case at the point of accident, and trains are operated by time-table and train orders, no block-signal system being in use. The inside track of the loop is known as "B" main, and the clockwise direction thereon is classed as direction B, the opposite direction, classed as direction A, is maintained on the outside track, known as "A" main. The accident occurred within yard limits, on "B" main, just outside of the city limits of Toledo, at a point about 2,500 feet west of Tower K, or about 650 feet east of Bennett Road, no regular trains are operated over this portion of the railroad and foreign train and engine crews operate thereon, subject to the requirements specified in the Toledo Terminal Railroad time-table, which they are required to have in their possession.

Approaching from the west, via direction B, there is a 1° curve to the right 237.5 feet in length, followed by 1,550 feet of tangent to the point of collision, this tangent extending for a considerable distance beyond. The grade for direction B movements is slightly descending for a considerable distance, being 0.116 per cent at the point of collision.

The weather was clear at the time of the accident, which occurred at about 3.38 a. m.

### Description

Pennsylvania Railroad transfer train 8615 consisted of 61 freight cars and a caboose, hauled by engine 8615, and was in charge of Conductor Fuller and Engineman Palmer. This train was manned by a crew of Pennsylvania Railroad employees and entered upon the tracks of the Toledo Terminal Railroad at Temperance, 1.7 miles west of Tower K. It departed from that point as extra 8615 on "B" main, at 3.18 a. m., and arrived at Tower K at 3.28 a. m., where it was brought to a stop in obedience to the indication displayed by an interlocking signal. After standing at this point about 10 minutes, and just as it was starting ahead again, its rear end was struck by extra 49.

Toledo Terminal transfer train extra 49 consisted of 12 freight cars and a caboose, hauled by engine 49, and was in charge of Conductor Shea and Engineman Hardy. This train passed Vulcan, the last open office, 6.07 miles from Tower K, at 3.13 a. m., according to the train sheet, and collided with extra 8615 while traveling at a speed estimated to have been between 6 and 10 miles per hour.

The caboose of extra 8615 was considerably damaged, being partly shoved under the car ahead of it, which car in turn was damaged and had its rear end derailed and shoved out of line to the right, the second car ahead of the caboose was also damaged. Engine 49 was slightly damaged. The employee killed was the conductor of extra 8615, while the employee injured was the flagman of that train.

### Summary of evidence.

Flagman Kikel, of extra 8615, was interrogated first at the hospital and subsequently at his residence. He stated that when his train came to a stop at Tower K, he did not go back to flag, but just stepped off the caboose, and that when his train started ahead again, having stood at that point for several minutes, he stepped on the caboose and went inside, to the front end, saying that Conductor Fuller was on the rear end. Flagman Kikel was cleaning windows and saw the reflection of the headlight of the following train in the glass, called the attention of Conductor Fuller to that train, and the conductor remarked that he was aware of it. Flagman Kikel did not pay much attention to the following train, saying that it looked to be a good distance away, judging from the headlight, and that he kept on cleaning windows, the following train was only about six or eight car-lengths away when he realized that a collision was imminent. He saw the conductor go for the door, and at once did likewise, but the collision occurred before they could get off the caboose. Flagman Kikel said that the markers on

the cabooses were in perfect condition; the outside markers were equipped with the round type of cup, the kind that fit in them regularly, and it was not necessary to change the position of the cups when changing the position of the markers, but merely to take the markers out of the brackets and replace them in the desired position. Other than the markers in use, he recalled that there was one old type inside-marker in the caboose, he did not look to see if there was a cup in the old marker. This was the second night he had been on this particular caboose. It also appeared from the statements of Flagman Kikel that his train was moving at the time of the collision, that he did not notice the following train before he stepped on the caboose, and that he heard no whistle signal sounded on the engine of that train.

Engineman Palmer, Fireman Boyd and Head Brakeman Kavanagh, of extra 8615, were riding on the engine and were unaware of anything wrong prior to the occurrence of the accident. Engineman Palmer stated that his train had started and had moved ahead, how much he could not say, when the air brakes applied in emergency from the rear. Engineman Palmer did not feel any effects on the engine of anything crashing into his caboose, saying that his engine was pulling, moving at a speed of not over 2 or 3 miles per hour. When the accident occurred, he looked back and no difficulty was experienced in observing lighted lanterns at the point of collision, and when departing from the yard at Temperance, Engineman Palmer had looked back along his train and was able to observe that the markers on the caboose were lighted, watching them all the way out to the main line switch. Engineman Palmer further stated that when he first brought his train to a stop at Tower K, he did not whistle out a flag, as it had never been the practice to do so at that point, and that rear-end protection is never afforded there. He had a Toledo Terminal time-table, but was not furnished with a book of rules of that railroad and had not seen one; there was nothing in the time-table that required flag protection in this instance, and he knew that it was not required to flag through any instructions he had received. Fireman Boyd gave testimony similar in practically every respect to that of Engineman Palmer, the fireman had neither a Toledo Terminal time-table nor a book of rules of that railroad, while the head brakeman had a Toledo Terminal time-table. The statements of all of the surviving members of extra 8615 were to the effect that the weather was clear and that there was frost, but no haze.

Engineman Hardy, of extra 49, stated that he sounded the road crossing signal on the engine whistle for Lewis Avenue crossing, located about 2,500 feet west of Bennett Road, and also sounded it for the latter crossing, these signals being sounded when about 150 feet from the crossings. The electric headlight on his engine was turned on fully, but he did not see the caboose of extra

8015, or its markers, which were burning dimly, until he was about three car-lengths from it, at which time the speed of his train was about 15 miles per hour, and he was sure that the caboose was standing still; at about the same time, the fireman called his attention to the markers. He was working steam, but shut off as quickly as he could and placed the brake valve handle in the emergency position, the air brakes taking effect at about the time the caboose was struck. Engineman Hardy said flagmen should go back and protect at the point involved under the conditions that existed, but that a flagman is not often encountered at that point under those conditions, and it is not customary to whistle out a flag when a stop is made at such places, when bad curves are involved, however, a flag is always whistled out. It further appeared from Engineman Hardy's statements that the weather was not clear, being hazy, with a heavy frost, that he was sitting on his seat box, looking out from the inside of the cab, and that the front cab window was closed, although the side window was open. There was no steam leaking in the cab that he knew of, and he could offer no reason for not having seen the caboose ahead, even though there was no flagman out, nor were fuses or torpedoes encountered.

Fireman Beck, of extra 49, stated that the engine whistle was sounded from Lewis Avenue crossing and also for Bennett Road crossing, that he put in a fire just after passing Bennett Road, about five or six scoops of coal, and that although he looked ahead before getting down on the deck of the engine, he did not see anything of a train ahead. When he got back up on his seat box, at which time the speed was about 15 miles per hour, he looked through the front window and noticed the rear end of the caboose ahead, about three or four car-lengths away, and gave warning to the engineman, who immediately shut off steam and applied the air brakes; the fireman estimated the speed to have been about 6 or 8 miles per hour when the accident occurred. Fireman Beck only saw the marker on the left side of the caboose ahead, saying that it was quite frosty and that the markers were burning very dimly, being either turned down too low or covered with frost. While it was not exactly customary for flagmen to go back in that locality, yet in view of the existing weather conditions Fireman Beck thought it would have helped quite a bit, after the collision occurred, however, he and the engineman got off right away and no flag was whistled out nor did he know whether his flagman went back. He had seen flagmen out behind a train in that location in foggy weather or when it was dark, yet it had been quite awhile since he had seen one out behind a train going in direction B at Tower K, as the majority of trains he worked on came in under control, for as a rule a stop indication is displayed on the interlocking signal at that point.

Conductor Shea, of extra 49, who was riding in his caboose, estimated the speed of his train to have been about 15 or 17 miles per hour when the air brakes applied, saying that he braced himself, thinking that the stop was being made on account of a train ahead, and then his train stopped all of a sudden, he estimated that the speed was about 10 miles per hour, or less, at the time of the collision, and that the caboose traveled about four car-lengths after he felt the air brakes apply. He immediately went ahead, and on seeing what had happened he continued on to Tower K and summoned assistance. Conductor Shea said that he did not consider it necessary to use fuses in that locality unless it was foggy, and that on this occasion the weather was fair, pretty frosty and a little hazy down in the hollow. Conductor Shea stated that it was not customary to flag in that vicinity, but that had the rear end of his own train been standing at that point, under the circumstances, he would have seen to it that his own flagman was affording protection, and that it would not have been necessary to go back very far in order to afford such protection.

Flagman Spaulding was also riding in the caboose at the time of the accident, after the accident he went forward to the point of collision and rendered what assistance he could, remaining at that point. Flagman Spaulding stated that the weather was fair and that visibility was not interfered with on account of weather conditions. When he arrived at the point of collision, there was a marker hanging on the left side of the caboose, next to "A" main, but it was not burning at that time. He estimated the speed of his train to have been about 15 miles per hour when the air brakes were applied and not over 8 or 10 miles per hour when the collision occurred. Flagman Spaulding further stated that while the accident occurred within yard limits, yet for his own protection he thought that he would have protected in some way had he been the flagman of the train ahead.

Head Brakeman Niethamer was also riding in the caboose and went to the point of collision immediately after the accident occurred, he did not think that the air brakes were applied in emergency just prior to the accident, nor did he think there was anything about weather conditions that would interfere with visibility at the point of accident. Head Brakeman Niethamer thought that it was customary to have a flag out at this locality, saying that one should have been out to protect. When questioned, however, as to why the rear end of his own train was left entirely without protection, following the occurrence of the accident, he endeavored to account for such action as being due to the excitement, saying that they knew where the train behind them was working and that it would not be up there right away.

Superintendent Nally, of the Toledo Terminal Railroad, stated that the markers and cups, the cups being oval shaped, claimed to have been found at the point of accident not later than one hour after its occurrence, were brought to his office by Toledo Terminal Chief of Police Ramsey and Toledo Terminal Trainmaster Vesey. Diligent search was made by several employees for other markers and cups in and about the wreckage, but to no avail. Superintendent Nally thought it possible that when the stop was made at Tower K, it upset the cups in the markers, and that this accounted for the markers not being seen by Engineman Hardy for a greater distance. He further stated that it is insisted that flagging be done all over the road, however, no tests had ever been conducted prior to the accident to see whether crews were flagging or not, but at various times he had been out on the road personally and had found crews flagging, although a lot of this was platform flagging, which he considered inefficient in one sense and not so in another, as on the Toledo Terminal Railroad train movements are slow, and for only short distances at a time.

Chief of Police Ramsey, of the Toledo Terminal Railroad, stated that he arrived at the scene of the accident about one-half hour after its occurrence, and shortly thereafter he noticed one marker lying in the path along side of the train and the other in the ditch with the wreckage, both extinguished. The marker found on the path was all right with respect to the lens, but the cup was rectangular, while the bottom of the marker was intended to accommodate only a round fit.

Trainmaster Vesey, of the Toledo Terminal Railroad, stated that he arrived at the scene of the accident about 4.15 a. m. At that time there was one marker hanging on the side of the caboose, not burning, and the cup in the marker did not fit, but was setting flat on the bottom of the marker. Trainmaster Vesey further stated that within yard limits, there is little flagging done, depending on the situation.

The markers in question were shown to the Commission's inspectors, they were the standard bracket marker used on cabooses of the Pennsylvania Railroad. This type of marker is intended to accommodate a round cup, but the cups in the markers shown were oval-shaped, being somewhat oblong, and this prevented them from being set flat in the cup receptacle of the marker, necessitating that they be applied in a tilted position. Tests were made with a standard marker, using both a round cup and an oval-shaped cup. With the oval-shaped cup and a one-half inch burner and wick, lighted and turned to a position where it did not smoke, and with the lens of the marker somewhat dirty, the light could be seen for a distance of 1,180 feet, this being in misty weather and looking over a switch light slightly below the range of

vision and about 200 feet in front of the marker, and with several switch lights and two locomotive headlights in the background and slightly to the right, also with electric flood lights in the background slightly to the left and above the marker. Under similar conditions, but with a round cup and a one-inch wick, turned to the highest position at which the light did not smoke, and placed in the same marker, it could be seen for a distance of 2,290 feet.

An examination of flagging equipment and marker supplies was made at the Outer Yard of the Pennsylvania Railroad, where supplies for use in the vicinity of Toledo are kept, and while there was a large quantity of red lamps, white lamps, red flags, fuses, torpedoes, bracket markers, round cups, burners and wicks on hand, yet no oval-shaped cups were found at the supply house. It was developed that an oval-shaped cup was at one time used in a slide-in type of marker light, which is now practically extinct on the Pennsylvania Railroad.

#### Conclusions.

This accident was caused by the failure of Engineman Hardy, of Toledo Terminal transfer train extra 49, to operate under proper control within yard limits.

Rule 93, of the book of rules of the Toledo Terminal Railroad Company, reads as follows:

"Within yard limits the main track may be used protecting against first-class trains

"Extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear."

There is a conflict in the testimony as to whether extra 8615 was standing or moving at the time of the accident, and also as to weather conditions, visibility, manner of affording flag protection, condition of the caboose markers, etc. The fact remains, however, that both of the markers on the caboose of extra 8615 were burning at the time of the accident, and had Engineman Hardy been operating his train at a reasonable rate of speed, maintaining a proper lookout, there is no reason why he should not have seen the rear end of extra 8615 in time to stop. The fact that he did not see the caboose until it was only three car-lengths distant is sufficient evidence that he was not maintaining a proper lookout within yard limits.

The evidence indicates a confusing situation as to the affording of flag protection, and it is not helped

any by the statement of the Toledo Terminal superintendent that he had personally noted quite a little "platform flagging," which he considered inefficient in one sense and not inefficient in another, in view of the type of movements handled over this terminal railroad. Rule 99 of the Toledo Terminal Railroad is of the usual type, requiring flag protection when a train stops or is moving under circumstances in which it may be overtaken by a following train, while rule 93, previously quoted, allows the main track to be used within yard limits, and requires extra trains to move within such limits prepared to stop. There is nothing confusing about the requirements of these two rules, and it would not appear that there is any excuse for the apparent confusion existing in the minds of the various employees as to whether flag protection should have been provided at the point of accident. In the absence of other instructions to the contrary, the rear end of extra 8615 was not required to be protected by flag while standing within yard limits. If it is the desire of the management of this property that flag protection be provided at all points, regardless of circumstances or conditions, then such a requirement should be placed in effect and all employees should be properly instructed in accordance therewith. But whether such a requirement is placed in effect or not, steps should be taken by the responsible operating officials to see that one uniform understanding of the rules and regulations is had by all employees operating over this railroad.

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.