INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED AT THE INTERSECTION OF THE TRACKS OF THE KANSAS, OKLAHOMA & GULF RAILWAY OF TEXAS AND THE TEXAS & PACIFIC RAILWAY AT DENISON, TEXAS, ON AUGUST 17, 1925.

January 4, 1926.

To the Commission:

On August 17, 1925, there was a side collision between a yard engine and a work train of the Kansas, Oklahoma & Gulf Railway of Texas at the intersection of the tracks of this railway and the Texas & Pacific Railway at Denison, Texas, resulting in the death of one employee and the injury of three employees.

Location and method of operation

At the point of accident both railways are single-track lines over which trains are operated by time-table and train orders, no block signal system being in use. Approaching the point of accident from the west on the track of the Kansas, Oklahoma & Gulf Railway of Texas there is a compound curve to the left more than 1,200 feet in length, the curvature varying from 4° 20' to 5°, the accident occurring on this curve at a point 297.4 feet from its eastern end, where the curvature is at its minimum, the grade for eastbound trains on this track is 1.4 per cent descending for a considerable distance, extending to within 71 feet of the crossing, from which point it is practically level across the crossing. Approaching from the north on the Texas & Pacific Railway there is a 3° curve to the right 1,066 feet in length, the accident occurring on this curve at a point 439 feet from its southern end; the grade for southbound trains is 0.7 per cent descending for 800 feet, then 0.7 per cent ascending for a distance of about 275 feet to the crossing and for about 25 feet beyond. There is a deep ravine located in the northwest angle of the intersection and the view across it from one track to the other was somewhat obstructed by the tops of trees, which extend from 5 to 15 feet above the level of the tracks. There is a stop board

located 318 feet north of the crossing on the Texas & Pacific Railway; while the stop board on the Kansas, Oklahoma & Gulf Railway of Texas is located 142 feet west of the crossing. In addition to the operating rules of both railroads, the State law requires all trains to come to a full stop when approaching a railroad crossing at grade, provided, as in this instance, it is not protected by an interlocking plant.

The weather was clear at the time of the accident, which occurred at about 12.57 p. m.

Description

Eastbound work extra 7 consisted of six ballast cars and a coach, hauled by engine 7, backing up, and was in charge of Conductor Kimberly and Engineman McDonald. This train departed from what is known as the coach track, located about opposite the passenger station at Denison, at about 12.55 p.m., pulled out on the main track, and the engine was brought to a stop at a point 592 feet west of the crossing, after which the coach-track switch was closed. Work extra 7 then continued eastward, passed the stop board without stopping and on reaching the crossing, while traveling at a speed of about 8 miles an hour, the engineman's side of the engine was struck by engine 239.

Yard engine 239, headed south, in charge of Conductor Hamblett and Engineman Davis, had just made a transfer delivery of cars to the Texas & Pacific Railway, and was returning light, southbound, over the main track of that railway, this engine also passed the stop board without stopping, and on reaching the crossing, while traveling at a speed estimated to have been from 6 to 15 miles an hour, collided with work extra 7.

Engine 7, together with its tender, was derailed and overturned; engine 239 was also derailed but remained upright. The employee killed was the fireman of engine 239.

Summary of evidence

Engineman McDonald, of work extra 7, stated that when about 250 feet from the crossing he sounded the crossing whistle, and just after passing the stop board, only 142 feet from the point of accident, traveling at a speed of about 8 miles an hour, he looked across

the ravine toward the Texas & Pacific track and saw yard engine 239 at a point north of the stop board, moving toward the crossing, but it did not appear to be traveling very rapidly. When he first saw engine 239 it was so much farther from the crossing than the work engine that he did not think an attempt would be made to cross ahead of his train, and consequently he began looking in the direction that his train was moving, paying no further attention to the yard engine until the tender of his own engine was on the crossing. At this time he saw the yard engine within about 20 or 25 feet of the crossing, traveling at too high a rate of speed to be able to stop in time to avert an accident, and he immediately began to work steam in an endeavor to get his engine over the crossing, but was unable to do so. Engineman McDonald also stated that he did not hear engine 239 whistle for the crossing, that after he first saw yard engine 239 there was ample time for him to have brought his train to a stop, but he had supposed it would be over the crossing before the yard engine reached that point. The statements of Fireman Hale practically corroborated those of Engineman McDonald, he estimated the speed of the work train to have been not more than 6 miles an hour when approaching the crossing.

Head Brakeman Brady stated that after closing the coach-track switch he boarded the rear of the coach and walked through it toward the head end, on reaching the front platform he saw that his engine was about 20 feet from the crossing, traveling at a speed of about 6 miles an hour, while yard engine 239 was about 100 feet from the crossing, traveling at a speed of about 15 miles an hour, and made no stop prior to colliding with engine 7. Head Brakeman Brady further stated that the only whistle signal he had heard sounded by either engine was the two blasts sounded by the engine 7 at the time he gave the proceed signal after closing the coach-track switch. Conductor Kimberly was in the yard office, obtaining information in regard to trains which the work train would have to meet, and was unaware of anything wrong prior to the occurrence of the accident.

Engineman Davis, of yard engine 239, stated that the air brakes on his engine were in good condition and worked properly, that he was thoroughly familiar with the physical conditions at Denison yard and was aware of the daily movements of the work train. He stated that the speed of his engine was about 6 or 7 miles an hour when it was approaching the crossing on the Texas & Pacific track, but that he did not bring his engine to a stop. He stated, however, that he reduced speed and whistled for the crossing.

After passing the stop board he looked across the ravine and saw the work train standing on the Kansas, Oklahoma & Gulf Railway of Texas track while the coach-track switch was being closed, and shortly afterwards he became engaged in a conversation with the fireman. When he again looked ahead he saw the work train about 50 or 75 feet from the crossing, his own engine being about the same distance away, and he said he immediately closed the throttle, applied the air brakes in emergency and reversed the engine, when about 35 feet from the crossing, but was unable to stop. Engineman Davis further stated that there was nothing to interfere materially with his view of the work train from the time he passed the stop board until he reached the crossing, that it was customary for the one who first called for the crossing to have precedence, that he did not hear the work train call for it, and that he, therefore, assumed that the work train would wait until his engine had passed. He admitted that he did not maintain a proper lookout when approaching the crossing on account of the fact that he was talking with the fireman, and he also stated that he did not notice the air brakes being applied from the rear of his engine.

Conductor Hamblett, of yard engine 239, stated that he was riding on the right side of the rear footboard of the tender, and that when it had reached a point which subsequent measurement revealed was 727 feet from the crossing he looked across and saw the cars in work extra 7, the work engine being 629 feet from the crossing at this time. The engineman of the work train had his back partly turned toward the yard engine, and was apparently looking in the direction in which the work train was moving. As the work train was in plain view and its engine was so much nearer to the crossing than his own engine, he was of the opinion that his engine would stop and let the work train pass over the crossing. The speed of his engine was not reduced, however, still being about 12 miles an hour, and Conductor Hamblett stated that on reaching a point about 300 feet from the crossing he shouted to Engineman Davis and began giving him stop signals, but was unable to attract the engineman's attention. He said he opened the angle cock at the rear of the tender when at a point afterwards found to have been 148 feet from the crossing, at which time the tender of engine 7 was practically on the crossing, and that the speed of the yard engine still was about 10 miles an hour at the time of the accident. Conductor

Hamblett further stated that it was customary when approaching this crossing on the Kansas, Oklahoma & Gulf Railway of Texas merely to slow down and drift over the crossing, but when approaching on the Texas & Pacific track it was customary to stop at the stop board and whistle for the crossing, but on this occasion Engineman Davis did not stop or slow down for the crossing, and that he did not hear him sound the whistle.

Head Brakeman Dillon, of yard engine 239, stated that he was riding on the deck of the engine on the fireman's side, and that the speed of the engine was between 12 and 15 miles an hour, and that Engineman Davis did not slow down, stop, or sound the whistle for the crossing; he also stated that Engineman Davis held no conversation with the fireman when approaching the crossing. The first intimation he had of anything wrong was when the fireman, who was his brother, pointed across the ravine and shouted to Engineman Davis, "Look out for that work train", at which time the yard engine was approximately 186 feet from the crossing, working steam; he said Engineman Davis then closed the throttle and applied the air brakes. Head Brakeman Dillon did not notice any application of the air brakes from the rear of the engine before he jumped, and that he noticed no material reduction in the speed of his engine after he jumped off and prior to the accident.

Flagman Jackson, of yard engine 239, who was riding on the left side of the rear footboard of the tender, corroborated the statements of Conductor Hamblett as to the speed of the engine, and also about calling to the engineman and finally opening the angle cock on the rear of the tender.

Conclusions

This accident was caused by the failure of Engineman McDonald and Davis to maintain a proper lookout and to know whether the way was clear for the movement about to be made; Engineman Davis also failed to bring his engine to a stop before passing over a crossing at grade.

Under rule 98-A, of the Rules of the Transportation Department, trains are required to come to a full stop not less than 200 feet nor more than 600 feet from a crossing with another railroad at grade, and are not to proceed until the way is known to be

absolutely clear. After work extra 7 had pulled out on the main track and stopped to allow the brakeman to close the coach-track switch, the engine was slightly less than 600 feet from the crossing and technically it came within the requirements of that particular part of the rule. No stop was made at or near the stop board, located 142 feet from the crossing, and after observing the approach of yard engine 239 Engineman McDonald paid no further attention to its movement, assuming it would be stopped to allow his train to pass, and he did not notice that it had not been brought to a stop until the tender of his own engine was practically on the crossing. In operating his train in this manner Engineman McDonald violated the requirement that he should not proceed until the way was known to be absolutely clear.

Rule 98 contains a provision that where required by law, trains must stop. The evidence indicated that Engineman Davis, of yard engine 239, ignored this requirement, as well as both of the provisions of rule 98-A referred to in the preceding paragraph, and although he had seen the work extra approaching the crossing when his own engine was approximately 300 feet distant from the crossing, yet he paid no further attention to the movement of the work extra until too close to the crossing to enable him to stop. It is also apparent that Conductor Hamblett could have brought his engine to a stop in time to avert the accident had he acted promptly, although under the circumstances as they existed in this case it would be difficult for a man in his position to realize, until too late for effective action, that there was danger of the occurrence of an accident. Each engineman was on the side of his respective engine which was nearest to the other train, each had observed the approach of the other train, and each then engaged himself in other directions, failing to look ahead again until too late to avert an accident, for such negligence there is no excuse.

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.