

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE FORT WORTH & DENVER CITY RAILWAY AT FT. WORTH,
TEXAS, ON DECEMBER 27, 1925.

February 25, 1926.

To the Commission:

On December 27, 1925, there was a head-end collision between a freight train and a yard engine on the Fort Worth & Denver City Railway at Ft. Worth, Texas, resulting in the death of four employees and the injury of two employees.

Location and method of operation

This accident occurred within yard limits, at a point 1.7 miles south of North Yard Station, the north yard-limit board being located approximately 3.2 miles north of this point. There are no block signals in use in this vicinity, the movement of trains being governed by the yard-limit rule, supplemented by a special time-table rule which requires all trains and engines, including first-class trains, to move within yard limits under control. Approaching the point of accident from the south there are 4,500 feet of tangent followed by a 4° 01' curve to the right 1,806 feet in length, the accident occurring on this curve at a point 446 feet from its northern end; approaching from the north there are 3,153 feet of tangent followed by the curve on which the accident occurred. The grade is descending southward, varying from 0.62 to 1.17 per cent, being 0.82 per cent at the point of accident.

The weather was clear at the time of the accident, which occurred at 12.10 p.m.

Description

Southbound freight train extra 460 consisted of 38 cars and a caboose, hauled by engine 460, and was in charge of Conductor Hines and Engineman Littrell. It arrived at North Yard, the last open office, picked up a Form 19 order, not involved in this accident, and departed, according to the train sheet, at 12.05 p.m., colliding with yard engine 68 at a point 1.7 miles south of North Yard while traveling at a speed variously estimated to have been from 1 to 4 miles an hour.

Yard engine 68, headed south, was in charge of Engine Foreman DeCamp and Engineman Wallace, it left North Ft. Worth, backing up en route to North Yard, at about 12.05 p.m., and collided with extra 460 while moving at a speed variously estimated to have been from 12 to 25 miles an hour.

Both engines remained upright with only the front driving wheels of engine 68 and the front truck of engine 460 off the rails. The force of the impact drove, however, engine 68 ahead a distance of about 70 feet, demolishing the frame of the tender and forcing the cistern against the boiler head. The front end of engine 460 was considerably damaged, while no damage was sustained by any of the other equipment. The employees killed were the engine foreman, fireman and two switchmen, all of whom were on engine 68.

Summary of evidence

Engineman Littrell, of extra 460, said he had just released the air brakes and his train was drifting at a speed of about 8 or 10 miles an hour when his fireman called a warning of a switch engine some distance ahead, saying there was one approaching but that he could not determine whether it was on the track of the Fort Worth & Denver City Railway or on the tracks of the St. Louis Southwestern Railway, a line paralleling their own track in this vicinity. Engineman Littrell immediately reduced speed, however, and when the fireman again called he applied the brakes in emergency and jumped from the engine just before the impact, the speed of his train having been reduced to about 3 or 4 miles an hour at the time of the collision.

Fireman Kelly, of extra 460, said he saw engine 68 when it was half a mile distant but due to the curve and the track layout he was unable to distinguish which track it was on, but judging from its speed he at first thought it was on the St. Louis Southwestern tracks, he mentioned the approaching engine to Engineman Littrell who immediately reduced the speed of their own train, and a little later, about the time the light engine was 15 or 20 car-lengths distant, he saw that it was on their own main line, working steam and traveling at a speed of about 20 or 25 miles an hour, and that apparently it was not going to be able to stop before colliding, he called to the engineman who applied the air brakes in emergency and he thought the speed was reduced to about 2 miles an hour at the time of the collision. The statements of Head Brakeman Murphy, who was on engine 460, in substance corroborated those of Engineman Littrell and Fireman Kelly and added nothing of importance to the evidence.

Engineman Wallace, of yard engine 68, said he went on duty at 8.45 a.m. at Fort Worth yards, at about 11.45 a.m. Engine Foreman DeCamp informed him that they would go to North Ft. Worth to do some miscellaneous switching, but did not mention any train orders or a line-up nor was anything said relative to incoming trains. Upon arriving at North Ft. Worth, Engineman ~~Foreman~~ Foreman DeCamp said "We will stop here and I will phone North Yard--there is a dead engine up there--will see if they want us to go up there and haul it into town." Returning from the telephone the engine foreman said everything was all right and that they would go to North Yard and return with the dead engine, and he then outlined other switching movements to be made upon their return. There was no further conversation between the engine foreman and Engineman Wallace as the engine proceeded northward. Engineman Wallace said the side window was open on his side but on account of the fact that the weather was cold, with the temperature below freezing and a strong north wind blowing, the storm curtain was down and he thought all the windows were closed on the fireman's side of the cab. His engine was moving at a speed of about 10 or 12 miles an hour and he did not see extra 460 approaching, not looking out at that particular time and also because he was on the outside of the curve with a high tender cistern obstructing his view of the track ahead, and he said he had no knowledge of the approach of extra 460 until the collision occurred. He thought the fireman could have seen extra 460 approaching had he been maintaining a lookout but said he had not asked him to do so on account of the fact that several times during the morning he had had to call the fireman's attention to minor delinquencies and he did not wish to appear tyrannical by again reminding the fireman of his duty. Engineman Wallace further stated that it had been the practice of engine foreman with whom he had worked, when making the movement between Ft. Worth and North Yard, to telephone the operator at North Yard to hold the train-order signal against inbound trains and that is what he supposed Engine Foreman DeCamp had done at North Ft. Worth.

Engine Foreman Dentzell, of engine 250 said he called Yardmaster Stewart at Ft. Worth at 11.40 a.m. and told him that engine 250 had broken down in North Yard and would need assistance, and was informed by the yardmaster that an engine was being sent to North Ft. Worth in charge of Engine Foreman DeCamp, who would telephone him from that point and would come up and tow engine 250 if it were not repaired in the meantime. He

went to the engine, found it could not be repaired, and then returned to the office to await the expected call from Engine Foreman DeCamp. When the telephone rang the yard clerk answered and he heard him say "Yes, he is sitting here now - yes" and then the clerk hung up the receiver and said Engine Foreman DeCamp intended doing some work at North Ft. Worth before he came up to North Yard. Upon learning that the party calling was DeCamp, an attempt was made to recall him to the telephone but it was then too late, his reason for wishing to talk with Engine Foreman DeCamp was that extra 460 was then passing the office at North Yard and it occurred to him that DeCamp might overlook that train.

Yard Clerk Johnson said he heard Engine Foreman Dentzell say his engine was broken down and that he might have to have help to get to the roundhouse. Later the engine foreman came into the office and asked to have engine 250 towed into Ft. Worth. Engine Foreman Dentzell had some conversation with members of his crew to the effect that some one, he did not say who, was coming after them. Later some one called on the telephone asking if that were North Yard, if Engine Foreman Dentzell were there and if the engine foreman still wanted assistance and on being answered in the affirmative to each question the party calling concluded by saying "Well, as soon as I clear out North Ft. Worth I'll be up." Yard Clerk Johnson said that was all that was said and that Engine Foreman Dentzell was present during the conversation.

Yardmaster Stewart stated that at about 11.25 a.m. Engine Foreman Dentzell telephoned from North Yard saying his engine had broken down and might require an engine to tow it in to Ft. Worth. He told the engine foreman that he was sending Engine Foreman DeCamp to North Ft. Worth to do some switching there and that he would have Engine Foreman DeCamp call him from that point and if he still needed help Engine Foreman DeCamp would come up and haul engine 250 to the roundhouse. Accordingly when Engine Foreman DeCamp called later he told him in substance what he had just told Engine Foreman Dentzell, and at the same time told Mr. DeCamp that according to the line-up in the dispatcher's office extra 460 was reported to arrive at about 12.30 p.m.

In discussing the method of operation in the yard, Yardmaster Stewart said it was the practice to give engine foreman train orders when moving from Ft. Worth to North Yard when such orders were requested, but such orders were not considered necessary nor were they required, as under the time-table instructions all

trains and engines had to move between these points under control; it also appeared from Mr Stewart's statements that engine foremen were verbally instructed to telephone to the North Yard office from North Ft. Worth and ascertain if the way were clear before moving between these points.

The track of this railway is paralleled on the east by the track of the St. Louis Southwestern Railway, the distance between the two lines varying from about 94 feet at the point of accident to a distance of about 250 feet at a point 2,200 feet south of the point of accident. When a test was conducted with engines of the same types as those involved in the accident, it was found that the maximum distance one engine crew could have seen the opposing engine was 3,814 feet, at this distance, however, it was impossible to discern upon which track the opposing engine was moving. It further appeared that Engineman Wallace, sitting on his seat box and looking through the rear cab window, could have seen a man standing on the ground at the point of collision for a distance of 462 feet.

Conclusions

This accident was caused by failure to maintain a proper lookout and to operate engine 68 under proper control within yard limits, for which Engineman Wallace and Engine Foreman DeCamp were primarily responsible.

There were five employees on yard engine 68 as it moved northward toward North Yard on the morning of the accident, and the evidence indicated that not one of them was paying any attention to the condition of the track ahead, that on account of the unusually cold weather and the fact that a strong north wind was blowing at the time, the windows on the fireman's side of the cab were closed and the storm curtain was down, and that the movement apparently was being made almost wholly on the supposition that the track was clear.

The investigation developed that single-track operation was established in 1920 between Ft. Worth and a point just south of North Ft. Worth, doing away with a joint double-track arrangement which had previously been in effect, and at that time instructions were issued that switch engines had to obtain time or wait orders before making the movement from Ft. Worth to North Yard, 3.7 miles north of the north end of double track. Subsequently the double-track operation was restored, but the practice at the time of the accident here under investigation had reached the point where train orders

were still being issued to protect the movement of a switch engine to North Yard, or arrangements made to have the operator at North Yard hold southbound trains, but only when a request to that effect was made by the foreman of a switch engine. It did not appear that there was any uniformity about the matter and apparently it was left to the judgment of the various engine foreman, reliance generally being placed on the yard-limit rules. For a material portion of the distance between North Ft. Worth and North Yard the track of the Ft. Worth & Denver City Railway parallels that of the St. Louis Southwestern Railway, and it is a matter of difficulty for an engine crew to determine on which track an opposing engine is moving; it is believed that the situation warrants the establishment of more definite regulations governing train movements, to be observed by all concerned. Had train-order authority been required, or if the permission of the operator at North Yard had been required, it is probable that this accident would not have occurred.

Both Engineman Wallace and Engine Foreman DeCamp were experienced men; at the time of the accident the crew of yard engine 68 had been on duty about 3½ years and the crew of extra 460 about 9 hours, previous to which all of these employees had been off duty 11 hours or more.

Respectfully submitted,

W. P. BORLAND,

Director.