

Inv-2074

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
CHICAGO, BURLINGTON & QUINCY RAILROAD

BLUE SPRINGS, NEBR.

JUNE 29, 1936.

INVESTIGATION NO. 2074

SUMMARY

Railroad: Chicago, Burlington & Quincy
Date: June 29, 1936
Location: Blue Springs, Nebr.
Kind of accident: Derailment
Equipment involved: Freight : Motor truck
Train number: No. 93
Engine number: 2148
Consist: 15 cars and : tractor and tank
caboose : trailer
Speed: 20-30 m.p.h. : 12 m.p.h.
Track: 1^o curve to the right; slight
descending grade
Weather: Clear
Time: 6:50 a.m.
Casualties: 3 killed and 2 injured
Cause: Truck being driven upon highway
grade crossing in front of ap-
proaching train.

July 21, 1936

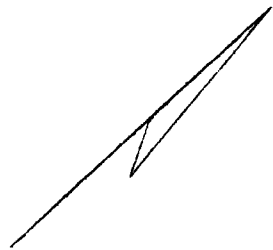
To the Commission:

On June 29, 1936, there was a derailment of a freight train on the Chicago, Burlington & Quincy Railroad as a result of striking a motor truck at a highway grade crossing at Blue Springs, Nebr., which resulted in the death of 2 employees and 1 trespasser, and the injury of 1 employee and a pedestrian who was in the vicinity of the crossing at the time of the accident.

Location and method of operation

This accident occurred on the Crete and Wymore Sub-division of the Wymore Division, which extends between Crete and Wymore, Nebr., a distance of 42.52 miles, and is a single-track line over which trains are operated by time table, train orders, and a manual block-signal system. The accident occurred at a point 330 feet south of the station at Blue Springs, where the track crosses U.S. Highway 77. Approaching this point from the north on the railroad, the track is tangent for 2.1 miles, followed by a 1° curve to the right 1,463 feet in length, the accident occurring on this curve at a point 750 feet from its northern end; the grade for southbound trains is slightly descending at the point of accident. A whistle board is located 1,725 feet north of the crossing, and the maximum authorized speed for freight trains over this sub-division is 30 miles per hour.

U. S. Highway 77 runs east and west according to compass directions, and crosses the track at an angle of 42°. It is a gravel road, 26 feet in width, and is straight for several hundred feet and practically level within a distance of 100 feet on each side of the crossing, although there is a slight dip where it crosses the track. A State warning sign of the disc type, bearing the letters "RR", is located 300 feet east of the crossing, on the north side of the highway, and below the disc on the same mast there is a small sign reading "Speed 12 miles State Law". Adjacent to this sign is a standard crossing sign bearing the words "RAILROAD 300 FEET TAKE NO CHANCES". The view of this latter sign to be had by the driver of a westbound vehicle is partially obstructed by a telephone pole until within 100 feet of it, and then it can be seen clearly. There is also a triangular crossing sign located 24 feet south of the center of the highway and 18 feet west of the railroad; the height of this sign is 9 feet 10 inches and it displays a warning to traffic in either direction. The Nebraska Motor Vehicle Laws provide that the drivers of all trucks shall, immediately before crossing any railroad track, bring their vehicles to a complete stop and look carefully in both direc-



o Crete, Nebr.
 40.79 mi.
 o Blue Springs
 x Point of accident
 1.73 mi.
 o Wymore, Nebr.

Whistle Post

1,725 ft.

Direction of Train

F.C.

RAILROAD CROSSING
Look out for the cars

750 ft.

COUNTY ROAD

Freight car

Sheds

Station

Trees

RAILROAD
300 feet
Take no chances

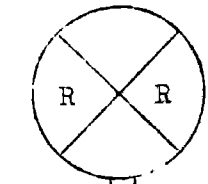
330 ft.

House

POINT OF ACCIDENT

1°
1,463 ft.

Direction of Track



Speed 12 miles
State Law

F.T.

Inv. No. 2074
C.B. & Q. R.R.
Blue Springs, Nebr.
June 29, 1936

tions for approaching trains before crossing the track.

The view of a southbound train had by the driver of a motor vehicle approaching the crossing from the east is very much restricted by telephone poles, trees and residential buildings. At a point 73 feet from the track a driver may look between two trees and have an unobstructed view of a southbound train for a distance of at least 1 mile. The view then is obstructed by trees until within 43 feet of the track, from which point the view is again unobstructed and a train can be seen for at least 1 mile.

The weather was clear at the time of the accident, which occurred about 6:50 a.m.

Description

Train No. 93, a southbound freight train, consisted of 15 cars and a caboose, hauled by engine 2148, and was in charge of Conductor Dobbs and Engineman Brothers. This train departed from Crete, 40.79 miles from Blue Springs, at 4:35 a.m., according to the train sheet, 3 hours late, and was derailed when it struck a motor truck on a highway crossing at Blue Springs while traveling at a speed estimated to have been between 20 and 30 miles per hour.

The truck involved was a 1936 Chevrolet tractor, hauling a semi-trailer approximately 16 feet in length, with a capacity of 2,336 gallons, and was loaded with gasoline. It was owned by Paul H. Jacobs, and was being driven by Floyd O. Hutchins, en route from Randolph, Kans., to Lincoln, Nebr. It proceeded westward on Highway 77, did not stop for the crossing, and was passing over it at a speed of about 12 miles per hour when the trailer was struck by Train No. 93.

The engine struck approximately the center of the trailer, which was broken loose from the truck, demolished, and thrown to the south of the crossing and to the right of the track. The engine, tender and first car were not derailed, and the engine stopped 1,120 feet beyond the crossing. The rear truck of the second car, the third, fourth and fifth cars, and the front truck of the sixth car were derailed, the second car breaking away from the first car and stopping about three car lengths behind it. Gasoline was sprayed over the engine and cars, and was ignited, resulting in the death of the engineman and fireman; the employee injured was the head brakeman.

Summary of evidence

Head Brakeman Hartzell, of Train No. 93, was riding on the running board of the left side of a tank car, the fourth car in the train. In addition to the crossing on which the accident occurred, there is a crossing located just north of the station, and the engineman sounds two crossing whistle signals. In this particular case, the engineman started sounding a crossing whistle signal at the whistle board and continued sounding it up to the time of the accident. Head Brakeman Hartzell stated that when he was about seven car lengths from the crossing he saw a motor truck close to it and it appeared as though it were going to stop, but the next thing he knew he found himself entering a mass of flames. He estimated the speed of his train at the time of the accident to have been about 20 miles per hour.

Conductor Dobbs, of Train No. 93, stated that he was in the cupola of the caboose, on the left side, and heard the engineman sound the crossing whistle signal for the crossing located just north of the station; he then heard a second crossing whistle signal, which was followed by a succession of short blasts. The speed of the train was about 25 miles per hour and just as the caboose was about opposite the station or a little north of it he felt the air brakes being applied, although he did not think it was an emergency application, and he saw fire ahead but at first thought it was due to weeds burning. He then left the cupola and as the caboose passed through the fire, he saw a gasoline truck lying on the ground to the right of the track, the caboose stopping about 40 or 50 feet beyond the burning tank. On examining the equipment after the accident he was of the opinion that the gasoline truck must have fallen back toward the track and struck a pair of wheels, thus derailing the cars. The statements of Flagman McCarty brought out nothing additional of importance.

Engineman Mehuron, who was deadheading in the caboose of Train No. 93, went to the engine and climbed into the cab, portions of which were on fire. There was no one in the cab at that time, and he found the throttle slightly open and closed it and applied the independent brake, but he did not observe the position of the automatic brake valve; the pilot of the engine was knocked down and the frames were bent. Engineman Mehuron estimated the speed to have been not more than 30 miles per hour at the time of the accident, while Fireman Walbridge, who also was deadheading on Train No. 93, estimated the speed to have been 25 or 27 miles per hour. Fireman Jeffries, also deadheading on the train, thought there was an emergency application of the brakes before reaching the crossing, as the speed had been reduced considerably at the time the caboose passed through the fire.

Driver Hutchins stated that he took charge of the truck at Randolph, Kans., shortly after 4:15 a.m., relieving another driver at that point, and had driven about 52 or 54 miles at the time of the accident. He stopped at Wymore, 1.73 miles from Blue Springs, where he got a cup of coffee, and then proceeded. The windshield and both of the enclosed cab windows were open, but he did not hear the train approaching nor did he hear the whistle signal sounded, and he did not see the approaching train until he was about 20 feet from the track; he was operating the truck in third gear, at a speed of about 12 miles per hour, and attempted to cross the track ahead of the train. The truck was in good mechanical condition and there was nothing in the cab to obstruct his view, nor was there any other vehicle on the highway in front of him within 300 feet of the crossing. Driver Hutchins is 41 years of age, has had about 8 years' experience in driving trucks, and had been employed by Mr. Jacobs since September, 1935, having driven over this crossing on several occasions since that time; he had been off duty 13 hours at the time he took charge of the truck at Randolph. It further appeared from his statements that Driver Hutchins did not know he was required by law to stop for the crossing, it being his idea that the drivers of trucks were to proceed at not exceeding 12 miles per hour, and he said that most crossings have a sign providing for that rate of speed.

Paul H. Jacobs, owner of the motor truck involved, stated that he operates only one truck and employs two drivers, and that he had had this truck only about 3 weeks at the time of the accident. The truck had two axles and the semi-trailer only one axle, with dual wheels on both the trailer and tractor, or a total of 10 wheels, and was equipped with hydraulic brakes, which had been relined and rechecked about a week prior to the accident. The truck operates between Eldorado, Kans., and Lincoln, Nebr., a distance of approximately 246 miles, and the entire trip, including the loading and unloading, consumes about 20 hours, which is divided between the two employees, one employee working not more than 10 hours at a time; the truck is inspected practically every trip. Mr. Jacobs stated that he is not familiar with the motor vehicle laws of the State of Nebraska, that he does not drive the truck himself, and that the drivers are not given any special instructions relative to the operation of the truck other than that furnished by the insurance company, and he was not familiar with those instructions except that he knew the truck should not be operated at a speed in excess of 35 miles per hour. He also said that Driver Hutchins is one of the first drivers who handled gasoline motor trucks into the State of Nebraska, which has been done for the last 6 or 7 years.

Division Lineman Farquhar stated that he was at the north end of the siding, approximately 1,700 feet north of the crossing involved, when he heard a whistle signal sounded for a crossing located about 1 mile north of the station, and as the train passed him the engineman started sounding the crossing whistle signal for the crossing just north of the station, and continued sounding it until after he passed the station; the train was traveling at a speed of about 20 or 25 miles per hour as it passed him, and the fireman was on his seat box looking out the window.

Jess Kimberly, who lives about three blocks northwest of the crossing, stated that he was in his yard when his attention was attracted to the unusual amount of whistling by Train No. 93 as it approached the crossing. The train was not traveling at a high rate of speed and soon after the engine disappeared from his view he heard an explosion. He then went to the crossing and met a stranger who told him that he had tried to stop the truck driver, but the driver would not pay any attention to him. Mr. Kimberly also stated that he talked with the driver, who said that he looked both ways and did not see the train. Later, however, he overheard a conversation between the truck driver and another man, and the truck driver then stated that he saw the train approaching but thought he could cross ahead of it.

Mrs. G. W. Gieber, who lives near the crossing, stated that she was in her house when she heard the engine whistle, and on going outside she saw a truck going westward on the highway. The truck was about 200 feet from the track, and she watched it as it approached the crossing; it did not appear to reduce speed, did not stop, and continued upon the crossing directly in front of the engine. There was very little wind at the time of the accident and there was no reason why this whistle should not have been heard by any one on the highway, as it was sounded continuously and loudly up to the time of the accident.

B. F. Hendricks, who lives east of the track and north of the highway, was in his yard when he heard the whistle of Train No. 93; he could not see the train until it was about opposite the station, and the truck then was about half way between the 300-foot stop sign and the track. The truck was proceeding at pretty good speed and did not slow down, and he figured that they would come together at the crossing.

Subsequent to the accident some tests were made which showed that as the engine rounded the curve to the right the engineman's view was gradually diminished until a point 365 feet from the crossing was reached, beyond which point the

engineman was unable to see anything east of the track. On reaching a point 337 feet from the crossing an unobstructed view of the entire crossing could be had from the fireman's side, and when 155 feet from the crossing the fireman could see the highway for a distance of 300 feet east of the track.

A check of motor traffic passing over this crossing for a 24-hour period showed a total of 1,365 motor vehicles, consisting of 1,140 passenger cars, 3 busses, 2 ambulances and 220 trucks, and only 31 of the trucks, or 14 percent, came to a stop before proceeding over the crossing. The traffic on the railroad amounted to 6 trains, 2 passenger and 4 freight, and the daily average movement on the railroad for the 30-day period preceding the date of the accident was 6.2 trains.

Discussion

The evidence indicates that the engineman sounded two crossing whistle signals, one for the crossing located just north of the station and one for the crossing involved in the accident. In fact, according to the statements of several persons who live in the vicinity of the crossing, the whistle signal was sounded so continuously that it attracted their attention. The truck was seen to approach the crossing at a fairly high rate of speed, although the eye-witnesses were unable to give an estimate of the speed, but the truck driver stated that it was 12 miles per hour on passing over the crossing; all the statements agree, however, that the truck did not stop, but proceeded upon the crossing directly in front of the approaching train. While the view is very much restricted due to trees, telephone poles and houses, had the driver stopped at any point within 43 feet of the crossing he would have had an unobstructed view of the approaching train for approximately 1 mile. According to his own statement, however, he did not see the approaching train until he was only 20 feet from the track and then attempted to cross in front of the train. He also stated that he did not hear the engine whistle.

The evidence indicates that the engineman did not see the approaching truck, due to his view being cut off as he approached the crossing, and while the fireman may have seen the truck, there was not sufficient distance in which to stop the train in time to avert the accident.

Attention is directed to the accident which occurred on April 24, 1936, on the same sub-division of this railroad at Hoag, Nebr., 16 miles from Blue Springs, wherein a truck, also

hauling gasoline, failed to stop at a crossing and ran into a train, causing the death of 1 person and the injury of 2 persons. While the Nebraska Motor Vehicle law provides that the drivers of all trucks shall bring their vehicles to a complete stop and carefully look in both directions for approaching trains before crossing a railroad track, a 24-hour check of motor traffic in connection with the investigation of the Hoag accident showed that only 9 percent of the trucks stopped, while a similar check of the traffic in the present case showed that only 14 percent of the trucks stopped before using the crossing. The occurrence of these two accidents within a period of less than 10 weeks, each involving a gasoline tank truck, and resulting in a combined toll of 4 persons killed and 4 injured, should be sufficient to cause local authorities to awaken to their responsibilities and take steps to enforce the provisions of law. The reports of this Bureau for many years past have called attention again and again to the dangers attendant upon the transportation of gasoline and other inflammable or explosive articles on the highways, as well as to the necessity for the drivers of all motor vehicles to exercise proper care before attempting to pass over railroad crossings at grade, and the accident here under investigation, as well as the similar accident at Hoag only a few weeks previously, serve again to call attention to this subject and to the absolute necessity for strict enforcement and obedience so far as local laws and regulations are concerned.

Attention also is called to the fact that in this particular case there was a sign near the crossing which might well have been misleading; it was the sign of the disc type under which was mounted the small sign reading "Speed 12 miles State law". The driver said this was the speed at which he was operating his vehicle and that he did not know he was required to stop, and it probably is true that anyone not acquainted with the law might interpret the sign as indicating that the only precaution required so far as the law is concerned would be a reduction in speed to 12 miles per hour.

It also is to be noted that the driver's employer did not know anything about the provisions of the law, neither did he give his drivers any particular instructions, apparently depending on such instructions as were given by an insurance company. One of the duties of any employer of drivers of motor vehicles is to see that his drivers are properly instructed and are fully acquainted with the laws and regulations affecting their movements, and ^{then} to see to it that these instructions, laws and regulations are enforced and obeyed; this duty was not carried out by the employer in this case.

Conclusion

This accident was caused by a motor truck being driven upon a highway grade crossing directly in front of an approaching train.

Recommendations

1. It is recommended that responsible local authorities take the necessary steps to enforce the provisions of law requiring trucks to be stopped before passing over railroad crossings at grade.

2. It is recommended that all employers of drivers of motor vehicles make sure that such drivers fully understand and obey all laws and regulations governing the movements of their vehicles.

Respectfully submitted,

W. J. PATTERSON,

Director.