INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE OREGON SHORT LINE RAILROAD, UNION PACIFIC SYSTEM, NEAR WOODS CROSS, UTAH, ON FEBRUARY 9, 1934.

April 19, 1934.

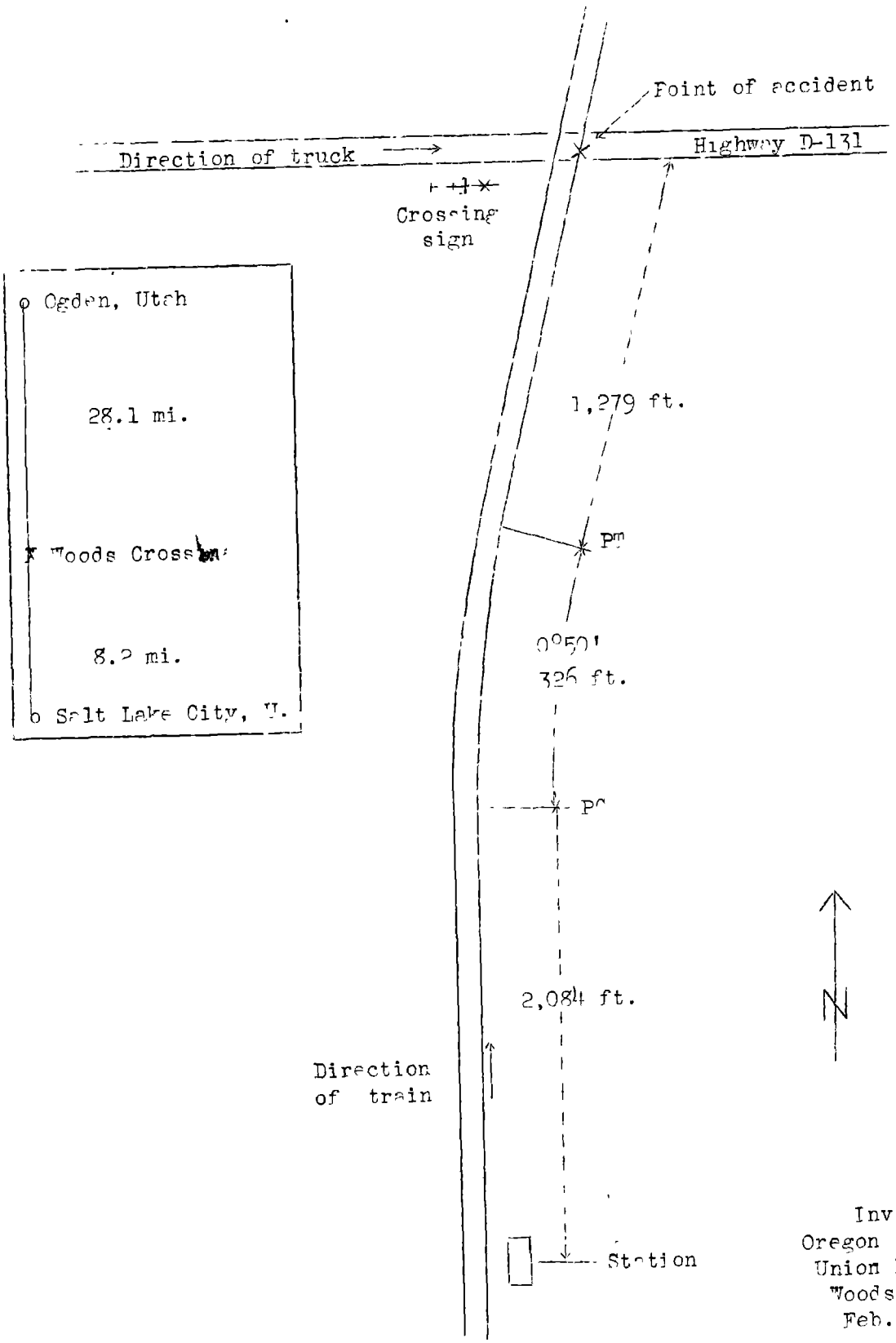
To the Commission:

On February 9, 1934, there was a collision between a passenger train and the trailer of a motor truck at a grade crossing on the Oregon Short Line Railroad, Union Pacific System, near Woods Cross, Utah, which resulted in the death of 1 employee and the injury of 1 employee. The investigation of this accident was held in conjunction with a representative of the Public Utilities Commission of Utah.

Location and method of operation

This accident occurred on the Fifth Subdivision, which extends between Salt Lake City and Ogden, Utah, a distance of 36.3 miles, and is a double-track line over which trains are operated by time table, train orders, and an automatic block-signal system. The general direction of the tracks is north and south, but time-table directions are east and west and these latter directions are used in this report. The accident occurred at a highway crossing approximately 3/4 mile west of the station at Woods Cross; approaching this point from the east, beginning at the station, the track is tangent for a distant of 2,084 feet, followed by a 0° 50' curve to the right 326 feet in length and then tangent track for a distance of 1,279 feet to the crossing, and for a considerable distance beyond that point. The grade for west-bound trains is 0.504 percent descending at the point of accident.

The highway, known as State Road D-131, is a connecting road between two other highways and crosses the tracks at an angle of 67° 45'; its surface consists of oiled gravel, about 15 feet in width, and is tangent for a considerable distance in each direction from the crossing. A warning sign, of the cross-bar type, is located on the east side of the highway close to and south of the tracks, and under the crossed bars there is a sign indicating that the crossing consists of two tracks. A clear view of a train approaching from the east ordinarily can be had by the driver of a motor vehicle approaching on the highway from the south when he is approximately 500 feet from the crossing, but an east-bound freight train had just cleared the crossing and the caboose was about 25 or 30 car



Inv. No. 1888
Oregon Short Line R.R.
Union Pacific System
Woods Cross, Utah
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lengths, or 1,100 or 1,200 feet from that point when the passenger train passed it, thus restricting the view to that distance.

The weather was cloudy at the time of the accident, which occurred about 11:26 a.m.

Description

West-bound passenger Train No. 20 consisted of 1 baggage car and 1 coach, both of steel construction, hauled by engine 3176, and was in charge of Conductor Hayes and Engineman Duffin. This train departed from Salt Lake City, 8.2 miles east of Woods Cross, at 11:10 a.m., 20 minutes late, passed Woods Cross at 11:25 a.m., 22 minutes late, and shortly afterwards it collided with the automobile trailer truck while traveling at a speed estimated to have been between 50 and 60 miles per hour.

The motor vehicle involved consisted of a Mack truck, 6-cylinder model, equipped with a cab and covered body, owned by the Interstate Motor Lines, and operated by Shell Henroid; it was hauling a trailer loaded with five containers having a total capacity of 1,700 gallons, and at the time of the accident three of the containers carried about 1,000 gallons of gasoline, the other containers being empty. The truck was traveling northward on the highway and was stopped at the crossing while the freight train was passing; then it started over the crossing and was moving at a speed estimated at 3 miles per hour when the trailer was struck by Train No. 20.

The trailer was thrown to the north of the truck, badly damaging it and throwing the containers from the body. The train stopped 3,276 feet west of the crossing with its engine truck derailed and the pilot damaged. Gasoline was sprayed over the engine and cars which immediately caught fire, causing fatal injury to the engineman and serious injury to the fireman.

Summary of evidence

Fireman Burklund, of Train No. 20, stated that the engine bell was ringing and the whistle was being sounded while the train was approaching the crossing. He looked over the tops of some low cars in the freight train and saw the truck and thought it was standing at that time, but as soon as the freight train cleared the crossing the truck started ahead and when it moved upon the tracks he shouted a warning to the engineman. The echo from the whistle prevented the engineman from hearing him so he crossed over to the right side of the cab and called the engineman's attention to the danger and the engineman immediately

applied the brakes in emergency. He estimated the speed of his train at the time he first observed the truck on the highway at 60 miles per hour, which speed had not been reduced to any material extent prior to the accident. He said also that the driver of the truck did not look in the direction of the approaching train until the truck was actually on the rails and then he attempted to increase speed in an effort to avert the accident. Fireman Burklund's statement indicated that his train was close to the crossing when it passed the caboose of the freight train.

Conductor Hayes, of Train No. 20, stated that after leaving Salt Lake City the train did not stop; the usual speed was made between that point and Woods Cross, and the train was traveling about 55 or 60 miles per hour as it approached the point of accident. He heard a crossing whistle signal and felt the brakes apply in emergency just before the train reached the crossing, and almost immediately he saw flames around the train.

Head Brakeman Harrison, of Train No. 20, corroborated the statements of the conductor as to the speed of the train, the sounding of the whistle, and the application of the brakes. After the train stopped he assisted in extinguishing the fire in the engine cab and then observed that the throttle was closed and the brake-valve handle in emergency position, while the engine bell was still ringing.

Rear Brakeman McMaster, of Train No. 20, was on the rear platform when his train passed the station at Woods Cross, remaining there until after passing the east-bound freight train, which was about four or five pole lengths east of the crossing when his own train passed it. While outside he heard the engine whistle sounded for the crossing and after the train stopped he heard the bell ringing.

Car Inspectors Mackay and Blake stated that they made the usual air-brake inspection and test on Train No. 20 prior to its departure from Salt Lake City and all brakes were found to be working properly and all brake shoes were in good condition.

Conductor Hunt, of east-bound freight train Extra 2535, stated that when the rear end of his train passed the crossing he saw the motor truck standing on the highway about 20 feet from the tracks; Train No. 20 passed the caboose at a point approximately 30 car lengths from the crossing, at which time the whistle was blowing; he did not pay any further attention to the truck.

Rear Brakeman Phillips, of extra 2535, stated that his train was traveling at a speed of about 20 miles per hour and

after it passed over the crossing he looked back from the rear platform of the caboose and observed the truck approaching the crossing. Train No. 20 passed the caboose about 25 car lengths from the crossing, and he thought he heard the brakes apply on that train when it was a little more than its own length beyond the caboose. At first he thought the truck just barely got over the crossing, but when he saw the flames he notified his conductor as to what had happened.

Shell Henroid, driver of the truck, stated that he resides at Woods Cross and was familiar with the crossing and was experienced in driving trucks hauling trailers of the type involved in the accident, and had been employed intermittently by the Interstate Motor Lines for 6 months previous to the accident; he had had 10 years' experience in driving trucks, and went to work at 8 a.m. after having had proper rest the previous night. After procuring a load of gasoline at a refinery about ½ mile south of the railroad he proceeded towards the crossing and stopped the truck about 40 feet from it to wait for an approaching freight train to pass. When the rear end of that train had reached a point about three or four car lengths east of the crossing he looked in the direction it was moving and, as he saw no train approaching, he started forward and then looked again in the same direction, but still failed to see an approaching train. The truck entered the crossing at a speed of about 3 miles per hour and was just clearing it when he felt an unusual motion, and realizing that something was wrong he stopped the truck, jumped out and then discovered the trailer on fire. He said there was no one riding on the truck with him and there was nothing to distract his attention but he did not see or hear the passenger train until after the accident. The truck driver also said that the crossing was in good condition and the approaches well maintained.

T. S. Carter, manager of the Interstate Motor Lines, stated that his company is engaged as a common carrier in interstate commerce and has complied with all the requirements of the Public Utilities Commission of the State of Utah. His firm does not require an examination as to the physical or mental condition of truck drivers and no special bulletins are issued covering the operation of trucks, but frequent safety meetings are held and safety features discussed, particularly concerning railroad crossings, the instructions being that stops must be made for such crossings. The driver of the truck involved had been in the employ of his company for about 6 months and he considered him a competent man. He described the truck as being a 5-ton truck with a flat hood and enclosed cab, equipped with doors in which there were windows about 24 by 26 inches in size. The trailer had a capacity for four tons and was equipped with dual tires

at the rear end; the total length of truck and trailer was about 45 feet.

The driver of an automobile approaching the crossing from the north at the time of the accident said that after the freight train cleared the crossing he saw the truck and trailer standing on the other side, and the truck and trailer started ahead slowly when the caboose was about two car lengths beyond the crossing. This motorist heard the whistle of a train about ¼ mile distant and saw the passenger train against the background of the freight train. Its speed was 50 or 60 miles per hour and the engineman was still whistling when coming on to the crossing.

Conclusions

This accident was caused by a motor truck and trailer being driven on a railroad crossing at grade directly in front of an approaching train.

According to the evidence, the truck approached the crossing and stopped while an east-bound freight train passed and when that train was a short distance beyond the crossing the driver of the truck started ahead, moved upon the crossing at low speed, and was almost over it when the trailer was struck by the passenger train. The fireman of that train said he observed the truck standing on the highway while his train was approaching and that the whistle was being sounded, but just after the freight train cleared the crossing the truck started across the tracks; as quickly as possible he notified the engineman of the danger, but the train was then too close to the crossing to avoid the accident. The driver of the truck said he looked twice in the direction from which the passenger train was approaching, but did not see or hear it and was not aware of its approach until after it struck the trailer.

Using the driver's estimates as to the location of his truck when it started ahead and as to the speed at which it was moving, It is apparent that it consumed about 20 seconds from the time it started until it reached the point it occupied at the time of the accident. This time interval indicates that the passenger train probably was at least 1,500 feet from the crossing when the truck started to move and therefore was obscured from the driver's view by the rear portion of the freight train, which was passed by the passenger train at a point 1,100 or 1,200 feet from the crossing. These figures corroborate the driver's statement that the passenger train was not in sight when he started ahead. On the other hand, however, Driver Donroid said that when the caboose of the freight train was only three or four car lengths beyond

the crossing he looked to see if there was another train approaching and then started; in starting ahead in this manner he violated the rules and regulations of the Public Utilities Commission of the State of Utah, which require the driver of a motor vehicle to stop for a railroad crossing at grade and then not to proceed over the crossing until it is safe to do so. Driver Henroid was handling a heavy, slow-moving vehicle, and instead of starting ahead practically as soon as the freight train had cleared the crossing, it was incumbent on him to wait until he had a sufficiently clear view of the track to know beyond any question that he had time in which to make the movement in safety. The driver of a truck carrying gasoline or other highly inflammable or dangerous articles should take extraordinary precautions to insure safety at grade crossings.

The highway on which this accident occurred is a connecting link between two small towns and is used by a number of school children attending a nearby school. While the view is good when approaching the tracks from either direction, there is considerable traffic on the railroad, much of which is operated at high rates of speed, and it is believed that the railroad company should make a survey to determine whether additional protection should be provided. Experience has shown that no form of grade crossing protection is an effective substitute for the exercise of sound judgment upon the part of the operators of motor vehicles, but some form of protection in addition to the present warning sign may prevent future accidents at this point.

Respectfully submitted,

W. J. PATTERSON,

Director.