

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE LINE OF THE SOUTHERN PACIFIC COMPANY
AT PIRU, CALIF., ON FEBRUARY 12, 1933.

May 13, 1933.

To the Commission:

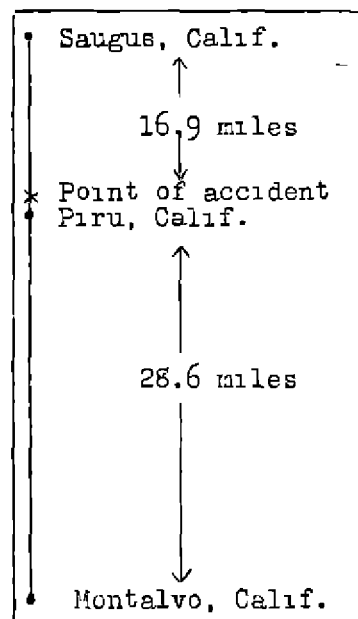
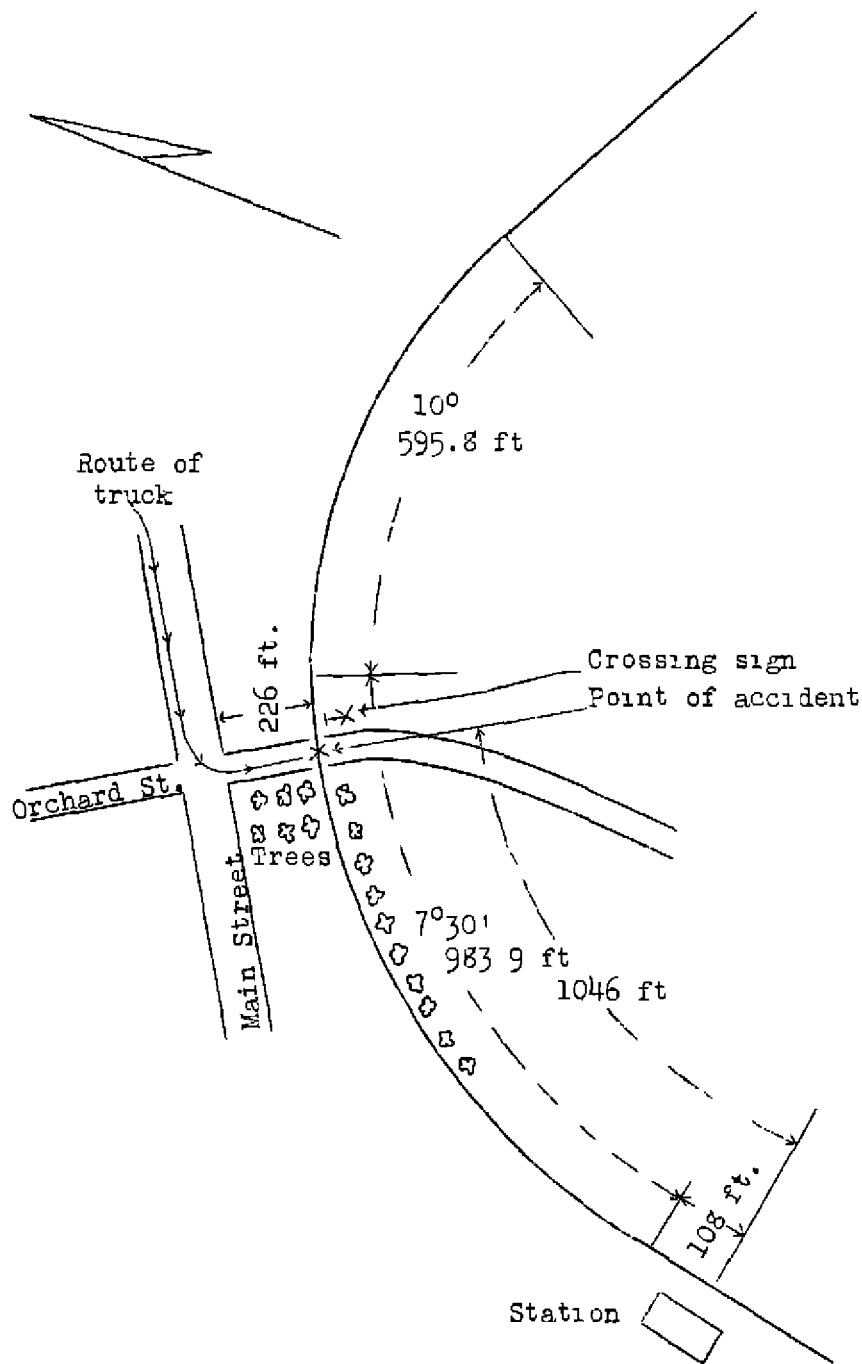
On February 12, 1933, there was a collision between a passenger train and a motor truck with trailer at a street crossing on the line of the Southern Pacific Company at Piru, Calif.

Location and method of operation

This accident occurred on that part of the Ventura Sub-division which extends between Montalvo and Saugus, Calif., a distance of 45.5 miles, and is a single-track line over which trains are operated by time table and train orders, no block-signal system being in use. The point of accident was about 1,046 feet east of the station at Piru, where Orchard Street crosses the track at a right angle. Approaching the crossing from the west, the track is tangent for a distance of 108 feet, followed by a compound curve to the right consisting of a curvature of $7^{\circ} 30'$ for a distance of 983.9 feet and 10° for 595.8 feet, the accident occurring near the leaving end of the $7^{\circ} 30'$ curve. The grade for east-bound trains is slightly ascending from the station to the point of accident. The maximum authorized speed for passenger trains in the vicinity of the point of accident is 25 miles per hour.

Orchard Street runs practically north and south and Main Street parallels the track on the north and connects with Orchard Street at a point 226 feet from the crossing. The latter street is tangent from its intersection with Main Street to a point 60 feet south of the crossing, at which point it curves to the right. It is 30 feet in width and consists of mixed dirt and gravel with a hard oiled top surface 16 feet in width, at the crossing, however, it is 13 feet in width and is level with the tops of the rails. There is a slight incline leading up to the track, which is about 2 feet above the ground on the north side of the track. The maximum speed for motor vehicles is fixed by a signboard at the intersection of Main and Orchard Streets at 25 miles per hour.

A standard highway crossing sign of the cross-bar type is located 12 feet south of the track and 18 feet east of the center of the street and stands 9 feet above the ground and 6 feet above the top of the south rail. The view of this sign approaching the crossing from Main Street is unobstructed.



Inv. No 1810
Southern Pacific Co.,
Piru, Calif.
February 12, 1933

Under state law the driver of any truck carrying inflammable liquids is required to stop before passing over a railroad crossing.

Due to an olive orchard situated on the northwest corner of the crossing the view to be had from Orchard Street of an approaching east-bound train is obstructed until a vehicle reaches a point 100 feet from the crossing, at which point a clear view of the track for a distance of 114 feet west of the crossing may be had. At a point 65 feet from the crossing the view is again obstructed by a tree, but at a point 55 feet from the crossing the track can be seen for a distance of 600 feet. There also are trees located on the south side of the track and on the inside of the curve, which reduce the range of vision, as a vehicle closely approaches the crossing, from 600 to 540 feet.

The weather was clear at the time of the accident, which occurred at 7:55 a.m.

Description

East-bound passenger train no. 352 consisted of a gas-electric motor car and a baggage car, and was in charge of Conductor Mahoney and Motorman Hirst. The motor car was of all-steel construction and the baggage car was of wooden construction. This train departed from Santa Paula, 17.1 miles west of Piru, at 7:23 a.m., 1 minute late, made a station stop at Piru, and collided with the truck and trailer at Orchard Street crossing while traveling at an estimated speed of about 15 miles per hour.

The motor truck involved in this accident was a Sterling truck, Model EC-29, of 1928, equipped with a tank having a capacity of 2,200 gallons, and the trailer truck was equipped with a tank of 3,000 gallons capacity. The truck and trailer, which had an over-all length of 52 feet, were owned and operated by Bert Hale, an independent trucker, of Newhall, Calif., and at the time of the accident were being operated by W.F. Sniffer. The tanks of the truck and trailer were loaded to capacity with crude oil at the tanks of the Pacific Western Oil Company, located at the eastern end of Main Street, approximately 1/3 mile from the crossing, and departed from that point about 7:45 a.m., proceeding westward on Main Street and making a left turn into Orchard Street. The trailer and truck proceeded onto the track at a speed variously estimated to have been from 3 to 15 miles per hour, and were struck about midway between the truck and trailer by train no. 352.

The truck was hurled to the south of the track and east of the roadway and stopped on its right side about parallel with the roadway 15 feet from the road and 20 feet south of the track, the driver remained on his seat and was not injured. The trailer was thrown to the north of the track and stopped in an upright position against the motor car. Both the truck

and the trailer sustained considerable damage and practically all the oil in the tanks escaped, although no fire resulted. The front end of the motor car of train no. 352 sustained slight damage, but no part of the equipment was derailed.

Summary of evidence

Motorman Hirst, of train no. 352, stated that he started to sound the crossing whistle signal just after leaving the station, that the bell was ringing as his train approached the crossing at a speed of about 15 miles per hour, and that he sounded the last blast on the whistle about the time he first saw the truck, which was just before the collision occurred. He estimated that the truck moved about 10 or 12 feet from the time he first saw it until it was struck by his train, which traveled a distance of 45 or 50 feet before it stopped. Judging from the sound of the motor of the truck he was of the opinion it was running in high gear, probably at a speed of about 15 miles per hour, and could not have stopped in view of the speed at which it was running. As he started to take his foot off the dead man's button, which would allow the air brakes to apply in emergency, the collision occurred and his shoe became caught, however, if the brakes did not apply as a result of his taking his foot off the button they applied as a result of the breaking of the train line in the accident. Motorman Hirst stated that his view of the street was obscured by trees, and due to the construction of the motor car, as it tilted toward the right on rounding the curve, he was unable to see the truck as it ascended the grade on the highway leading to the crossing. A test made with a car of the same construction, however, showed that the motorman could have seen the street continuously from a point 300 feet distant. While the view from the window directly in front of him decreased as his car approached the crossing, the view through the other windows increased. The tilt of the car as it rounded the curve was found to have no effect on the range of vision. The whistle and bell were not as loud as those on a steam engine, but the whistle was heard clearly a distance of 1,500 feet.

Conductor Mahoney, of train no. 352, was riding on the left side in the smoking compartment of the motor car and first saw the truck when it was on the track. He thought the last crossing whistle signal was sounded when the train was about 8 or 10 car lengths from the crossing, and said the bell was ringing at the time of the collision. Conductor Mahoney further stated that he heard some one who seemed to be a friend of the driver of the truck make the remark that the driver had been on duty about 25 hours. Both the conductor and Brakeman Freeman stated that the driver of the truck told them after the accident that he did not see the train approaching until it was too late, and that he then tried to get across as far as possible in order to protect himself.

Statements of five persons who lived in the vicinity of

the crossing were to the effect that the bell was ringing as the train approached the crossing and two of these persons heard the whistle sounded. Diana Siquendo, who lived on Main Street near Orchard Street, stated that her attention was attracted to the whistle and the bell by her little granddaughter, who wanted to be taken out to see the train. She went out with the child and when she got down to the walk she noticed a truck turning the corner, which is 226 feet from the crossing, and from the high rate of speed at which it was traveling she knew it could not pass the crossing before the arrival of the train and also realized that it was running too fast to stop. She walked to the corner, a distance of about 60 feet, and saw that the train had already struck the truck. While the trees obscured her vision of the truck as it approached the crossing, she was sure that it did not stop as there was not time enough for it to have stopped and then reach the crossing. Observations were made of the movement of loaded oil trucks and trailers at another crossing, where the physical conditions were more favorable, for the purpose of ascertaining how long an interval of time would elapse from the time they passed a point 220 feet from the crossing, until they had made a stop for the crossing and then had proceeded until the rear wheels of the truck were between the rails, the approximate position of the truck here involved at the time of the accident, and it was found that the average amount of time so consumed was more than 1 minute.

Truck Driver Shaffer stated that he left the tanks of the Pacific Western Oil Company about 7:45 a.m., proceeded westward on Main Street at a speed of about 15 miles per hour and continued at that speed when he made the turn at Orchard Street. He stopped with the front end of the truck about 30 feet from the north rail of the track and looked to the right and to the left but saw nothing coming nor did he hear anything. He then started to pass over the crossing and when the front wheels of the truck were on the track he saw the train approaching, it then being about 300 feet from the crossing. The truck has four gears and after making the stop for the crossing he was running in low gear, which has a maximum speed of 3 miles per hour, although as soon as he saw the train he stepped on the accelerator. Driver Shaffer stated that he did not know whether or not he could have heard the train whistle, although on a previous occasion with his motor running he had heard an engine bell ringing, he was unable to explain why he did not see the train until it was only 300 feet distant. Driver Shaffer had been driving trucks for 3 years, had been in the employ of Mr. Hale since November, 1931, and had made an average of 12 or 14 trips per month over the crossing involved. He further stated that he went on duty at 11 p.m. the night before the accident, but when questioned as to the hours he had been off duty prior to that time he first consulted Mr. and Mrs. Hale and after conversing with them for about 10 minutes he stated that he returned from Santa Paula about 1 a.m. on the morning of

February 11 with a light load of oil which was unloaded at the Newhall Refinery, he then loaded the truck and trailer with heavy oil to be taken to Kramer and reached Mr. Hale's house about 4 a.m., when he went off duty and Mr. Hale drove the truck to Kramer. Mr. Hale returned from Kramer about 10 p.m., at which time Driver Shaffer was called, resuming duty at 11 p.m. There is no record kept of the hours he is on duty, although he said he had never been on duty continuously as long as 20 hours, when he gets tired he pulls up alongside of the road and rests. When questioned as to the greatest number of hours he had been on duty at one time he again consulted Mr. and Mrs. Hale, but no definite reply was given.

Mr. Hale, owner of the truck and trailer, stated that the truck was in good condition and that the last repair work had consisted of the installation of new brake bands about 3 months previously, this truck is the only one he owns, he and Shaffer taking turns in driving it, and due to the great cut in prices paid for hauling he is forced to keep his truck in operation almost constantly. Most of the hauls are not long, with the exception of the haul from Newhall to Kramer, a distance of 114 miles, which takes about 20 hours for a round trip, although they do not work as long as 20 hours without taking 8 hours rest. On a later date Mr. Hale was questioned again after a check had been made of the slips showing the receipt and delivery of oil on the day before the accident, it had been found that Mr. Hale's name was shown as the driver who received the oil at Newhall on the day prior to the accident. Mr. Hale stated that his name was signed by Driver Shaffer when Shaffer received the load inasmuch as he himself was the one who was going to make the trip through to Kramer.

Laborer Klapperstick, of the Suckow Borax Company at Kramer, stated that on February 11 a load of oil was delivered about noon by a man answering the description of Shaffer, stating that there are two men that drive the truck and on this day it was the younger man and he heard him make the remark that he was about "all in", that he had been on duty either 34 or 36 hours, he wished to refresh himself and then said that he guessed he would be able to get back to Newhall.

Conclusions

This accident was caused by the failure of Truck Driver Shaffer to use proper precautions before attempting to pass over a railroad crossing at grade, a contributing cause was the failure of Motorman Hirst, of train no. 352, to maintain a proper lookout and take steps to stop his train before the accident occurred.

The California Vehicle Act of 1931 provides that the operator of any truck carrying inflammable liquids shall before crossing at grade any track or tracks of a steam railroad bring his truck to a full and complete stop within not less than 10 feet nor more than 50 feet from the nearest rail, and

shall while stopped look and listen in both directions for approaching trains. Driver Shaffer said he stopped 30 feet from the crossing, looked in both directions and proceeded onto the crossing in low gear at a speed of 3 miles per hour. Other evidence, however, was to the effect that the truck was traveling at a much higher rate of speed and probably was not stopped before attempting to pass over the crossing, although no positive conclusion to this effect can be drawn. It did appear, however, that the truck driver did not see the train until it was 300 feet distant, whereas had he been using the caution required when stopping for a railroad crossing he could have seen the train when it was at least 540 feet distant, he also failed to hear the whistle and bell, although there was evidence that both were used.

According to his own statements, Motorman Hirst did not see the truck until about the time the collision occurred and apparently there was no application of the brakes until that time, when the damage caused by the accident resulted in a broken train line. Tests showed that the motorman's view was in no way obscured by the tilt of the car as it rounded the curve, in fact, if the truck had stopped at the point claimed by the truck driver, the motorman could have seen it when 600 feet distant. If it approached without stopping there still remains the fact that when 100 feet from the crossing the motorman could have seen anything on the street within 55 feet of the crossing, and had the motorman seen the truck even at this late moment, he could have stopped short of the crossing.

There is no record kept of the hours on duty of the truck driver, and according to his statements, as well as those of his employer, he had been on duty about 9 hours at the time of the accident after having been off duty 19 hours. From the manner in which his statement was given relative to the time he was off duty on the day before the occurrence of the accident, it is a question as to how much credence can be given to it, for it was only after conversing with his employer, Mr. Hale, and with Mrs. Hale, who keeps the accounts, that he made his reply, which apparently was in accord with what they told him. A statement made by one of the employees of the plant at Kramer, at which plant the load of oil had been delivered at noontime on the day before the accident, indicated that Shaffer was the driver who delivered the oil, that employee did not know the name of the driver but the description given agreed with that of Shaffer and he stated that the driver made the remark that he was all in and had been working more than 30 hours. Two trucking slips dated February 10, signed by Driver Shaffer, show a haul from Piru to the Newhall refinery and then from the Santa Paula tanks to the Newhall refinery. If Driver Shaffer made the trip to the plant at Kramer on February 11, in addition to these two trips on the tenth, he then would have been on duty more than 30 hours when he reached the Kramer plant, as stated by the laborer at that point, and approximately 48 hours from the time he went on duty on the

morning of February 10 to the time of the accident, 7:55 a. m. February 12, with very little rest, if any, during that time. Due to the lack of accurate information, however, and to the fact that such sources of information as were available could not be corroborated in any way, it was impossible to develop on the record the exact situation surrounding the hours of service of Driver Shaffer or whether he was in proper physical and mental condition for the performance of his duties.

As indicative of the need for supervision of the working conditions of truck drivers, however, it might be well to call attention to another instance developed at the time of this investigation. The driver from whom the following information was obtained had been out of work for $1\frac{1}{2}$ years and did not wish his name to be used as he did not want to lose his job. This driver, also engaged in hauling inflammables, said that at the time he was interviewed he had been on duty more than 20 hours continuously and that by the time he completed his trip he would have been on duty about 26 hours. This driver also made regular trips over a certain route which required him to be on duty about 36 hours, and on one of his routes there are about 12 railroad crossings at grade.

The indicated existence of such long working hours as are referred to above constitutes additional argument, if any is needed, for regulation of conditions surrounding the operation of motor trucks. The need for limiting hours on duty in order to promote safety is well recognized on our railroads, and is one of the factors responsible for the safety records which have been established by the railroad industry. There is no reason why similar regulation should not be extended to the motor transportation industry, with benefit both to those employed in that industry and to the motoring public.

Respectfully submitted,

W. P. BORLAND,

Director.