

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING
AN ACCIDENT ON THE MISSOURI PACIFIC RAILROAD AT MOARK,
ARK., ON APRIL 20, 1933.

July 20, 1933.

To the Commission:

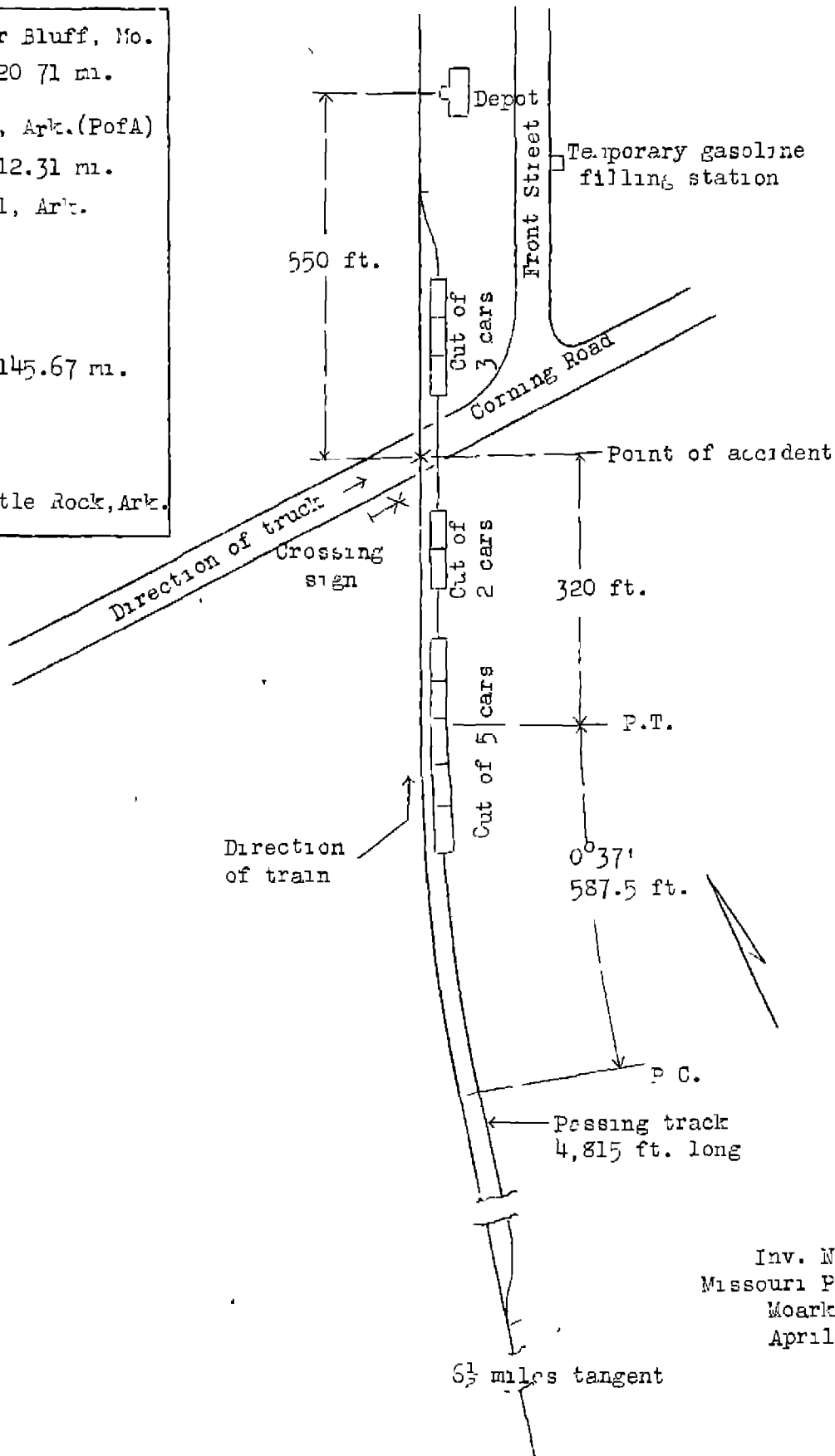
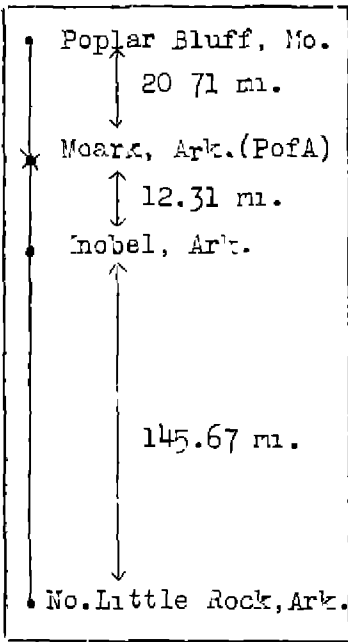
On April 20, 1933, there was a collision between a passenger train and an automobile tank truck at a grade crossing on the Missouri Pacific Railroad at Moark, Ark., which resulted in the death of 1 employee and the driver of the truck, and the injury of 1 employee and 3 other persons.

Location and method of operation

This accident occurred on the Hoxie District of the Arkansas Division, extending between North Little Rock, Ark., and Poplar Bluff, Mo., a distance of 178.69 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The point of accident was about 550 feet south of the depot at Moark where a county road known as Corning Road crosses, from west to east, first the main track and then the passing track. Approaching the crossing from the south on the railroad, the track is tangent for about $6\frac{1}{2}$ miles and then there is a $0^{\circ} 37'$ curve to the right 587.5 feet, followed by 320 feet of tangent to the crossing, this tangent extending for a considerable distance beyond that point. The grade for north-bound trains is slightly descending, being 0.18 percent at the crossing. The speed of passenger trains is limited to 65 miles per hour.

The passing track is 4,815 feet in length and parallels the main track on the east, the north switch being located 454 feet north of the crossing. At the time of the accident three separate cuts of cars stood on the passing track, a cut of three cars being just north of the crossing, with the south end of the south car about 25 feet north of the center line of the crossing, while the other cuts of cars stood south of the crossing.

The highway extends practically west and east and crosses the track at an angle of $58^{\circ} 40'$, it is an unimproved road and is tangent for a considerable distance in each direction from the crossing. The road is not heavily traveled and the only protection afforded at the crossing is a sign of the cross-bar type, located 25 feet west of the tracks and on the south side of the highway, painted white with black lettering, reading "RAILROAD CROSSING".



Inv. No. 1821
 Missouri Pacific R.F.
 Moark, Ark.
 April 20, 1933

From the driver's seat of an east-bound truck on the highway, the view of the railroad tracks was unobstructed, and on reaching a point 325 feet west of the crossing an approaching north-bound train could be seen plainly when it was more than 1,200 feet south of the crossing.

The weather was cloudy at the time of the accident, which occurred about 7:13 a.m.

Description

North-bound passenger train No. 26 consisted of 1 baggage car, 1 combination mail and baggage car, 1 express car, 1 coach, 1 chair car, 3 Pullman sleeping cars, and 1 dining car, in the order named, all of steel construction, hauled by engine 6615, of the 4-6-2 type, and was in charge of Conductor Bringle and Engineman Letbetter. This train passed Knobel, the last open office, 12.31 miles south of Moark, at 7:01 a.m., according to the train sheet, 45 minutes late, and struck a gasoline tank truck on the crossing at Moark while traveling at a speed estimated to have been about 60 miles per hour.

The Chevrolet truck involved, a 6-cylinder truck equipped with a cab, was owned and operated by E. E. Nelson, agent for the Sinclair Oil Company. There were three containers mounted on the truck, with capacities of 155, 110, and 105 gallons, or a total capacity of 370 gallons, but it was not known how much gasoline they contained. The truck was en route to a temporary filling station located on Front Street, east of the track and almost opposite the depot at Moark. It moved east on the highway and approached the crossing at a speed estimated to have been between 10 and 15 miles per hour, but did not stop, and on reaching the main track it was struck by train No. 26.

The tank truck was thrown north of the crossing and east of the passing track and stopped near the south end of the cut of three cars that stood on the passing track, the truck was practically demolished and the containers were torn from the body, blazing gasoline being sprayed over the engine of train No. 26, as well as over the three cars north of the crossing. No part of the train was derailed and it was stopped with the front end of the engine 3,890 feet beyond the crossing. The employee killed was the fireman, whose body was found on the right of way opposite the depot, while the injured employee was the engineman.

Summary of evidence

Engineman Letbetter stated that he looked at his watch before reaching the south switch of the passing track at Moark, at which time he was sounding a road crossing whistle signal; there are several crossings in the vicinity and he

continued to sound the whistle. He was unaware of the approach of the tank truck on the highway from the fireman's side of the engine, but suddenly he got a glimpse of it when it appeared directly in front of his engine, the accident occurring before he had time to apply the air brakes, an explosion occurred and the engineman was thrown off his seat box to the left. He covered his face with one hand and saw nothing of the fireman, the engine was still working steam with the throttle wide open, and he reached for and located the brake valve with his left hand, applied the air brakes in emergency, and then closed the throttle and the firing valve. The fireman had been sitting on the seat box on the left side of the cab when approaching the crossing, but the engineman did not know anything about the circumstances under which the fireman left the engine, as he was busy trying to dodge the flames and take care of himself. Engineman Letbetter further stated that he sounded the proper whistle signal for this particular crossing and that the engine was equipped with an automatic bell ringer, which was turned on, although he could not say positively whether the bell was ringing.

Conductor Bringle estimated the speed to have been about 60 miles per hour; the first he knew of anything wrong was on seeing the flames leaping up on both sides of the fifth car in which he was riding, and realizing that something unusual had happened he immediately reached for the emergency cord and pulled it two or three times, but the air brakes had already been applied. The proper crossing signals and the station signal had been sounded on the engine whistle.

Brakeman Davis, who was riding on the rear car, had been out on the rear platform looking over the train, and said the proper whistle signals were sounded, he had started back inside when the accident happened, at which time he estimated the speed to have been about 60 miles per hour. Both the conductor and the brakeman thought the whistle was still blowing when the engine reached the crossing. Train Porter Lee heard the whistling and also heard the bell ringing.

Ollie and Frank Householder, brothers, employed by a highway contractor, were eye-witnesses of the accident; they were preparing to unload cement from the middle car of the cut of three cars that stood on the passing track north of the crossing and on hearing the whistle of the approaching train they went to the open west door of the car to watch the train go by. When Ollie Householder first saw the tank truck approaching eastward on the highway it was about 400 or 500 feet west of the crossing, traveling about 10 or 15 miles per hour, the driver apparently not making any special effort to hurry across in front of the train, and he thought the truck would stop to let the train go by. It continued

to the crossing at about the same steady speed, however, directly in front of the train, no stop being made, it appeared as though the driver had not seen the train and had not made any effort to stop. Frank Householder gave similar testimony, he also stated that he did not notice whether the cab windows of the truck were open, and he thought the driver was looking straight ahead. As a result of the accident both of these witnesses were sprayed with gasoline and burned.

Other witnesses testified that the proper whistle signals were sounded but that the wind was blowing toward the approaching train; that the truck was proceeding at a moderate rate of speed, with the cab doors closed, and that it was not known whether the windows were open or shut. No loud noise was heard coming from the exhaust of the truck, such as would be made with an open muffler cut-out, and apparently no endeavor was being made by the driver to beat the train over the crossing, in fact, it was thought that he would stop before reaching the crossing but no such stop was made. The driver was seen to be looking straight ahead and it was thought that he probably did not see the approaching train. Some of the witnesses were personally acquainted with the driver of the truck, having known him for periods ranging from 1 to 7 or 8 years; he was about 30 years of age, of good repute, sober, attentive to business, and was considered to have been a very careful driver; he was thoroughly familiar with conditions at the crossing and had passed over it in each direction several times a day for about 3 weeks.

District Manager Edmonds, of the Sinclair Oil Co., was personally interviewed by the Commission's inspectors at Little Rock, Ark. He stated that the qualifications of drivers were thoroughly investigated before they were employed, but no mental or physical examination was required, nor demand made for a chauffeur's license. In the event of employees working on a commission basis, such as was the case in this instance, no limit was placed on the number of hours of service, Mr. Edmonds explaining that the longer such a driver worked the more product he would sell; no effort was made to ascertain whether a driver had proper rest before going on duty. Safety bulletins were issued from time to time, but the company has no rule requiring drivers to stop before proceeding over railroad crossings at grade, nor is any regular check made of the way drivers operate trucks other than to observe their actions casually when it happened that a driver was being accompanied. He was not familiar with any State law requiring the operator of any motor truck carrying explosives or inflammable liquids to bring his truck to a stop at highway grade crossings and did not know whether drivers actually did stop, but thought that drivers should be aware of such laws and it was left to the drivers to take care of themselves. On learning of the accident, Mr. Edmonds proceeded to the scene but was unable to ascertain its cause.

Examination of the remains of the truck disclosed that the ledges which carry the glass windows as they slide up and down in the cab doors were up, indicating that the windows were closed when the accident occurred. The rules and regulations of the State Highway Commission of Arkansas provide in part as follows:

The operator of any motor truck carrying explosive substances or explosives or inflammable liquids as a cargo, or part of a cargo, when upon a highway shall, before crossing at grade the track or tracks of any steam or interurban railway, bring his vehicle, bus or truck to a full and complete stop, within not less than 10 feet and not more than 50 feet from the nearest rail of the track nearest to the front of such vehicle, and after such stop and while so stopped shall both look and listen in both directions along such track or tracks for approaching trains.

Conclusions

This accident was caused by a gasoline tank truck being driven upon a railroad crossing at grade directly in front of an approaching passenger train.

According to the evidence, the driver of the truck was proceeding along the highway at a moderate rate of speed, about 10 to 15 miles per hour, apparently making no attempt to beat the train over the crossing, and it was thought by witnesses that he would stop and let the train pass; however, instead of stopping and definitely ascertaining that the way was clear, the driver continued upon the crossing directly in front of the approaching train. The driver was familiar with the crossing and had an unobstructed view of the approaching train; he was seen to be looking straight ahead, however, and with the windows in the cab of the truck apparently closed and the wind blowing toward the approaching train, it is probable he did not hear the whistle signals which the evidence clearly indicated were being sounded. This is the second investigation of this character in the State of Arkansas in less than a year; the situation as developed in this case is similar to that found to exist in connection with the accident on the St. Louis-San Francisco Railway at Lowell, Ark., on June 2, 1932. In that case a tank truck loaded with gasoline approached a crossing without stopping, in violation of the highway regulations and in disregard of a sign reading "STOP ARKANSAS LAW", and was driven on the crossing in front of an approaching passenger train, with the result that the engineman, fireman and driver of the truck were sprayed with blazing gasoline, receiving burns which resulted in the death of all three men. The driver had been employed by the district manager of the South-

land Oil Company about six weeks previously, and the investigation developed that instructions were not given to drivers as to what to do when approaching and before crossing railroad tracks, it being assumed that the driver would know what to do; observations were made, however, as to the manner in which drivers handled their trucks, including a check to see if they stopped at crossings. Another representative of that oil company said that no record was kept of discipline or hours of service nor were the drivers instructed on the state laws or on safety in general. It further appeared, however, that a driver was required to have a chauffeur's license and that the driver involved was in possession of such a license. In the case of the accident now under investigation, the driver owned the truck and was an agent for the Sinclair Oil Company. It was stated by the district manager of the oil company that safety bulletins are issued from time to time for the guidance of employees but that they have no rules requiring a driver to stop before passing over a railroad crossing; in fact, the manager said he was not acquainted with any state law requiring trucks loaded with inflammable liquids to stop before passing over a railroad crossing at grade nor was any effort made to know whether drivers actually made such stops or whether they were familiar with the state law in that respect, it being left to the drivers to take care of themselves. It further appeared in the present case that no restrictions are placed on the hours of service of drivers and that no effort is made to see whether they have the proper rest before going on duty, nor is any demand made by this company that the driver show a chauffeur's license.

This bureau has issued reports concerning a considerable number of investigations of accidents wherein trucks carrying inflammable liquids or explosives have been struck by trains, usually with disastrous results. The nature of such accidents, with the attendant suffering of those sprayed with blazing gasoline, as in the present case, would seem to warrant the assumption that those engaged in this form of motor transportation would as a matter of course take reasonable precautions to prevent the occurrence of such accidents, such as ascertaining whether drivers are competent, whether they are physically and mentally fit for duty and are acquainted with and observe the state laws or regulations governing the transportation of inflammables, and instructing them concerning these requirements. However, our investigations of various accidents of this character have developed instances of excessive hours on duty, defective brakes, and violation of or ignorance of state laws and regulations as well as of the ordinary rules of safe driving which should be observed by everyone when approaching a railroad crossing at grade. It is high time that these matters receive such attention as will eliminate the occurrence of accidents of this character, and if it is not accomplished by those directly engaged in

transporting dangerous articles over the highways, then it must be accomplished by appropriate legislation or regulation and by the rigid enforcement of such requirements by those in authority.

Respectfully submitted,

W. P. BORLAND,

Director.