

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING
AN ACCIDENT WHICH OCCURRED ON THE ST. LOUIS-SAN FRANCISCO
RAILWAY AT LOWELL, ARK., ON JUNE 2, 1932.

July 18, 1932.

To the Commission:

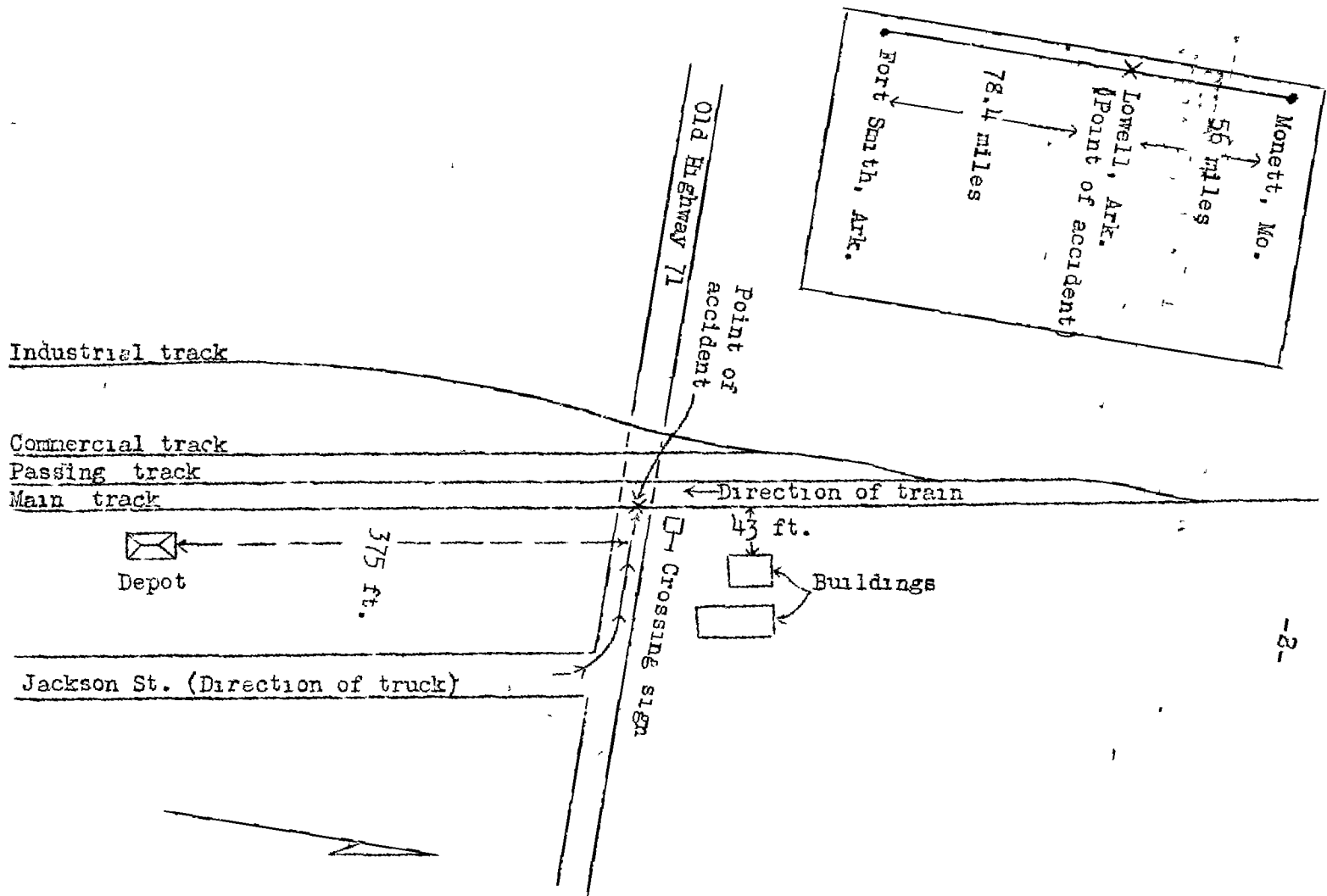
On June 2, 1932, there was a collision between a passenger train and an automobile tank truck at a grade crossing on the St. Louis-San Francisco Railway at Lowell, Ark., which resulted in the death of two employees and the driver of the truck.

Location and method of operation

This accident occurred on the Fort Smith Sub-Division of the Central Division, extending between Monett, Mo., and Fort Smith, Ark., a distance of 134.4 miles, in the vicinity of the point of accident this 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 375 feet north of the depot at Lowell, where a public highway known as Old Highway 71, or North Road, crosses the main track, and, from east to west, the passing-track, a commercial track and an industrial track. The track is tangent for about one-half mile in each direction from the crossing, while the grade for southbound trains is 0.25 per cent ascending at the crossing.

The highway extends practically east and west and crosses the tracks nearly at a right angle; the highway is composed of dirt and gravel. It is tangent for a considerable distance in each direction from the crossing, the approach to the crossing being practically level. Jackson Street parallels the railroad tracks on the east and connects with the highway at a point about 125 feet east of the tracks. There are two buildings on the north side of the highway between Jackson Street and the tracks, these buildings are separated by a distance of 14 feet, the one nearest to the tracks being located about 43 feet therefrom. The only protection afforded at the crossing consists of signs on either side of the tracks, the one on the east side of the track and north of the highway being of the flat type, painted white with block lettering and reading "STOP ARKANSAS LAW".

From the driver's seat of a truck a view of an approaching southbound train can be had for a distance of 1,219 feet on reaching a point on the highway 50 feet east of the main track.



Inv. No. 1765
 St. Louis - San Francisco Ry.
 Lomell, Ark.
 June 2, 1932.

The weather was clear at the time of the accident, which occurred about 6.45 a.m.

Description

The Ford Model "A" tank truck involved, $2\frac{1}{2}$ tons, owned by the Southland Oil Co., of Tulsa, Okla., had three containers, loaded with 569 gallons of gasoline and 30 gallons of oil, and was being operated by Cecil Allen, en route from Lowell to Harrison, Ark. The truck proceeded north on Jackson Street and turned west into the highway, but did not make a stop for the crossing, as required, and on reaching the main track it was struck by train No. 709.

Southbound passenger train No. 709 consisted of one baggage car, one combination mail-baggage car, one coach, one club car and one Pullman sleeping car, in the order named, all of steel construction, hauled by engine 1047, and was in charge of Conductor Singleton and Engineman Moore. This train left Rogers, the last open office, 5.3 miles north of Lowell, at 6.35 a.m., according to the train sheet, 13 minutes late, and struck the tank truck on the crossing at Lowell while traveling at a speed estimated to have been between 40 and 48 miles per hour.

The tank truck was thrown upon the passing track, practically demolished, headed south and upright, about 20 feet south of the crossing; the two rear containers were torn loose from the truck and stopped between the commercial track and the industrial track, at a point about 75 feet south of the highway. Gasoline was thrown over the engine, cars, truck and a large area of ground and immediately caught fire. No part of the train was derailed and it continued south of the crossing, being stopped with the front end of the engine 1,264 feet beyond the crossing. The engineman, fireman and the truck driver were sprayed with the gasoline and died from their burns, the fireman and engineman jumping from the cab at points about 300 and 450 feet south of the crossing, respectively.

Summary of evidence

Lowell is a flag stop for train 709 and on this occasion no stop was to be made. Conductor Singleton, who was riding in the fourth car, heard the station whistle signal sounded, but could not recall definitely whether he heard the road crossing signal sounded. The first intimation he had of anything wrong was when the air brakes were applied in emergency, at which time he estimated the speed of the train at about 48 miles per hour; after the collision occurred the train passed through fire and passed the burning

truck. Immediately after the train stopped he proceeded to the engine, the stack of which was still blazing from the gasoline, climbed into the cab and reduced the fuel feed firing valve to a low feed, he did not observe the position of the reverse lever; the brake valve was in emergency position. The air brakes had been tested and worked properly en route. Brakeman Howard was riding in the rear car, while Train Porter McPherson was riding in the third car; their statements agreed with those of Conductor Singleton. Train Porter McPherson also stated that he heard the usual road crossing whistle sounded and said that when the train stopped following the accident he went to the engine and at that time the automatic engine bell was ringing and continued to ring until he closed the air valve. They estimated the speed of the train to have been between 40 and 45 miles per hour when the brake application was made.

Roadmaster Stoneberger, who was riding on the rear platform of the last car, heard the station and road crossing signals sounded, but did not hear any alarm signals sounded just prior to the accident. He judged that the air brakes were applied in emergency about an engine length or more before the crossing was reached, at which time he estimated the speed to have been about 45 miles per hour.

Station Agent Ellis, who was off duty at the time of the accident, was walking southward between the commercial track and the industrial track as train No. 709 approached. He heard the usual station whistle signal sounded when the train was about 1 mile away, and later the road crossing signal was sounded, followed by an alarm signal just before the collision occurred. At this time the station agent had reached a point about 40 feet south of the crossing and on glancing over his shoulder he saw the blazing train; at first he thought the tender of the oil-burning engine had exploded, but after the train passed him he saw the truck, not having seen it prior to the accident.

Various other witnesses, including a passenger on the train, residents of the town, a retired section foreman, a farmer, and merchants who were in the immediate vicinity of the point of accident at the time of its occurrence, made statements to the effect that the usual station signal was sounded on the engine whistle, also the road crossing signal, and then an alarm signal, immediately following which the collision occurred. The automatic engine bell was heard to be ringing when the train passed a point from 75 to 125 feet north of the crossing and the sound of air brakes being applied was heard immediately prior to the accident. Estimates as to the speed of the train made by these witnesses ranged from 20 to 60 miles per hour and that of the truck as it approached the crossing, from $1\frac{1}{2}$ to 20 miles per hour.

It was estimated that the truck was about 10 or 15 feet from the track when the engine was within 300 feet of the crossing. To some of the witnesses it appeared at first as though the truck was going to make a stop for the crossing, as required, before proceeding across, but no such stop was made, the truck merely slowing down on nearing the crossing and then continuing across. Others said that it appeared as though the truck slowed down but could not stop for the crossing on account of the heavy load carried, while others thought that it was stopped just about the time the collision occurred. Two of the witnesses who estimated the speed of the truck to have been from 15 to 20 miles per hour, said they thought its speed was not reduced until it reached the track, when it appeared as though the driver saw the approaching train for the first time, having previously been looking straight ahead, and that he stopped the truck momentarily and then started ahead again, too late to avert the accident. The truck was equipped with a cab and it was thought that the doors of the cab were shut, but it was not known whether the cab windows were open or closed.

The air brakes on train No. 709 had been tested, and they also worked properly en route. After the accident Engineman Stafford operated train No. 709 from Lowell to Fayetteville, a distance of 14.4 miles, with engine 552, while Engineman Reed operated the train from Fayetteville to Fort Smith, a distance of 64 miles, with engine 1343, and on both of these occasions the air brakes worked properly.

Roy Blackwell stated that he had driven the truck involved within a few days prior to the accident, and knew that it was in good condition, including the brakes, saying that Driver Allen had always kept the brakes in good condition, and the motor seemed to be running properly before starting the trip on which the accident occurred. He said that Allen had driven trucks for several years and was considered a careful driver, and that he had been driving over this particular crossing for several days past, although as a rule he drove across earlier in the morning than on the day of the accident. He said that Allen was 22 years of age, single, of good habits and had been working since April 18, 1932.

District Manager Carver, of the Southland Oil Co., was interviewed by the Commission's inspectors, and stated that Cecil Allen was employed as a truck driver on April 18, 1932, and that on the day prior to the accident had driven to Locust Grove, a distance of about 70 miles, and returned to Lowell. Truck drivers who are properly recommended are considered for employment, and while he did not know the experience of Cecil Allen as a truck driver, he satisfied

himself that he was sufficiently experienced to warrant his being employed. Instructions were not given to truck drivers as to what to do when approaching and before crossing railroad tracks, as he presumed they would know what to do. Mr. Carver said he made observations as to the manner in which drivers handled their trucks, including a check to ascertain whether they stopped at railroads, but he had not made any such check on the driving of Cecil Allen. Periodical inspection was made by him of the trucks under his supervision and the brakes on the truck involved were inspected and tested and found to be in good condition either on the last day of May or the first day of June, since which time no complaint had been received in regard to the brakes; truck drivers have instructions not to drive a truck unless the brakes are in good condition. Mr. Carver considered Cecil Allen to have been one of his most careful drivers, and knew of no instance of his truck drivers working excessive hours. It was further ascertained from R. C. Tuthill, a representative of the oil company, that it was not the practice of the company to require an examination of truck drivers, either physically or mentally, but to rely to some extent on references furnished and on the word of the driver being considered for employment. No record is kept of discipline or hours of service worked by drivers, nor are drivers instructed on State laws or safety, it being deemed sufficient that drivers should be acquainted with such matters, direct supervision of drivers being left to the district manager. In the State of Arkansas drivers are required to have a chauffeur's license and Cecil Allen was in possession of such a license.

Conclusions

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

Under the rules and regulations of the State Highway Commission of Arkansas, it is required that when approaching a highway grade crossing the operator of any motor truck carrying explosives or inflammable liquids as a cargo, or part of a cargo, shall bring his truck to a full and complete stop not less than 10 feet and not more than 50 feet from the nearest rail of the track. Eye witnesses of the accident were in accord that no stop was made by the truck before passing over the crossing.

This accident again calls attention to the need for extra precautions to be taken in connection with the operation of trucks carrying highly inflammable liquids, explosives and other dangerous articles. In this instance, however, the precautions prescribed for all highway traffic

passing over this crossing were not observed. Inasmuch as the driver was killed and the truck demolished, the reason for failure to safeguard the movement of this truck over the crossing could not be definitely ascertained.

The evidence is clear that the engine crew were maintaining a lookout approaching the crossing, that the proper whistle signals were sounded, including an alarm signal, that the automatic bell ringer was operating, and that the air brakes were in proper working order and were applied in emergency immediately prior to the accident.

The railroad employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.