

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ATCHISON, TOPEKA & SANTA FE RAILWAY NEAR ISLETA, N. MEX., ON APRIL 11, 1930.

May 12, 1930.

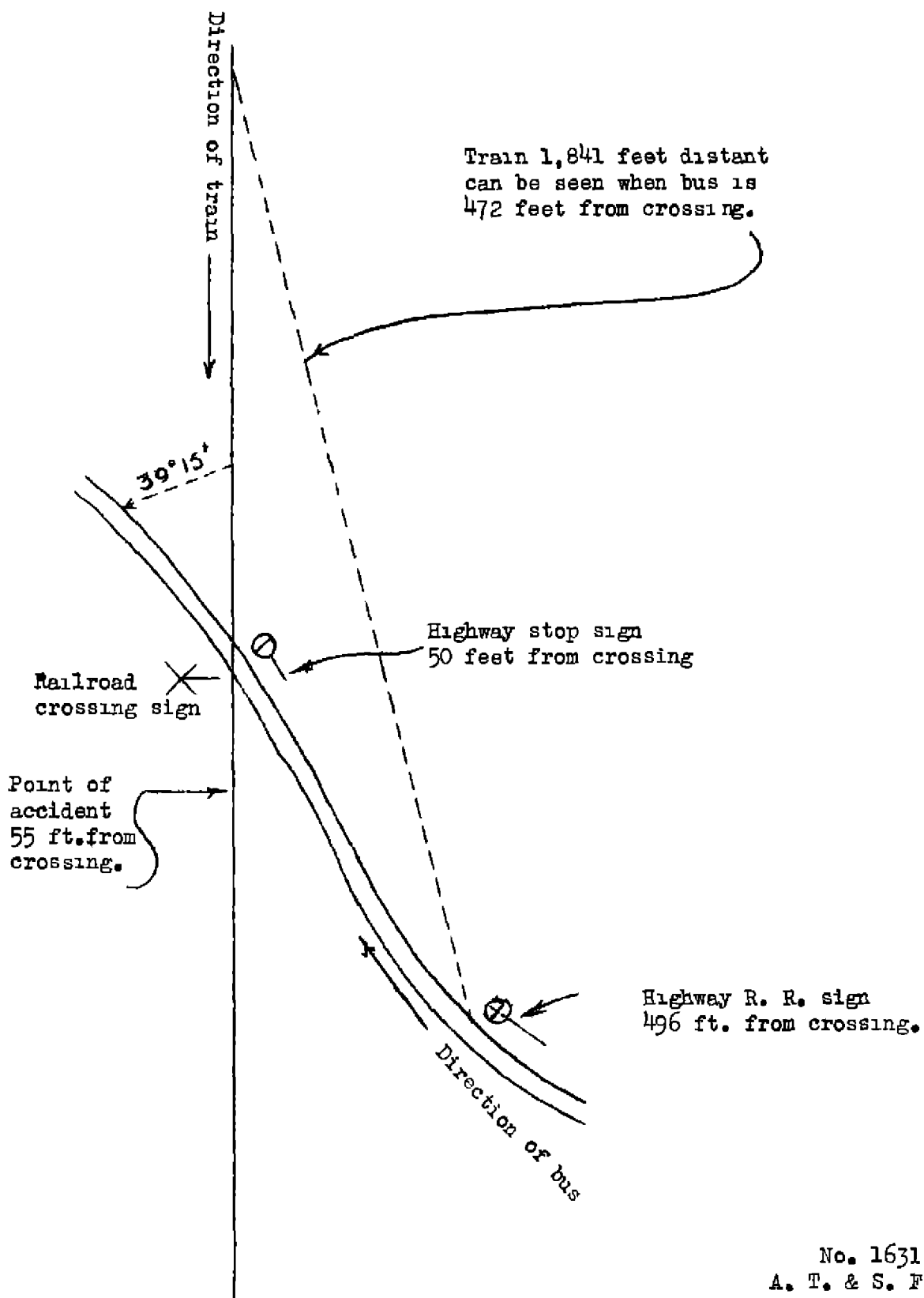
To the Commission:

On April 11, 1930, there was an accident involving an Atchison, Topeka & Santa Fe Railway mail and passenger train, and a motor bus of the Pickwick-Greyhound Lines, at a grade crossing near Isleta, N. Mex., which resulted in the death of the driver of the bus and 21 passengers, and the injury of 7 passengers. This accident was investigated in conjunction with a representative of the State Corporation Commission of New Mexico.

Location and method of operation

This accident occurred on the First District of the Rio Grande Division, which extends between Albuquerque and San Marcial, N. Mex., a distance of 107.2 miles, and in the vicinity of the point of accident 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 is approximately 3,055 feet east of the station of Isleta, where a public highway crosses the track at an angle of $39^{\circ}15'$, approaching this point from the east, the track is tangent for a distance of 9,024.3 feet to the crossing, and for a considerable distance beyond that point, while the grade is level at the crossing. Approaching the crossing from the west on the highway, it is tangent for a distance of approximately 450 feet to a point about 200 feet from the crossing, where there is a slight curve to the left, and it is then tangent to the crossing. Beginning at a point about 100 feet from the crossing, there is an ascending grade averaging 4° for a distance of 50 feet, and from this point the grade averages 2.6 per cent ascending to the crossing. Telegraph poles located along the south side of the track interfere slightly with the range of vision from vehicles approaching from the west on the highway, but from a point 472 feet from the crossing, a train approaching from the east can be seen for a distance of 1,841 feet, and from a point 35 feet from the track a train can be seen for a distance of more than $1\frac{1}{2}$ miles.

At a point 496 feet from the crossing, on the highway, there is a standard state warning sign mounted on a short post, the top of the disc, which is 2 feet



No. 1631
A. T. & S. F. Ry.
Isleta, N. Mex.
April 11, 1930.

in circumference, being 4.6 feet above the surface of the highway; this sign displays the letters "R R", painted black on a yellow background, and can be seen 281 feet. at a point 50 feet from the crossing, there is a state stop sign, mounted so that the top of it is 5.4 feet above the surface of the road. The latter sign can be seen for a distance of 727 feet and the letters "STOP", painted black on a yellow background are discernible for more than 400 feet. There is a railroad crossing sign, of the cross-arm type, on the opposite side of the track from the direction in which the bus approached the crossing; this sign is clearly visible for a distance of 454 feet from vehicles approaching it from the west. A regulation of the State Corporation Commission requires all motor vehicles engaged in carrying passengers to stop not less than 20 nor more than 75 feet from the nearest rail before crossing the tracks of any railroad, and they must not be started until it has been ascertained that there are no trains, etc., approaching the crossing from either direction. Rules of the Pickwick-Greyhound lines provide that the operator of a coach, whether carrying passengers or not, must bring his coach to a stop within not less than 10 nor more than 50 feet from a railroad crossing at grade, and while so stopped he must look in both directions along the track for approaching trains.

The weather was clear at the time of the accident, which occurred about 9.27 a.m.

Description.

Westbound train No. 7 consisted of four mail cars, five express cars, and one coach, hauled by engine 3712, and was in charge of Conductor Irwin and Enginemen Davis. This train departed from Albuquerque, 12.6 miles east of Isleta, at 9.13 a.m., three minutes late, and was approaching Isleta when it collided with the bus while traveling at a speed estimated to have been between 40 and 45 miles per hour.

The Pickwick-Greyhound motor bus had a seating capacity for 25 passengers, it was traveling eastward under a time-table schedule on a route extending from Los Angeles, Calif., to Denver, Colo., and was in charge of Driver Williams. This bus approached the crossing at a low rate of speed and when it reached a point a short distance from the crossing, it was swerved sharply to the

left, apparently in an effort to avoid an accident, leaving the highway and partly crossing the railway track, where it became stalled, and it was standing in this position when it was struck by train No. 7, before any of the occupants had a chance to escape.

The bus was completely demolished, the wreckage being lodged under and on the front end of the engine. Immediately after the accident, the gasoline caught fire and in turn set the wreckage on fire. The train came to a stop with the engine 1,490 feet from the center of the crossing, with only the engine truck derailed. The front end of the engine was slightly damaged.

Summary of evidence

Engineman Davis stated that when his train reached a point about 1 mile from Isleta, he made a brake-pipe reduction of from 6 to 8 pounds preparatory to passing through the interlocking plant at Isleta, this application of the brakes not being released prior to the accident. The engine bell had been ringing continuously after leaving Albuquerque and when the train passed the crossing-whistle board east of the highway, he started sounding the whistle, and was still blowing it when the engine struck the bus, which he thought was about 35 feet east of the crossing. He estimated the speed of the train at the time of the accident at 45 miles per hour. Due to the fact that the bus was approaching the crossing from the opposite side, Engineman Davis did not see it until after the fireman had shouted a warning; he immediately applied the brakes in emergency, looked ahead from the side window, and observed the forward end of the bus across the track and a man in the doorway apparently trying to get off, the collision occurring almost immediately.

Fireman Oldham stated that he was riding on his seatbox approaching the point of accident, and when the train was approximately 600 feet from the crossing he noticed the bus approaching from the left, and from the speed at which it was traveling he felt satisfied at that time that it would stop. When the engine was about 200 feet from the crossing, he realized that the bus was not going to stop and called to the engineman to apply the brakes in emergency. At about the same time the bus turned to the left from the highway, entered upon the track and stopped with its front wheels resting against the right rail, the engine striking it a second or two later. When the crash occurred, there was an explosion, and the ensuing flames entered the cab, causing him to

leave it and get on the tender. The fireman also said that the engine bell was ringing and the whistle was being sounded when he called a warning of danger to the engine-man.

Conductor Irwin stated that he was walking through the passenger car when he felt the brakes apply; this appeared to be a service application, but about four second later he felt an emergency application. He estimated the speed of the train at 50 miles per hour when the brakes were first applied and at 40 miles perhour at the time they were applied in emergency. Realizing that something unusual had occurred, he proceeded to the forward end of the car and at this time the car was then crossing the highway. The brakeman opened the door, looked out, and remarked that he thought the train had struck an automobile. As soon as the train stopped, Conductor Irwin got off the train and looked towards the highway but did not see any object that resembled an automobile, although he noticed some small fires along the track, and upon looking towards the engine he noticed flames leaping into the air in front of the engine; he then hurried forward and found the wreckage burning under the engine. After going to the station and reporting the accident, Conductor Irwin returned to the scene of accident, and on examining the track he found marks at a point about 35 or 40 feet from the center of the crossing, and also observed wheel marks of the bus leading off the highway pavement and on the ballast.

Brakeman Jones stated that when he heard the whistle sounded while the train was approaching Isleta, he went to the front vestibule of the passenger car for the purpose of getting the train orders at the station. As the car passed over the crossing he saw an object in the air, and upon looking down he noticed other objects lying on the ground which seemed to be parts of an automobile. He estimated the speed of the train at 35 or 40 miles per hour when he looked out the door at the crossing. Flagman Reeder, who also was riding in the rear car, said he heard the whistle sounded for the crossing, and he judged the speed of the train to have been 40 or 45 miles per hour at the time the brakes were applied in emergency.

Agent-Operator Long, on duty at Isleta, stated that his attention was first attracted to the approaching train by the sounding of its whistle for the crossing. He did not witness the accident but heard the explosion, and when he saw the fire he ran to the train and assisted in putting it out.

Air-brake Inspector Johnson stated that he made an air-brake test of train No. 7 before it departed from Albuquerque on the date of the accident and found the brakes operating properly on all of the cars.

Assistant Supervisor of Air Brakes Chambers stated that he considered a good stop was made after the brakes were applied in emergency, taking into consideration the number of cars in the train and the type of air-brake equipment in use, seven of the cars having L-3 equipment. In addition, lubricating oil from the motor bus was spilled on the rails, which had a tendency to lessen the braking power of the train.

Ellis Ruff, a passenger on the bus, stated that there did not appear to be anything wrong with the brakes, although there apparently was something wrong with the motor, as it would stop when running idle. He was riding in the second seat from the rear on the left side, but was unable to say whether the bus stopped before it attempted to cross the track, as he was dozing at the time. He said that a woman passenger was occupying the front seat with the driver.

W. R. Perkins, also a bus passenger, stated that the driver of the bus took charge of it at Gallup and he noted that the motor stalled on several occasions in trying to start the vehicle after leaving that point. He was riding on the left side in the second seat from the rear and noticed that the bus approached the crossing at a low rate of speed. He felt a jerk, which he thought was caused by the bus stopping, but was not certain that a stop was made. A short time later he felt two or three hard bumps, and upon looking ahead he noticed that the driver was steering to the left and that the bus was then opposite a cattle guard.

Conrad Heuvers, another bus passenger, stated that he was sitting on the left side of the bus near the rear end, and when it approached the crossing he observed the train approaching, quite a distance from the crossing, but did not hear its whistle sounded. The speed of the bus was reduced near the crossing, but it did not stop, the driver instead turning it to the left to avoid a head-on collision. He also stated that a woman passenger was riding in the seat with the driver.

Homer Stein, another bus passenger, stated that he was sitting in the next to the last seat on the left side of the bus. He saw the approaching train when both the train and bus were some distance from the crossing, and at that time the speed of the bus was 25 or 30 miles per hour. The bus reduced speed about 20 or 30 feet from the crossing and the driver looked to the left but did not look to the right until the bus was almost to the crossing and then he swerved the car to the left and came to a stop with the front wheels between the rails, the collision occurring a few seconds later. Mr. Stein watched the train continuously from the time it first came into view, but did not see steam escaping from the engine whistle, neither did he hear the sound of the whistle. He did not know whether the bell was ringing, as the bus was closed and he could not have heard it.

Marcelina Zunz, who resides near the scene of the accident, stated that he was standing at the crossing and observed the bus approaching but did not see the train until his attention was attracted to it by the sound of its whistle, as he had been facing in the opposite direction. He thought the bus was drifting while it was approaching the crossing, and then it suddenly turned to the left and stopped on the track about 15 or 20 feet from the crossing; the motor then was stalled while the bus was trying to pass over the track, and he saw the driver try to open the door, and then attempt to jump through the window.

Conclusions

This accident was caused by a motor bus being driven on the track directly in front of an approaching train, for which Driver Williams is responsible.

The investigation developed that the bus approached the crossing at slow speed, was turned sharply to the left just before reaching the crossing, and stopped with its forward end across the track, at a point 55 feet east of the center line of the crossing, where it was struck by the train a few seconds afterwards. There is a railroad warning sign located 496 feet from the crossing which gives advance notice of the approach to a crossing and there is another sign near the crossing which directs traffic to stop, which is also a requirement of the State Corporation Commission in connection with the operation of common-carrier motor vehicles, as well as being a requirement of the Pickwick-Greyhound Lines. Under these

circumstances, in daylight, and with the sun shining, and in view of the fact that the driver of the bus, when 472 feet from the crossing, could have seen a train more than 1,800 feet distant, there would appear to be no excuse for his action in failing to prevent an accident. One of the passengers on the bus said the driver looked to the left while approaching the crossing, but did not look to the right until the bus had nearly reached the crossing, and the fact that it was not until then that the driver finally realized a train was approaching from the right, is evident from his action at the last moment in turning the bus off the roadway.

The bus involved in this accident had been operated from Albuquerque to Gallup on the day prior to the accident, and the driver who operated it on that run stated that it was in good condition, with brakes and motor operating satisfactorily, while the general manager of the Pickwick-Greyhound Lines, in a letter to the Commission's inspectors under date of April 15, stated that the bus received a regular inspection and greasing in the shops at Gallup. Driver Williams had arrived in Gallup at 4.10 p.m., April 10, and departed from Gallup on the trip on which this accident occurred at 4.30 on the morning of the accident; he was considered an experienced man, and had been operating a bus in this particular territory for a period of several months.

There are two features in connection with this accident, concerning which no definite information is available, first, there was some evidence that there was a woman riding on the seat with the driver and that he had been talking with her en route, and, second, there was also some evidence to the effect that the motor had stalled on several occasions when the driver was trying to start the bus. To what extent either or both of these conditions may have been responsible for diverting the driver's attention, is something which is only a matter of conjecture. It is possible that neither of them had any influence on him, but if that were the case, then it is difficult to account for his apparent failure to notice the approaching train until the bus was too close to the crossing to be brought to a stop in safety.

The question of the occurrence of accidents at highway grade crossings is one which warrants the most serious attention, as is evidenced by an annual toll, approximately, of 2,000 killed and 6,000 injured. Accidents

involving busses have furnished a very small percentage of these casualties, but when they do occur, the results, as in this case, are apt to be so serious as to justify the taking of every possible precaution to avoid repetition. In the present case, there is no definite proof that the bus or its driver were not in proper condition for the safe transportation of the passengers. Nevertheless, the occurrence of this accident calls for an ever-increasing vigilance on the part of supervising officials of bus companies to see that even more care and attention are given to the maintenance of equipment, to see that employees have ample opportunity for rest and are fit to resume duty, and to make sure that the highest possible spirit of discipline and training is maintained among their employees. It is only by continually emphasizing these factors that the occurrence of accidents of this character, or other accidents at various points en route, can be prevented, or at least reduced to a minimum.

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.