

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RELATION
TO INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NEW
YORK CENTRAL RAILROAD AT BEREA, OHIO, ON JANUARY 22,
1930

February 14, 1930.

To the Commission

On January 22, 1930, there was a collision between a New York Central Railroad coal and passenger train and a school bus, at Sheldon Road grade crossing, Berea, Ohio, which resulted in the death of the driver of the bus and 9 school children and the injury of one child. This accident was investigated jointly with the Public Utilities Commission of Ohio.

Location and method of operation

The crossing where this accident occurred is in the Cleveland Terminal District of the New York Central Railroad; it is located approximately 12 miles west of Cleveland Union Station, and about half a mile east of the station at Berea. At this point the railroad is a four-track line, in addition, there are two passing tracks south of the four main tracks, the total distance across the 6 tracks being approximately 90 feet. The two tracks furthest to the north are track No. 3, the low speed westward track, and track No. 1, the high speed westward track. The tracks are tangent for a distance of several miles eastward and about half a mile westward from the crossing, the grade is practically level and the ground on each side of the right-of-way near the crossing is flat and approximately level with the tracks.

Sheldon Road crosses the New York Central tracks at an angle of about 60°. It is surfaced with gravel and maintained in good condition, it is tangent and practically level with the crossing for a considerable distance on both sides of the track. Approaching the crossing on Sheldon Road from the south there is an approach sign located 250 feet from the crossing and a crossing sign located at the intersection of the highway and the railroad right-of-way. The view of the railroad from the south is partially obscured by a rub and a ridge extending from a point about 1300 feet from the crossing to a point about 240 feet from the crossing, from the latter point to the crossing the view is unobstructed and a train approaching from the east can be seen for a distance of approximately 3 miles. The

view toward the west is not quite so open but for a distance of approximately 200 feet there is a clear view of the tracks toward the west for a distance of about 3100 feet.

The accident occurred at about 8.35 a. m. It was a clear, cold day, the sun was shining, the ground was covered with a little fresh snow, and a light wind was blowing from the north.

Description

On the morning of the accident train No. 7 consisting of one locomotive and 10 cars, departed from Cleveland at 8.02 a. m. on track No. 1, and train X19 departed on the same track at 8.11 a. m. Train X19 consisted of 3 mail cars, one express car, and two coaches, hauled by locomotive 3340, with Conductor Curtzweiler and Engineman Hand in charge. Train No. 7 was diverted to track No. 3 at WS tower, 4.2 miles east of Berea, for the purpose of allowing train X19 to pass, it proceeded from WS to Berea at reduced speed and according to the train sheet it passed WS at 8.30 a. m. and came to a stop at Berea at 8.36 a. m. Train X19 passed WS at 8.32 a. m., about 18 minutes late, and was running at a speed of 50 or 55 miles per hour and approximately a quarter of a mile behind train No. 7 when it struck the school bus at Sheldon Road crossing.

The school bus was a model T Ford, in charge of John Taylor, who was employed as bus driver by the school board of the Berea school district, and there were 10 children in it at the time of the accident. The bus had a seating capacity of 40, including the driver, and was being used to transport children from their homes to Brook Park school, it was proceeding in a northwesterly direction on Sheldon Road and was brought to a stop while train No. 7 passed and then proceeded upon the tracks and was struck by the engine of train X19. The bus was entirely demolished and the engine of train X19 was slightly damaged.

Summary of evidence

Neither the engineman nor the fireman of train X19 saw the bus before the accident occurred. The engineman being on the right hand side, his view of the highway toward the south was cut off by the locomotive; the fireman was working on the fire and did not look out toward the south when approaching this crossing. The engineman stated that he had been following train No. 7 closely enough to receive the caution indications of automatic block signals until train No. 7 was diverted to track No. 3 at WS, and he then estimated that he was about $1\frac{1}{4}$ miles behind train No. 7. He said his view of the train ahead was not

obscured by smoke or steam. When train No. 7 was diverted to track No. 3, giving him a clear track on No. 1, he began working steam for the purpose of making up time and was running at a speed of 50 or 55 miles an hour and had gained on the preceding train so that at the time of the accident they were only about a quarter of a mile apart. He stated that the bell was ringing continuously and he sounded the whistle for the crossing as he was approaching it, the last blast of this whistle signal being drawn out until he was about 75 feet east of the crossing. The first knowledge he had of the accident was when the crash occurred; the firemen told him he thought the locomotive had thrown a tire, he made a service application of the brakes and brought his train to a stop with the locomotive about opposite the rear end of train No. 7, which had also come to a stop at that time. He did not know they had struck a bus until after he had brought his train to a stop and began to examine his engine and found school books on the pilot.

There were no eye witnesses of the accident on the track or highway in the immediate vicinity of the crossing. The section foreman and a section laborer were working on the track about 1000 feet west of Sheldon Road. They saw the bus approaching the crossing at a speed of about 10 miles per hour and also saw train X19 approximately half a mile distant, they said the bus appeared to be moving slowly and as they thought it was going to stop they paid no further attention to either the bus or the train. They did not remember hearing the engine whistle as it approached the crossing, but the bell was ringing as the train passed there. The mother of three of the children in the bus, who lived some distance south of the railroad, stated that the bus stopped at her home at about 8.30 a. m. and after it left she watched it until it reached the crossing, there it stopped^{and} waited for the passenger train to pass and then it started up again and ran in front of and was struck by the second passenger train. She said the second train was running at high speed; she did not hear the bell ringing but did hear the whistle signals. Two school students were walking on Sheldon Road some distance northwest of the crossing. They saw the bus as it approached the crossing and stopped to allow the first train to pass. They did not see the bus start up again and could not tell how far beyond the crossing the first train was when the bus started over the crossing.

Superintendent Yawberg of the Borca school district stated that he arrived at the scene of the accident about 15 minutes after it occurred. At that time the passenger train standing west of the crossing was almost completely obscured by smoke and steam. Later, from a point on the south side of the railroad tracks he observed a west-bound train approach and pass and stated that the view of

the train was almost entirely obscured for a time by smoke, steam and flying snow. He thought it likely that driver Taylor when he approached the crossing saw the first passenger train, stopped until it passed and then started across without seeing the second train coming from the east. He thought that driver Taylor could have seen the second train from the east but it was likely he was then looking in the opposite direction, as Mr. Taylor had spoken to him some time before regarding an abandoned passenger train which often passed at about that time. He stated that Mr. Taylor had been employed by the school board as a bus driver for a period of four years or more, and that he was a man of excellent habits and a good, careful driver.

Mrs. Taylor, wife of the deceased driver, stated that the bus was in good condition and all the windows in the front and sides were in good condition. She stated that in cold weather snows had to be scraped and she had to stop at the morning if the school bus. Mr. Taylor had been driving the school bus for four or five years. It was his practice on school days to leave home at 7.30 in the morning, returning at 9.00, leave home again at 3.30 and return at 5.00. There were no regulations regarding 32 children in the bus, and he made two trips each morning, on some mornings on the first trip no children were stopping, on the second trip, however, it was never recalled and the accident occurred on the second trip. She stated Mr. Taylor's habits were good, he never drank and always went to bed at about 9.00 o'clock each night and got up at about 5.00 o'clock in the morning. On the evening before the day of the accident he returned at home, went to bed at about 9.00 o'clock and was asleep before 9.15. The investigating physician stated that Mr. Taylor was about 38 years of age, that he was of average height and hearing, and no physical defects.

Observations were subsequent to the accident under similar conditions of wind, weather, temperature and snow-covered ground, disclosed that it was necessary to wait for a period of from 10 to 30 seconds after the passing of a passenger train before the smoke, steam and snow cleared from the air sufficiently to determine whether another train was approaching and whether it was safe to proceed over the crossing.

Conclusions

This accident was caused by the school bus, after waiting for one train to pass, being driven across the crossing directly in the path of a second train which was approaching the crossing at high speed.

This crossing was not protected by watchman or by devices to indicate the approach of trains. The evidence in this investigation disclosed that the driver brought his bus to a stop and waited for the passage of one train. The two trains were estimated to have been approximately a quarter of a mile apart as they approached the point of accident, based upon this estimate, the second train reached the crossing approximately 20 seconds after the first train cleared it. The bus traveled a distance of at least 75 feet from the point where it stopped for the first train to the point where it was struck by the second train. It thus appears that the bus must have started forward at about the time the rear end of the first train cleared the crossing, and it is believed that at that time the air was so filled with smoke, steam and snow, stirred up and following behind the first train that it was impossible for the bus driver to see the second approaching train. The requirements of safety cannot be fulfilled merely by bringing an automobile to a stop at a grade crossing, it must be definitely known that there is no closely approaching train before it is safe to proceed. Because of his failure to observe this fundamental safety requirement, the direct responsibility for this accident must rest upon driver Taylor of the school bus.

For a period of 30 days prior to the date of this accident the average daily train movement over the tracks at this point was approximately 60 westward trains and 70 eastward trains. Normally highway traffic on Sheldon Road is light. However, at the time of the accident some traffic was rerouted from other highways where construction and repair work was in progress, and at times the volume of traffic is considerably increased on account of the close proximity of the Cleveland airport. Any highway grade crossings of this character over a multiple track railroad on which frequent and high speed trains are operated is a point of danger which requires the exercise of extreme caution on the part of the automobile drivers, and a peculiar responsibility for rigidly regarding all safety requirements and precautions rests upon the driver of a bus carrying children entrusted to his care.

Approach and crossing signs such as were installed at this point are merely markers indicating the existence and location of a grade crossing, such signs do not warn drivers or motorists of approaching trains, but caution them to "stop, look and listen" to ascertain whether or not a train is approaching. Such signs and markers alone do not adequately safeguard traffic over such a crossing. The range of vision may be so obscured by storm, smoke or fog, or obstructed by cars on the railroad tracks or other

vehicles on the highway, that a slowly moving vehicle may not have time to clear the crossing before the arrival of the crossing of a high-speed train which was not in view when the vehicle started across. At a crossing of this character there should be installed signal devices to give warning to persons on the highway of the approach of trains, and at such a crossing over a busy, multiple-track railroad careful consideration should also be given to the desirability of installing some device which would give a distinctive indication when two trains were approaching the crossing at the same time or only a short time interval apart.

Sheldon Road is a cross-road connection between two main heavily travelled highways. The road with which it connects on the north crosses the railroad tracks at Berea, this crossing being protected by crossing gates, the road with which it connects on the south crosses the tracks a short distance east of Sheldon Road crossing, this crossing, however, being unprotected. Normally the school bus route was over this latter road but the route had been changed in account of construction work in progress at this time, and obviously there was fully as much need for protection at this crossing as at Sheldon Road Crossing. When the construction work on this highway is completed it may be feasible to divert traffic from Sheldon Road and close that crossing, it would then be necessary to protect only one crossing, to materially increase the safety of highway travel across the railroad in this vicinity. In any event, in order to prevent recurrence of such disastrous accidents, crossings of public highways over such a heavily travelled multiple-track railroad should be protected by gates or signal devices.

Since the occurrence of this accident the buses of the Berea school district have been rerouted and the passage of school buses over the unprotected crossing, not protected by devices indicating the approach of trains has been reduced to the extent of twenty-two daily.

Respectfully submitted,

W. P. FOPPLID,

Director