INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3723

THE CHESAPEAKE AND OHIO RAILWAY COMPANY

IN RE ACCIDENT

NEAR MICHIGAN CITY, IND., ON

NOVEMBER 27, 1956

SUMMARY

Date:	November 27, 1956	
Railroad:	Chesapeake and Ohio	
Location:	Michigan City, Ind.	
Kind of accident:	Collision	
Equipment involved:	Freight train	: Motor-truck
Train number:	Extra 5703 West	
Locomotive number:	Diesel-electric units 5703 and 5905	
Consist:	65 cars, caboose	
Estimated speeds:	30 - 35 m. p. h.	: 50 m. p. h.
Operation:	Signal indications	
Track:	Single; tangent; 0.21 percent ascending grade westward	
Highway:	Tangent; crosses track at angle of 39°23'; 1.06 percent ascending grade eastward	
Weather:	Clear	
Time:	4:20 p. m.	
Casualties:	3 killed; 2 injured	
Cause:	Failure to stop motor-truck short of train moving over rail-highway grade crossing	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3723

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910

THE CHESAPEAKE AND OHIO RAILWAY COMPANY

January 18, 1957

Accident near Michigan City, Ind., on November 27, 1956, caused by failure to stop a motor-truck short of a train moving over a rail-highway grade crossing.

REPORT OF THE COMMISSION[1]

TUGGLE, Commissioner:

On November 27, 1956, there was a collision between a freight train on the Chesapeake and Ohio Railway and a motor-truck at a rail-highway grade crossing near Michigan City, Ind., which resulted in the death of the driver of the motor-truck and two train-service employees, and the injury of two train-service employees.

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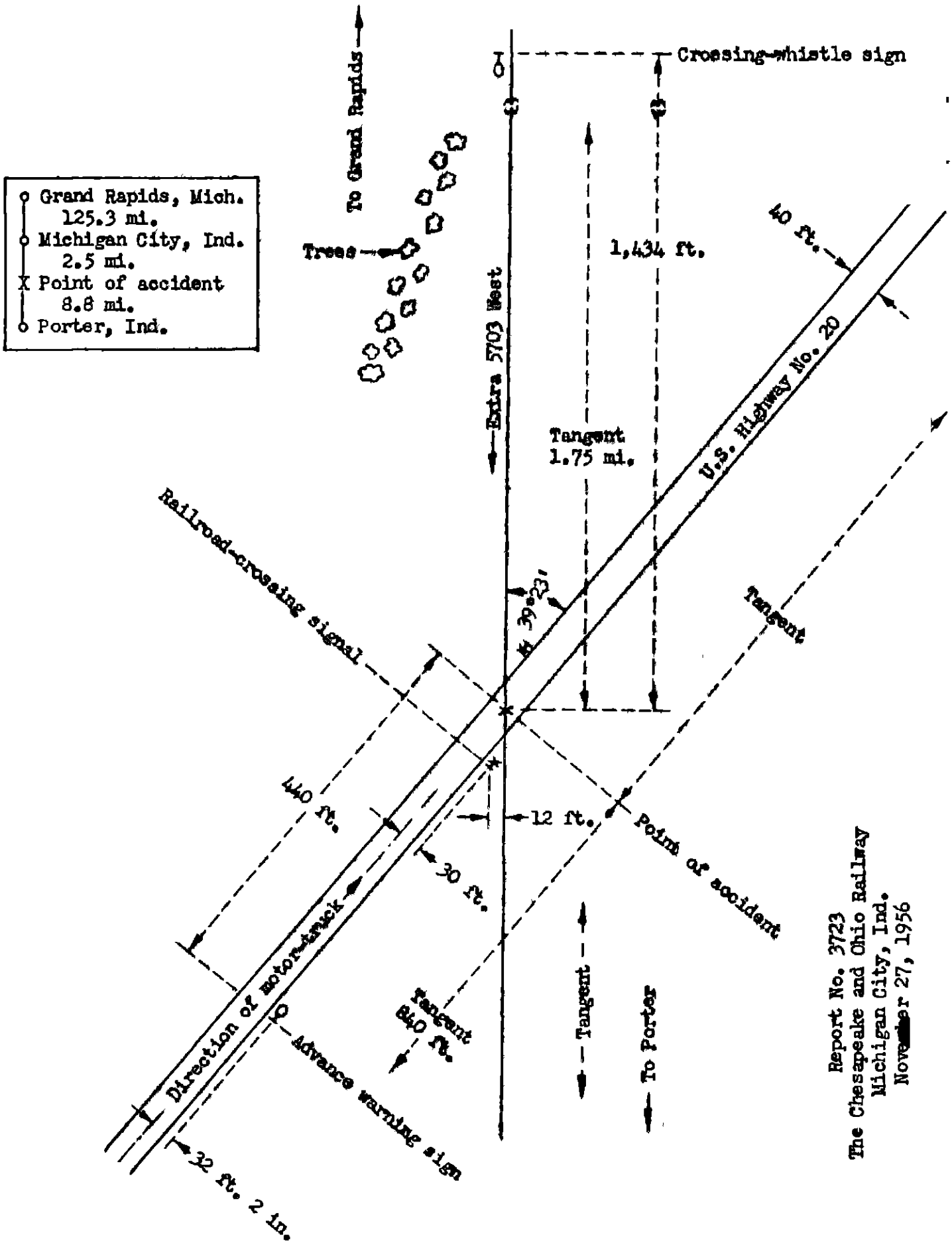
1. Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Tuggle for consideration and disposition.



Report No. 3723
The Chesapeake and Ohio Railway
Michigan City, Ind.
November 27, 1956

Location of Accident and Method of Operation

This accident occurred on that part of the Grand Rapids Division extending between Grand Rapids, Mich., and Porter, Ind., 136.6 miles, a single-track line, over which trains are operated by signal indications. The accident occurred on the main track at a point 127.8 miles west of Grand Rapids and 2.5 miles west of Michigan City, Ind., where the railroad is crossed at grade by U. S. Highway No. 20. In the vicinity of the point of accident the railroad extends from northeast to southwest and the highway extends from east to west. A west-bound train by timetable direction moves toward the southwest by compass direction. The track is tangent throughout a distance of 1.75 miles immediately east of the point of accident and a considerable distance westward. The grade is 0.21 percent ascending westward at the point of accident.

U. S. Highway No. 20 is surfaced with concrete to a width of 40 feet. It intersects the railroad at an angle of 39°23'. Two prefabricated gum-wood slabs 25-1/4 inches in width are laid between the rails, and one slab 17 inches in width is laid on the outside of each rail throughout the width of the crossing. The highway is tangent throughout a distance of 840 feet immediately west of the crossing and a considerable distance eastward. The grade for east-bound vehicles is 1.06 percent ascending throughout a distance of 800 feet immediately west of the crossing.

A circular railroad-crossing advance warning sign is located 31 feet 2 inches south of the center-line of the highway and 440 feet west of the crossing. This sign is 30 inches in diameter and is mounted on a mast 5 feet above the level of the highway. It bears two diagonal lines intersecting at right angles and the letters "RR" in black on a yellow background. The letters and the lines are equipped with reflector buttons. At the time the accident occurred a railroad-crossing signal of the flashing-light type was located 30 feet south of the center-line of the highway and 12 feet north of the center-line of the track. This signal consisted of a standard cross buck mounted on a mast 11 feet 11-1/2 inches above the level of the highway. It bore the words "RAILROAD CROSSING" in black letters on a white background. Two hooded red lamps were mounted back-to-back at each end of a horizontal bar which was attached to the mast at a point approximately 8 feet 6 inches above the level of the highway. A sign which bore the word "DANGER" in red letters on a white background was mounted on the mast directly above the lamps, and a sign which bore the words "STOP

ON RED SIGNAL" in white reflectorized letters on a black background was mounted on the mast below the lamps. A similar signal is located in the southeast angle of the intersection. The warning aspect is displayed by the alternate illumination of the lamps when a west-bound train occupies any portion of the track throughout a distance of 2,820 feet immediately east of the crossing. A crossing-whistle sign for west-bound trains is located 1,434 feet east of the crossing.

This carrier's operating rules read in part as follows:

14. Engine Whistle or Horn Signals

Note--The signals prescribed are illustrated by "o" for short sounds; "--" for longer sounds. * * *

SOUND	INDICATION
* * *	
(1) -- -- o --	Approaching public crossings at grade. To be prolonged until the crossing is reached.
* * *	

17. The headlight will be displayed to the front of every train by day and by night * * *

* * *

30. The engine bell must be rung * * * while approaching and passing public crossings at grade * * *

Motor vehicle laws of the State of Indiana read in part as follows:

251. Obedience to Signal Indicating Approach of Train. Sec. 100. Whenever any person driving a vehicle approaches a railroad grade crossing, the driver of such vehicle shall stop within fifty feet but not less than ten feet from the nearest track of such railroad and shall not proceed until he can do so safely, when:

(a) A clearly visible electric or mechanical signal device gives warning of the immediate approach of a train.

* * *

The maximum authorized speed for freight trains in the vicinity of the point of accident is 60 miles per hour.

Description of Accident

Extra 5703 West, a west-bound freight train, consisted of Diesel-electric units 5703 and 5905, coupled in multiple-unit control, 65 cars, and a caboose. This train passed the west switch of a siding at Michigan City at 4:19 p. m., as indicated by the dispatcher's record of movement of trains. While moving over the intersection of the railroad and U. S. Highway No. 20, 2.5 miles west of Michigan City and 1,691 feet west of the west siding-switch, at an estimated speed of 30 or 35 miles per hour the right side of the locomotive was struck by a motor-truck, and the locomotive and the first nine cars were derailed.

The vehicle involved was a tractor and semi-trailer owned by the Circle Oil Corporation, Elkhart, Ind. The driver, who was the sole occupant, held Indiana chauffeur's license No. W 425 115 001 881. The tractor was a 1948 model GMC, powered by a 4-cylinder engine, and equipped with a conventional cab. It bore Indiana license 10787. The semi-trailer was a 1956 model Freuhauf with a 6,200-gallon cargo tank. It bore Indiana license 12486. Both the tractor and the semi-trailer were equipped with air brakes. At the time of the accident the semi-trailer was loaded with 5,000 gallons of fuel oil. The total length of the vehicle was 41 feet 6 inches, and the gross weight was 54,000 pounds. This vehicle was moving eastward on U. S. Highway No. 20 at an estimated speed of 50 miles per hour when it entered the crossing and struck the side of the locomotive of Extra 5703 West.

Both Diesel-electric units and the first nine cars of Extra 5703 West were derailed. The first Diesel-electric unit turned end for end and stopped on its right side about 13 feet south of the track and approximately parallel to it. The west end was 227 feet west of the crossing. The second unit stopped upright with the front end about 25 feet north of the track and the rear end against the rear end of the first unit. The cars stopped in various positions on or near the track. The tractor stopped underneath the first Diesel-electric unit, and the semi-trailer stopped on the north side of the track. The cargo of the semi-trailer became ignited, and equipment which had been damaged in the collision and derailment was further damaged by fire. The first Diesel-electric unit, three cars, the tractor, and the semi-trailer were destroyed. Six cars were badly damaged, and the second Diesel-electric unit was considerably damaged.

The engineer and fireman of Extra 5703 West were killed. The front brakeman and the flagman were injured.

The weather was clear at the time of the accident, which occurred about 4:20 p. m.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 23.2 trains. During the 24-hour period beginning at 6 p. m., December 11, 1956, 2,680 automobiles, 3,940 motor-trucks, and 50 buses passed over the crossing.

Discussion

As Extra 5703 West was approaching the point where the accident occurred the enginemen were in their respective positions in the control compartment of the first Diesel-electric unit. The conductor and the flagman were in the caboose. The front brakeman said he had observed that the headlight was lighted while the train was at Michigan City, and he assumed that it was lighted when the accident occurred. He said that the locomotive bell was ringing and that the engineer was sounding the grade-crossing whistle signal as the locomotive approached the crossing. The brakeman saw that the flashing-light warning signal on the south side of the track was in operation as the locomotive approached. He did not see the other signal. He said that when the locomotive reached a point a short distance east of the crossing the engineer called a warning and began to sound a series of warning blasts on the horn. The collision occurred almost immediately afterward and before the engineer could apply the brakes. The Diesel-electric units of Extra 5703 West were of the road-switcher type, and from the brakeman's position on the left hand side of the control compartment he could not see the motor-truck before the collision occurred. The surviving members of the crew estimated that the speed of the train was from 30 to 35 miles per hour when the accident occurred.

When the accident occurred the motor-truck was en route from Gary, Ind., approximately 25 miles west of Michigan City, to Elkhart, Ind. The driver of an automobile which passed the truck a short distance west of the crossing said that the truck was being operated in a normal manner at a speed of 50 or 55 miles per hour. He said that as he approached the crossing the flashing-light warning signals began to operate. He crossed the track ahead of the train, and he then saw the driver of the truck swerve to the right

immediately before the locomotive reached the crossing. He said that the grade-crossing whistle signal was sounded as the train approached the crossing. A driver who was following the truck at a distance of 500 or 600 feet said that there was no apparent reduction in the speed of the truck as it approached the crossing. He saw the truck swerve to the right before the collision occurred, but he said that the stop lights on the truck did not become illuminated and there was no indication that the driver had applied the brakes. He did not know whether the engineer sounded the grade-crossing whistle signal or whether the flashing-light warning signals were in operation. A driver who was approaching the crossing from the opposite direction said that the whistle signal was sounded and that the signals were in operation as the train approached the crossing.

At the time of the accident the driver of the truck had been employed by the Circle Oil Corporation during a period of approximately 5 weeks. His employer said that the driver had had 15 years experience in this capacity and that he was familiar with the crossing involved.

The warning signals at the crossing had been last inspected on November 23, 1956. The signal in the northwest angle of the intersection and the instrument case which housed the relays and batteries were demolished in the accident. After the damaged parts were replaced the signals functioned properly.

A narrow grove of trees extends between a point 390 feet east of the crossing and 160 feet north of the track and a point 680 feet east of the crossing and 70 feet north of the track. As an east-bound vehicle moves between a point 1,050 feet west of the crossing and the crossing, the driver's view of an approaching west-bound train is unobstructed except from the points at which the train is in line with these trees.

During wrecking operations on the morning after the collision occurred there was an explosion which resulted in the death of two maintenance-of-way employees, and the injury of five maintenance-of-way employees and two train-service employees. Diesel-electric unit 5703 was lying on its side, and the trucks and a 1,200-gallon fuel tank were being removed so that the body of the unit could be loaded on a flat car. The angle irons which secured the fuel tank in place were cut by use of acetylene cutting torches. After this was completed the torches were removed. The fuel tank exploded while an employee was attempting to pry it from the

unit by use of a bar. No fire followed the explosion, and apparently the tank was almost empty. The explosion occurred about 7 a. m., November 28.

Cause

This accident was caused by failure to stop a motor-truck short of a train moving over a rail-highway grade crossing.

Dated at Washington, D. C., this eighteenth day of January, 1957.

By the Commission, Commissioner Tuggle.

(SEAL)

HAROLD D. McCOY,

Secretary.