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INTERSTATE COMMERCE COMMISSION.

WASHINGTON

REPORT NO. 3701

PENNSYLVANIA-READING SEASHORE LINES

IN RE ACCIDENT

NEAR WILDWOOD JCT., N. J., ON

JULY 27, 1956

- 2 -

## SUMMARY

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Date: July 27, 1956

Railroad: Pennsylvania-Reading Seashore Lines

Location: Wildwood Jct., N. J.

Kind of accident: Collision

Equipment involved: Passenger train : Motor-truck

Train number: 311 :

Consist: One Diesel-powered  
passenger unit :

Estimated speeds: 6 m. p. h. : 35 m. p. h.

Operation: Timetable, train orders, and  
manual block-signal system

Track: Single; 7° curve; level

Highway: Tangent; crosses track at angle of  
approximately 80°; level

Weather: Cloudy

Time: 9:15 a. m.

Casualties: 1 killed; 17 injured

Cause: Failure to stop motor-truck short  
of train moving over rail-highway  
grade crossing

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3701

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

PENNSYLVANIA-READING SEASHORE LINES

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September 27, 1956

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Accident near Wildwood Jct., N. J., on July 27, 1956, caused  
by failure to stop a motor-truck short of a train moving  
over a rail-highway grade crossing.

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REPORT OF THE COMMISSION<sup>1</sup>

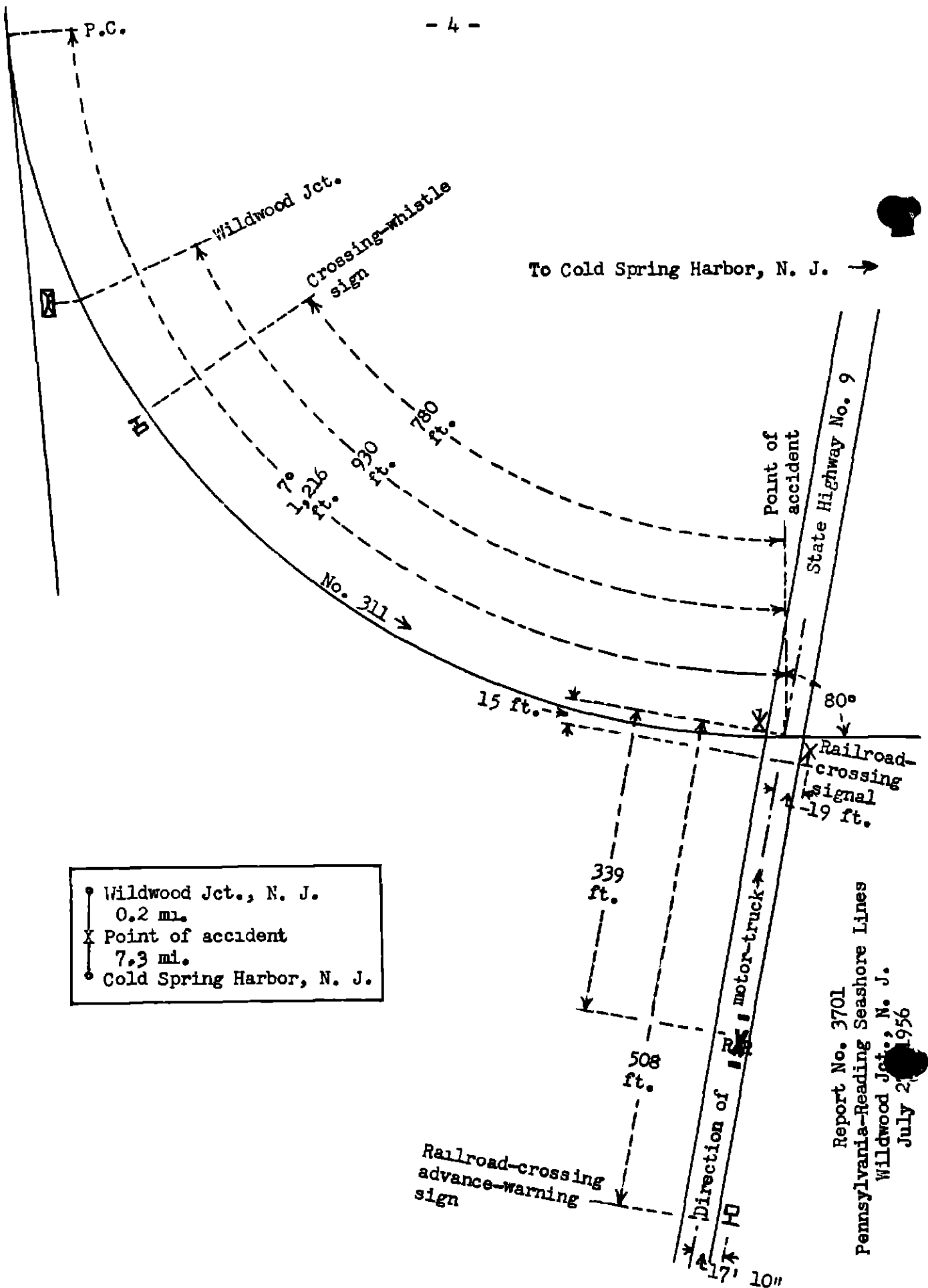
CLARKE, Commissioner:

On July 27, 1956, there was a collision between a passenger train on the Pennsylvania-Reading Seashore Lines and a motor-truck at a rail-highway grade crossing near Wildwood Jct., N. J., which resulted in the death of the driver of the motor-truck, and the injury of 16 passengers and 1 train-service employee. This accident was investigated in conjunction with a representative of the Board of Public Utility Commissioners of the State of New Jersey.

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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 Clarke for consideration and disposition.



To Cold Spring Harbor, N. J. →

•	Wildwood Jct., N. J.
	0.2 mi.
X	Point of accident
	7.3 mi.
•	Cold Spring Harbor, N. J.

Report No. 3701  
 Pennsylvania-Reading Seashore Lines  
 Wildwood Jct., N. J.  
 July 21, 1956

Railroad-crossing advance-warning sign

Direction of motor-truck  
17' 10"

### Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between Wildwood Jct. and Cold Spring Harbor, N. J., 7.5 miles, a single-track line, over which trains are operated by timetable, train orders, and a manual block-signal system. The accident occurred on the main track at a point approximately 930 feet south of the station at Wildwood Jct., where the railroad is crossed at grade by New Jersey State Highway No. 9. In the vicinity of the point of accident the railroad extends from northwest to southeast. A south-bound train by timetable direction moves toward the southeast by compass direction. From the north on the railroad there is a 7° curve to the left 1,216 feet to the crossing. South of the crossing the track is tangent. The grade is practically level.

New Jersey State Highway No. 9 is surfaced with bituminous material to a width of approximately 29 feet. The northeast angle of the intersection of the highway and the railroad is approximately 80°. A 6-inch by 12-inch plank is laid on the gage side of each rail throughout the width of the crossing, and the remaining area of the crossing is surfaced with bituminous material to the level of the tops of the rails. The highway is tangent throughout a distance of over 1,000 feet immediately south of the crossing and several hundred feet northward. The grade for north-bound vehicles is practically level throughout a distance of several hundred feet immediately south of the crossing.

A circular railroad-crossing advance-warning sign is located 17 feet 10 inches east of the center-line of the highway and 508 feet south of the railroad. This sign is 24 inches in diameter and is mounted on a mast 5 feet 4 inches 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. At a point 339 feet south of the crossing a warning sign is painted in white on the black surface of the highway. This sign consists of two intersecting diagonal lines and the letters "RR" in the north-bound traffic lane. At the time the accident occurred a railroad-crossing signal of the flashing-light type was located about 19 feet east of the center-line of the highway and about 15 feet south of the center-line of the track. This signal consisted of a standard cross buck mounted on a mast 12 feet above the level of the highway. It bore the words "RAILROAD CROSSING" in black reflectorized letters on a white background. Two hooded red lamps were

- 6 -

mounted back-to-back at each end of a horizontal bar which was attached to the mast at a point 9 feet 2 inches above the level of the highway. 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 northwest angle of the intersection. The warning aspect is displayed by the alternate illumination of the lamps when a south-bound train occupies any portion of the track throughout a distance of 698 feet immediately north of the crossing. A crossing-whistle sign for south-bound trains is located 780 feet north of the crossing.

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

14. Engine Whistle 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 or repeated until 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  
\* \* \*

The maximum authorized speeds for passenger trains are 15 miles per hour on the curve immediately north of the crossing and 6 miles per hour over the crossing.

Description of Accident

No. 311, a south-bound first-class passenger train, consisted of Diesel-powered passenger unit PRSL 405. This train departed from the station at Wildwood Jct. at 9:14 a. m.,

- 7 -

on time. While it was moving over the intersection of the railroad and New Jersey State Highway No. 9, 930 feet south of the station at Wildwood Jct., at an estimated speed of 6 miles per hour the side of the train was struck by a motor-truck and the train was overturned.

The vehicle involved was a tractor and semi-trailer. The driver, who was the sole occupant, held New Jersey operator's license No. 3242124. The tractor was a 1952 Brockway, Model 154W. It was equipped with a conventional steel cab and was powered by a 6-cylinder 145-horsepower gasoline engine. It was owned by Vinci's Express, Inc., Woodbine, N. J., and bore New Jersey license XE-7924. The semi-trailer was a 1956 Freuhauf with tandem axles, aluminum sides, and an open top. It was owned by Zeno Brothers Trucking Co., Inc., Akron, Ohio, and bore Pennsylvania license M-805. Both the tractor and the semi-trailer were equipped with air brakes. At the time of the accident the cargo consisted of electrical equipment. The cargo originated at Harrisburg, Pa., and was destined to Cape May Court House, N. J. The gross weight of the vehicle and cargo was approximately 49,900 pounds. This vehicle was moving northward on State Highway No. 9 at an estimated speed of 35 miles per hour when it entered the crossing and struck the side of No. 311.

Marks on the side of PRSL 405 indicated that the truck struck the unit about 26 feet from the south end. The front end of the tractor was forced underneath the side of the unit and struck the Diesel engine which was suspended under the floor. The unit was overturned to the left and stopped on its side immediately north of the north rail and parallel to it. The rear of the unit was several feet east of the east edge of the highway. The unit was somewhat damaged. The tractor stopped in the southeast angle of the intersection, several feet south of the track and approximately parallel to it. It was demolished. The semi-trailer stopped with the front end on the rear end of the tractor, and the rear end in the north-bound traffic lane of the highway. It was somewhat damaged.

The conductor of No. 311 was injured.

The weather was cloudy at the time of the accident, which occurred about 9:15 a. m. Rain had fallen a short time before the accident occurred, and the surface of the highway was wet.

- 8 -

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 13.2 trains. During the 24-hour period beginning at 8 a. m. July 30, 1956, 3,076 automobiles, 515 motor-trucks, and 4 buses passed over the crossing.

PRSL 405 is of stainless steel construction. It is 85 feet long between the pulling faces of the couplers, a maximum of 14 feet 7 inches in height, and a maximum of 10 feet 6/8 inch in width. It is mounted on two four-wheel trucks and is powered by two 275-horsepower Diesel engines mounted under the floor of the unit. Each engine drives the inboard axle of one truck through a torque converter transmission. The weight in working order is 114,740 pounds. An operator's station is located on the right hand side of the vestibule at each end of the unit.

#### Discussion

As No. 311 was approaching the point where the accident occurred the enginemen were maintaining a lookout ahead from the control compartment at the front of the unit. The members of the train crew were in the passenger section of the unit. The headlight was lighted. The brakes had been tested and had functioned properly when used en route. The fireman, a qualified engineer, was operating the unit. The enginemen said that the grade-crossing whistle signal was sounded as the train approached the crossing and that the signal was prolonged until the front of the train passed the crossing. The bell was ringing during this time. The engineer said he first saw the flashing-light warning signals at the crossing at a distance of about 300 feet. The fireman said he saw them at a distance of about 140 feet. Both employees said that the signals were in operation when they first saw them and that they continued to operate until the train reached the crossing. The enginemen said that no sand was used after the train departed from the station at Wildwood Jct. They said that the speed was low as the train moved on the curve north of the crossing, and as they approached the crossing the fireman made a brake application which reduced the speed to 5 or 6 miles per hour. The enginemen did not observe the truck until after the front of their train had entered the crossing. The fireman thought that the truck was about 150 feet south of the crossing when he first saw it. He said that at that time the driver appeared to be attempting to stop. He was unable to estimate the speed of the truck. He said that when he saw the truck he called a warning and made an emergency application of the brakes. The collision occurred and the unit began to overturn at approximately the same time that he made the brake



application. The engineer thought that the truck was about 50 feet distant when he first saw it and that it was moving at a speed of about 35 miles per hour. The members of the train crew did not see the truck before the accident occurred.

The tractor was damaged in the accident to the extent that the condition of the braking system at the time of the accident could not be tested. The brake drums and linings were found to be in good condition. A few hours after the accident occurred it was found that the brakes of the semi-trailer were still applied, and it was necessary to release the air pressure by opening pet cocks before the semi-trailer could be moved.

Before the accident occurred two automobiles were moving northward on the highway behind the truck. The driver of the first automobile said that he was about 30 feet behind the truck when the accident occurred. He estimated that the speed of the truck was about 35 miles per hour. The driver of the second automobile said that he was about 170 feet behind the truck as the truck approached the crossing. He said that he was driving at a speed of about 40 miles per hour and that he was moving slightly faster than the automobile ahead. Both of these drivers said that the flashing-light warning signals at the crossing were not in operation at any time as they approached the crossing. Two of the passengers who were on the train made statements that the flashing-light signals were in operation as the train entered the crossing.

A signal inspector of the carrier arrived at the scene of the accident about 45 minutes after the accident occurred. He said that he inspected the track north of the crossing and found that the tops of the rails were bright and clear of sand. The flashing-light warning signal in the southeast angle of the intersection had been knocked down when the accident occurred. The inspector said that the signal in the northwest angle of the intersection operated properly when he made tests by shunting each track circuit. Tests were made after the signal in the southeast angle of the intersection had been replaced, and no condition was found which would have caused the signals to fail to operate properly.

The range of vision between a vehicle approaching the crossing from the south and a train approaching the crossing from the north is materially restricted by vegetation in the southwest angle of the intersection. From points 400 feet, 300 feet, and 200 feet south of the crossing an approaching train is visible at distances of 75 feet, 112 feet, and 180 feet, respectively, north of the crossing. After a vehicle

- 10 -

reaches a point approximately 150 feet south of the crossing the driver can obtain a view of an approaching train at any point between the station at Wildwood Jct. and the crossing.

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 twenty-seventh day of September, 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,  
Secretary.