INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3377

THE PENNSYLVANIA RAILROAD COMPANY

IN RE ACCIDENT

NEAR ANOKA, IND., ON

NOVEMBER 9, 1950

SUMMARY

Date:	November 9, 1950	
Railroad:	Pennsylvania	
Location:	Anoka, Ind.	
Kind of accident:	Collision	
Equipment involved:	Passenger train	: Yard engine
Train number:	237	:
Engine numbers:	Diesel-electric units 5893A and 5840B	: 8163
Consist:	8 cars	:
Speeds:	45 m. p. h.	: Standing
Operation:	Movements with current of traffic by signal indications; movements against current of traffic by train orders and manual-block system	
Tracks:	Double; tangent; 0.26 percent descending grade westward	
Weather:	Clear	
Time:	5:55 a. m.	
Casualties:	27 injured	
Cause:	Open switch	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3377

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

THE PENNSYLVANIA RAILROAD COMPANY

January 29, 1951

Accident near Anoka, Ind., on November 9, 1950, caused by an open switch.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On November 9, 1950, there was a collision between a passenger train and a yard engine on the Pennsylvania Railroad near Anoka, Ind., which resulted in the injury of 8 passengers, 8 railway-mail clerks, 1 railway-express messenger and 10 train-service employees. This accident was investigated in conjunction with a representative of the Indiana Public Service Commission.

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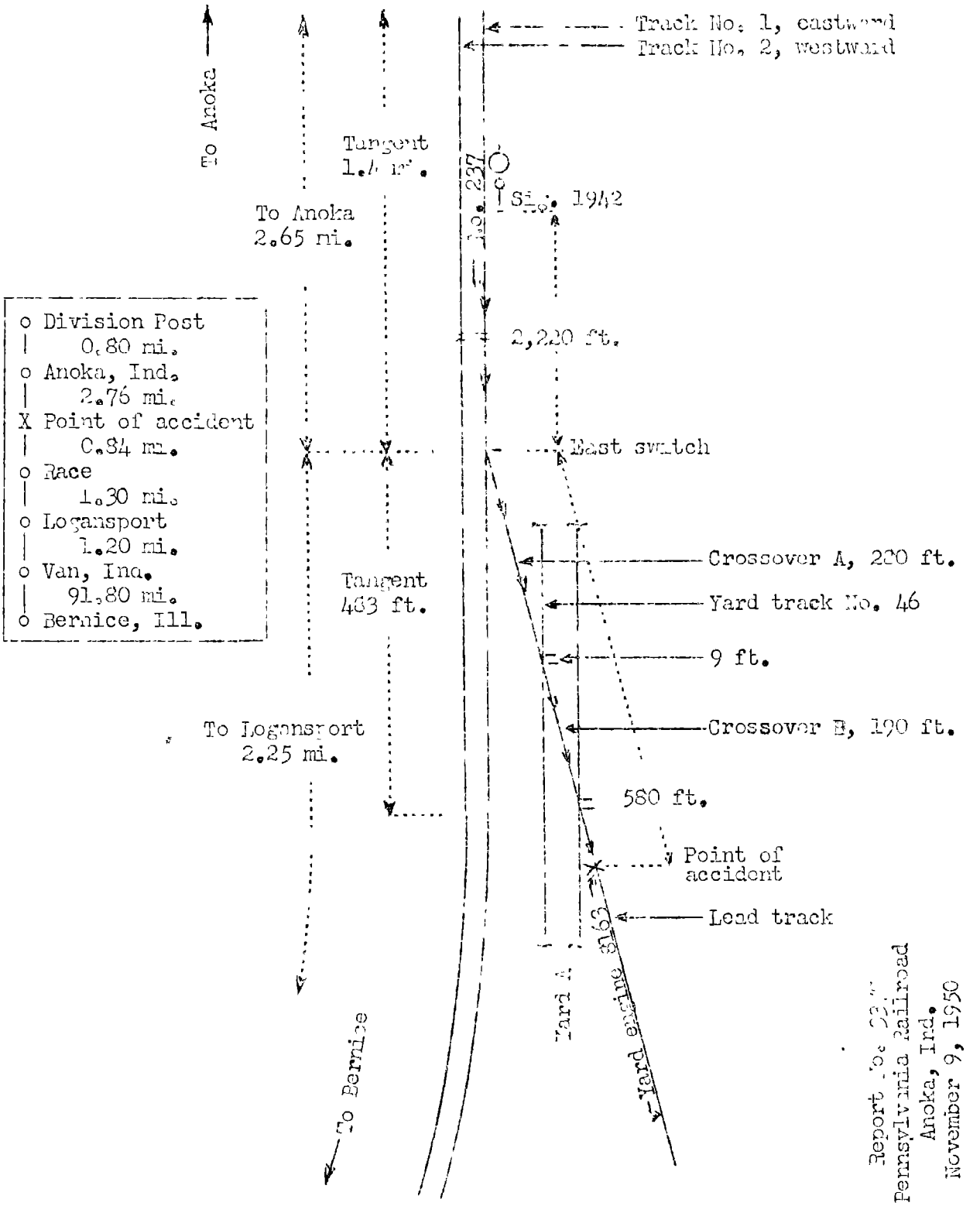
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Report No. 22[illegible]
Pennsylvania Railroad
Anoka, Ind.
November 9, 1950

Location of Accident and Method of Operation

This accident occurred on that part of the Chicago Division extending between Division Post, near Anoka, Ind., and Bernice, Ill., 98.7 miles. In the vicinity of the point of accident this is a double-track line, over which trains moving with the current of traffic are operated by signal indications, and trains moving against the current of traffic are operated by train orders and a manual-block system. The main tracks from south to north are designated as No. 1, eastward, and No. 2, westward. The tracks of Yard A parallel track No. 1 on the south from a point 1.6 miles west of Anoka to Race, 3.6 miles west of Anoka. In the immediate vicinity of the point of accident yard track No. 46 and a lead track are located south of track No. 1. Track No. 46 is parallel to track No. 1, and the lead track extends southwestward from track No. 1. At a point 2.65 miles west of Anoka, crossover A connects track No. 1 with yard track No. 46. This crossover is 280 feet in length and is facing-point for west-bound movements on track No. 1. Crossover B, 190 feet in length, connects yard track No. 46 with the lead track. The east switch of crossover B is 9 feet west of the west switch of crossover A and is facing-point for west-bound movements on yard track No. 46. The accident occurred on the lead track at a point 590 feet west of the east switch of crossover A. From the east on track No. 1 there is a tangent 1.4 miles to the east switch of crossover A and 485 feet westward. The grade for west-bound trains varies between 0.67 percent and 0.26 percent descending throughout a distance of 2.58 miles immediately east of the point of accident and is 0.26 percent descending at that point.

The switch stand of the main-track switch of crossover A is located south of track No. 1. The switch lamp and target are mounted on a low stand 6 feet 1 inch north of the center-line of track No. 1 and directly opposite the switch stand. The switch lamp is of the oil-burning type with lenses 5 inches in diameter. The centers of the lenses are 3-1/8 inches above the level of the tops of the rails. Disc targets 10 inches in diameter are fitted around the lenses of the lamp. The switch stand and the target stand are so connected that when the switch is lined for movements on track No. 1 a green light and a white target are displayed in the direction of an approaching train. When the switch is lined for a crossover movement, a red light and a red target are displayed.

A visual indicator is provided in the interlocking station at Race. It indicates track occupancy of track No. 1 between Race interlocking and signal 1942, located approximately 2,200 feet east of crossover A. This indicator displays a yellow aspect when the track is occupied and also when any switch within these limits is in other than normal position.

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

> 104. Conductors and flagmen are responsible for the position of switches used by them and their trainmen except where switch tenders are stationed. Switches must be properly lined after having been used.
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> * * *
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> 325. A signalman informed of any obstruction in a block must immediately notify the signalman at the other end of the block and each must display Stop-signals to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.

The maximum authorized speed for passenger trains operating against the current of traffic was 50 miles per hour.

Description of Accident

No. 237, a west-bound first-class passenger train, consisted of Diesel-electric units 5883A and 5840B, coupled in multiple-unit control, one baggage car, three express box cars, three baggage cars, and one coach, in the order named. All cars were of all-steel construction. At Anoka, the last open office, the crew of this train received copies of train order No. 211, which read as follows:

> NO 237 ENG 5883 AND NO 201 ENG 5494
> HAVE RIGHT OVER OPPOSING TRAINS
> ON NO 1 TRACK ANOKA TO RACE

The crew also received block authority on track No. 1 between Anoka and Race. This train passed Anoka at 5:52 a. m., 3 hours 2 minutes late. While it was moving on track No. 1 it entered crossover A, then was diverted through crossover B to the lead track, and while moving at a speed of 45 miles per hour it struck yard engine 8163 at a point 580 feet west of the east switch of crossover A.

Yard engine 8163, headed westward, was engaged in switching operations in Yard A. While it was standing on the lead track west of crossover B the rear of the tender was struck by No. 237.

The first Diesel-electric unit of No. 237 was derailed to the north and stopped with the front end of the unit 206 feet west of the point of accident. The front end and the rear end of this unit were, respectively, 72 feet 6 inches and 23 feet 6 inches north of the center-line of the lead track. The unit leaned toward the north at an angle of about 40 degrees. The front truck of the first Diesel-electric unit was displaced and stopped near the rear end of the unit. The second Diesel-electric unit was derailed to the north and stopped with the front end against the rear of the first unit and the rear end on the lead track. The first Diesel-electric unit was badly damaged and the second Diesel-electric unit was somewhat damaged. No other equipment of No. 237 was derailed. The first and the fifth to the eighth cars, inclusive, were slightly damaged.

Engine 8163 was derailed to the north and stopped upright, with the front end on the lead track and 361 feet west of the point of accident. The rear of the tender was 38 feet 6 inches north of the center-line of the lead track. The engine was considerably damaged and the tender was demolished.

The engineer, the fireman, the conductor, the flagman, the brakeman and the baggageman of No. 237, and the engineer, the fireman and two yard brakeman of yard engine 8163 were injured.

The weather was clear at the time of the accident, which occurred about 5:55 a. m.

Discussion

The investigation disclosed that on the day of the accident the front brakeman of Extra 9511 East, an east-bound freight train, lined the switches of crossover A for movement from Yard A to track No. 1. Before the switches were lined, the operator at Race gave oral permission for this train to enter track No. 1, and this permission was relayed to the conductor by the yardmaster. Extra 9511 East departed from Yard A at 5:08 a. m. and passed Anoka at 5:18 a. m. The crew did not restore the switches of crossover A to normal position.

After Extra 9511 East departed from Yard A, yard engine 8163 was engaged in switching operations in the vicinity of crossover A. A short time before the accident occurred the yardmaster instructed the yard conductor in charge of engine 8163 to have the switches of crossover A restored to normal position. The yard conductor said that he at once directed a yard brakeman to line the switches. The yard brakeman immediately proceeded to the crossover. Just after he lined the west switch he observed the headlight of a train approaching on track No. 1. He gave stop signals with a white light, and had reached a point approximately 145 feet east of the west switch when No. 237 entered the crossover. At this time engine 8163 was standing on the lead track west of crossover B, and the engineer and the fireman were in the cab of the engine. Neither of them was aware of the approach of No. 237 before the accident occurred.

No. 237 was authorized to operate against the current of traffic on track No. 1 between Anoka and Race, because track No. 2 between these points was blocked with cars. The operator at Anoka delivered copies of train order No. 211 to members of the crew and displayed a signal to indicate that the block was clear. No. 237 did not stop at Anoka. As this train approached the point where the accident occurred the speed was 69 miles per hour. The grade in this vicinity was slightly descending for west-bound movements. The headlight was lighted brightly. The brakes of the train had been tested and had functioned properly when used en route. The enginemen were maintaining a lookout ahead from their respective positions in the control compartment of the first Diesel-electric unit, the baggageman was in the fifth car, and the other members of the train crew were in the rear car of the train. The engineer said that he closed the throttle when the train was about 1.5 miles west of Anoka. The speed was then about 50 miles per hour, and he did not again observe the speed indicator. He said he observed a red light in the vicinity of crossover A, but he thought it was on a car standing on track No. 2. He then saw stop signals being given with a white light in the vicinity of the crossover and realized that the red light was the switch lamp at the east crossover-switch. He immediately made an emergency application of the brakes, and he thought that the brakes were applied when the train was about 400 feet east of the crossover. The fireman said he first saw the red switch lamp at crossover A when it was about 300 feet distant. He called a warning, but the engineer already had made an emergency application of the brakes. The baggageman said the brakes were applied before the train entered the crossover. The speed of the train was reduced to about 45 miles per hour when the accident occurred.

Train order No. 210, which contained the instruction to hold eastward trains clear of track No. 1 between Race and Anoka, was transmitted to the operator at Race at 5:42 a. m. Train order No. 211 was then transmitted to the operators at Race and at Anoka. After he received this train order, the operator at Anoka arranged with the operator at Race for block authority for the movement of No. 237 on track No. 1. The operator at Race said that at the time he received train order No. 210 the indicator which shows track occupancy on track No. 1 was displaying a yellow aspect. He attempted to communicate with the yardmaster by telephone. When he found that he was unable to talk with the yardmaster, he informed a clerk at the yard office that No. 237 would be operated on track No. 1. Then, since the block record indicated that Extra 9511 East had passed Anoka and that the block was clear of trains, he gave the operator at Anoka control of the block for the movement of No. 237. The indicator continued to display a yellow aspect. At approximately 5:50 a. m. the operator was successful in communicating with the yardmaster and asked the yardmaster if the crossover switches were properly lined. The yardmaster immediately instructed the yard conductor in charge of engine 8163 to have the switches lined, but the accident occurred before the yard brakeman reached the east switch.

The investigation disclosed that it had been a practice of long standing at this point for the crews of certain eastbound trains departing from Yard A to proceed without stopping to restore the switches of crossover A to normal position. When the switches were left open they were restored to normal position usually by a member of a yard crew acting on instructions from the yardmaster. The conductor of Extra 9511 East said that no one had specifically instructed him to leave the switches lined for movement through the crossover on the day of the accident, but that it had been the practice to leave them in that position. The flagman of this train said that for a period of several years crews to which he had been assigned had never restored the switches to normal position when their trains were departing from Yard A. The yardmaster at Yard A said that he had no knowledge that the switches had been left open after the departure of Extra 9511 East until he was so informed by the operator at Race.

Cause

It is found that this accident was caused by an open switch.

Dated at Washington, D. C., this twenty-ninth day of January, 1951.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.