

RAILROAD ACCIDENT INVESTIGATION

Report No 3804

THE PENNSYLVANIA RAILROAD COMPANY

TERRE HAUTE, IND

MARCH 22, 1958

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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DATE	March 22, 1958	
RAILROAD	Pennsylvania	
LOCATION	Terre Haute, Ind	
KIND OF ACCIDENT	Collision	
TRAIN INVOLVED	Yard Movement	Cut of cars
LOCOMOTIVE NUMBER	Diesel-electric unit 9370	
CONSIST	2 cabooses	16 cars
SPEEDS	10 m p h	Undetermined
OPERATION	Secondary track	
TRACKS	Double, tangent, 0 22 percent descending grade westward.	
WEATHER	Cloudy	
TIME	11 00 p m	
CASUALTIES	2 killed, 1 injured	
CAUSE	Failure to secure cut of cars on descending grade	

INTERSTATE COMMERCE COMMISSION

REPORT NO 3804

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

THE PENNSYLVANIA RAILROAD COMPANY

September 8, 1958

Accident at Terre Haute, Ind , on March 22, 1958, caused by failure to secure a cut of cars
on a descending grade

REPORT OF THE COMMISSION¹

TUGGLE, Commissioner

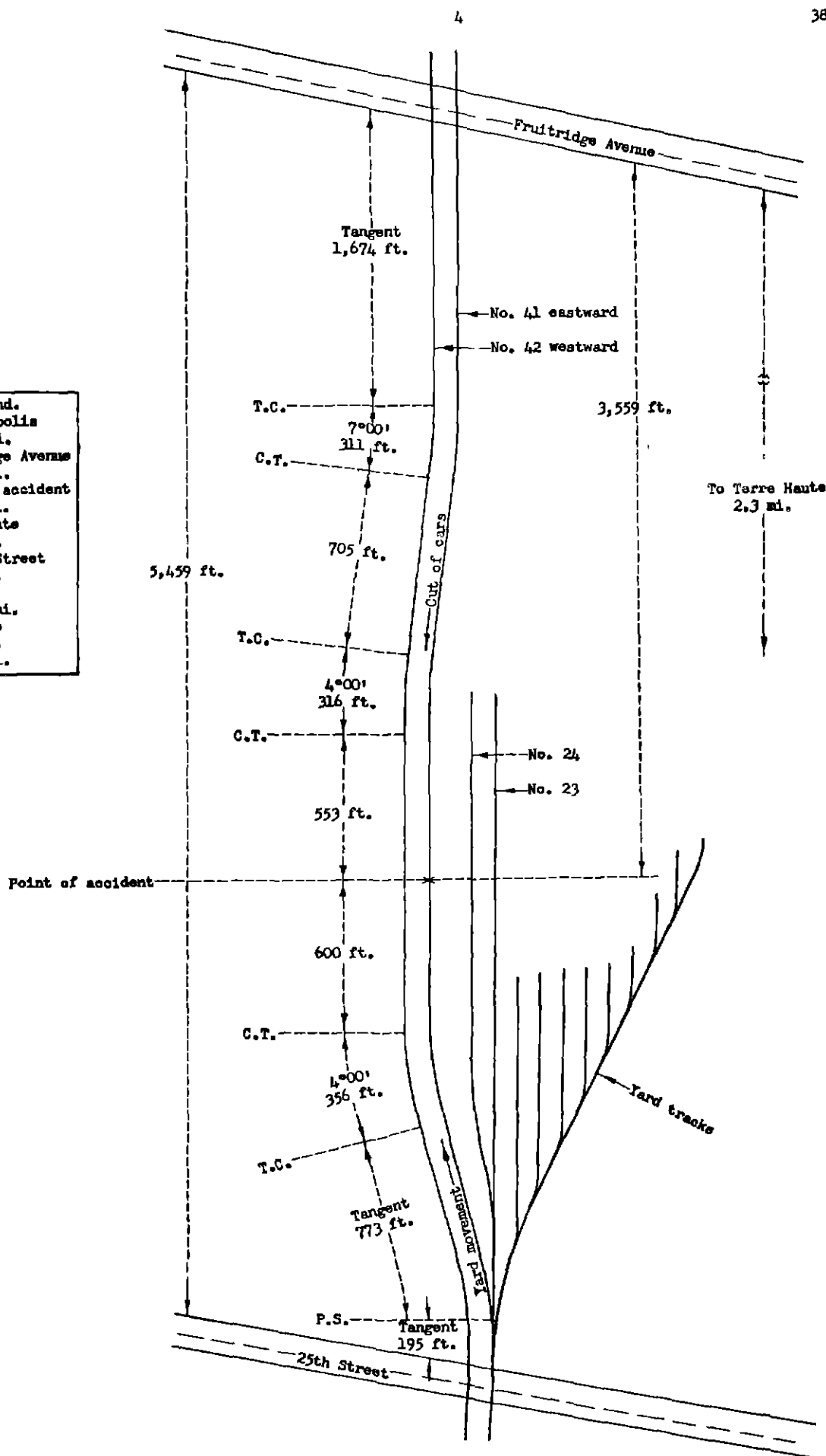
On March 22, 1958, there was a collision between a yard movement and a cut of cars on the
Pennsylvania Railroad at Terre Haute, Ind , which resulted in the death of two train-service employees,
and the injury of one train-service employee. This accident was investigated in conjunction with
representatives of the Indiana Public Service Commission.

¹Under 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.

○	Woods, Ind.
	Indianapolis
	68.1 mi.
○	Fruitridge Avenue
	0.67 mi.
×	Point of accident
	1.69 mi.
○	Terre Haute
	0.2 mi.
○	Seventh Street
	0.7 mi.
○	Vigo
	159.6 mi.
○	Ross Lake
	3.1 mi.
○	Eads, Ill.

To Eads

To Woods



The Pennsylvania Railroad
Terre Haute, Ind.
March 22, 1958

Location of Accident and Method of Operation

This accident occurred on that part of the Southwestern Region extending between Eads, Ill and Woods, Ind , 234 miles Within yard limits at Terre Haute, Ind , 163 6 miles east of Eads, there are two secondary tracks over which movements are operated under the rules governing movements on secondary track and within yard limits Between Fruitridge Avenue, 2 3 miles east of the station at Terre Haute, and 25th Street, 5,459 feet west of Fruitridge Avenue, the secondary tracks are designated from south to north as No 41 eastward and No 42 westward The accident occurred on track No 41 at a point 3,559 feet west of Fruitridge Avenue Yard tracks numbering 1 to 31, inclusive, are located south of track No 41 Track No 23 diverges from track No 41 and track No 24 diverges from track No 23 at points, respectively, 195 feet and about 340 feet east of 25th Street Westward from Fruitridge Avenue there are, in succession, a tangent 1,674 feet in length, a 7° curve to the right 311 feet, a tangent 705 feet, a 4° curve to the left 316 feet, and a tangent 553 feet to point of accident and 600 feet westward Eastward from 25th Street there are, in succession, a tangent 195 feet in length to the turnout of track No 23, a tangent about 773 feet, a 4° curve to the right 356 feet, and the tangent on which the accident occurred The average grade is 0 22 percent descending westward from Fruitridge Avenue to point of accident

This carrier's operating rules read in part as follows

DEFINITIONS

REDUCED SPEED - Prepared to stop short of train or obstruction

SECONDARY TRACK - A designated track upon which trains and engines may be operated without time-table authority, train orders or block signals

OPERATING RULES

110 On secondary tracks where Block Signal System Rules are not in effect, trains and engines may proceed at Reduced Speed, * * * Trains and engines will not protect against following movements unless specified on the time-table

* * *

4156-A A sufficient number of hand brakes must be applied on cars or cuts of cars left standing on any track to make them secure * * *

The carrier's Brake and Train Air Signal Instructions read in part as follows

31 To Cut Off Cars or Locomotives From Train

To cut off cars or locomotives from train proceed as follows

First - Make a full service application of the brake

Second - Close the angle cocks * * * on each side of the couplings to be separated, closing cock farthest from the locomotive first * * *

Third - Disconnect brake * * * line hose couplings, * * *, before the cars are uncoupled

Fourth - * * * If cars * * * to be cut off are to be left standing and train pulled away from them, they must be secured by hand brakes and not air brakes, * * *

The maximum authorized speed on secondary tracks in the vicinity of the point of accident is 20 miles per hour

Description of Accident

Extra 7046 East, an eastbound freight train, consisted of diesel-electric units 7046, 7196 and 7013, coupled in multiple-unit control, 20 cars, and 3 cabooses. This train departed from Rose Lake Yard, 3.1 miles east of Eads, at 7 25 p. m., passed Vigo, Ind., 2.5 miles west of the point of accident, at 10 37 p. m., entered secondary track 41 at Seventh Street in Terre Haute, passed 25th Street, and stopped west of Fruitridge Avenue at 10 50 p. m. The three cabooses and the rear four cars were then detached from the train by the crew of yard locomotive 9370 and placed on yard track 24. The locomotive was uncoupled from the front of the train and moved forward a short distance. Soon afterward, the remaining cut of 16 cars moved westward on the descending grade and while moving at an undetermined speed it struck a caboose being pushed eastward by yard locomotive 9370 on secondary track 41.

After placing the three cabooses and the four rear cars of Extra 7046 East on yard track 24, yard engine 9370 was then coupled to two cabooses on yard track 23 and moved to secondary track 41. While it was pushing the two cabooses eastward on secondary track 41 at an estimated speed of 10 miles per hour the leading caboose was struck by the cut of 16 cars.

Both cabooses, and the west car of the cut of cars were derailed. The leading caboose was telescoped by the west car of the cut of cars and became ignited immediately after the collision occurred. It was destroyed as a result of the fire and collision. The second caboose was badly damaged as a result of the fire and collision. The west car of the cut of cars was badly damaged primarily as a result of fire.

The flagman of the crew called to operate Extra 7046 East from Terre Haute and a brakeman on the crew of yard engine 9370 were killed. A brakeman of the crew of yard engine 9370 was injured.

The weather was cloudy at the time of the accident, which occurred at 11 00 p. m.

The 1st to 14th cars, inclusive, of the cut of cars were loaded flat cars equipped for "Piggy-back" service. The 15th was a loaded tank car and the 16th was a gondola loaded with logs. The 1st to 10th cars, inclusive, and the 13th car, were equipped with roller bearings.

Discussion

Before Extra 7046 East departed from Rose Lake Yard, its brakes were tested and found to operate as intended. When it arrived in Terre Haute at 10 50 p. m. on the day of the accident, it was stopped on secondary track 41 at a point where the east end of the first car was approximately 109 feet west of Fruitridge Avenue. Terre Haute is a terminal for crews of freight trains. The incoming engineer said that after he stopped the train by use of the independent brake, he left the independent brake valve in application position and the automatic brake valve in running position and was relieved by the outgoing engineer. The outgoing engine crew took charge of the locomotive after being advised that an excessive amount of water had been used by the rear diesel-electric unit. After an inspection of the locomotive, the outgoing engineer instructed the fireman to uncouple the locomotive from the train for the purpose of moving it forward about 100 feet to a point where facilities were available.

to replenish the water supply of the rear diesel-electric unit. The fireman closed the angle cock at the east end of the first car and then closed the angle cock at the rear end of the third diesel-electric unit. The fireman said that the locomotive was then moved backward about four inches in order to permit him to operate the lever of the uncoupling device. After the locomotive was uncoupled from the train, it was moved forward on secondary track 41 to Fruitridge Avenue where water was available immediately west of the crossing. The engineer said that he did not use the automatic brake valve between the time he relieved the incoming engineer and the time his locomotive was uncoupled from the train. Shortly after the locomotive was stopped at Fruitridge Avenue and while the rear diesel-electric unit was being supplied with water, a crossing watchman observed that the cut of cars left standing on secondary track 41 was moving westward. He called this movement to the attention of the fireman, who thought a yard engine was coupled to the cut of cars at the west end and was pulling it westward. The fireman immediately proceeded to a yard office located north of secondary track 42 and west of Fruitridge Avenue, and attempted by use of a loud-speaker system to instruct the crew of the yard engine to stop the movement on secondary track 41. The outgoing conductor and front brakeman of Extra 7046 East were also in the yard office at the time, and none of the employees in the vicinity of this yard office was aware that the cut of cars was moving unattended on a descending grade before the collision occurred.

After the rear end of incoming Extra 7046 East passed the west switch of yard track 23, yard locomotive 9370 was moved to secondary track 41 and followed the train eastward. When Extra 7046 East stopped on secondary track 41, the yard locomotive was coupled to the rear caboose and a brakeman of the yard crew uncoupled the three cabooses and the four rear cars from the train, after closing the angle cocks at the west end of the 16th car and the east end of the 17th car. The crew of the yard engine placed these seven cars on the west end of yard track 24 and then moved the yard locomotive to yard track 23, where it was coupled to two cabooses to be attached to the rear end of Extra 7046 East. The yard locomotive moved the two cabooses to secondary track 41 and then proceeded to push them eastward on that track. As yard locomotive 9370 moved eastward on secondary track 41 to couple the cabooses to the train, the fireman, a qualified engineer, was operating the locomotive. The engineer was on the fireman's seat in the control compartment. The two brakemen of the yard crew and the outgoing flagman of Extra 7046 East were on the leading caboose. The conductor of the yard crew remained in the vicinity of the switch at the west end of yard track 23. The fireman said that after a proceed signal was given by one of the yard brakemen, he did not afterward see any of the employees on the caboose. He said that he could see a reflection from a lantern on the front end of the leading caboose and assumed a brakeman of the yard crew was stationed there to give signals if necessary. Both the engineer and the fireman said that they maintained a lookout ahead in the direction of the movement and no signal was given by any employee on the leading caboose before the collision occurred. Neither the engineer nor the fireman was aware of the cut of cars approaching on secondary track 41 before the collision occurred. They both said that their locomotive was moving at a speed of about 10 miles per hour at the time of the collision. The speed of the cut of cars at the time of the collision could not be determined. Since the surviving yard brakeman was too seriously injured for questioning during the investigation, it could not be determined where the employees on the leading caboose were located at the time of the accident. The engineer of the yard locomotive said that he had observed smoke being emitted from the chimney of the leading caboose shortly before the accident occurred and that a fire evidently had been started in the caboose stove. There were two 2-gallon containers of kerosene and a small tank of propane gas in the leading caboose, and this flammable material apparently became ignited as a result of the collision and was the cause of the intense fire which followed.

The rules of this carrier require that when cars or locomotives are to be detached from a train, a full service application of the automatic brake must be made, after which the angle cocks must be closed on each side of the coupling to be separated. The rules also require that when cars separated from a train are to be left standing, a sufficient number of hand brakes must be set to hold the cars. In the instant case, a service application of the automatic brake was not made before the locomotive was detached from the train, nor were hand brakes set on the cut of cars left standing on a grade.

Cause

This accident was caused by failure to secure a cut of cars on a descending grade.

Dated at Washington, D C , this eighth
day of September, 1958

By the Commission, Commissioner Tuggle,

(SEAL)

HAROLD D. McCOY,

Secretary