

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE  
NEW YORK CENTRAL RAILROAD AT MAPES, PA., ON SEPTEMBER 29, 1931.

November 4, 1931.

To the Commission:

On September 29, 1931, there was a derailment of a freight train on the New York Central Railroad at Mapes, Pa., which resulted in the death of two employees and the injury of one employee.

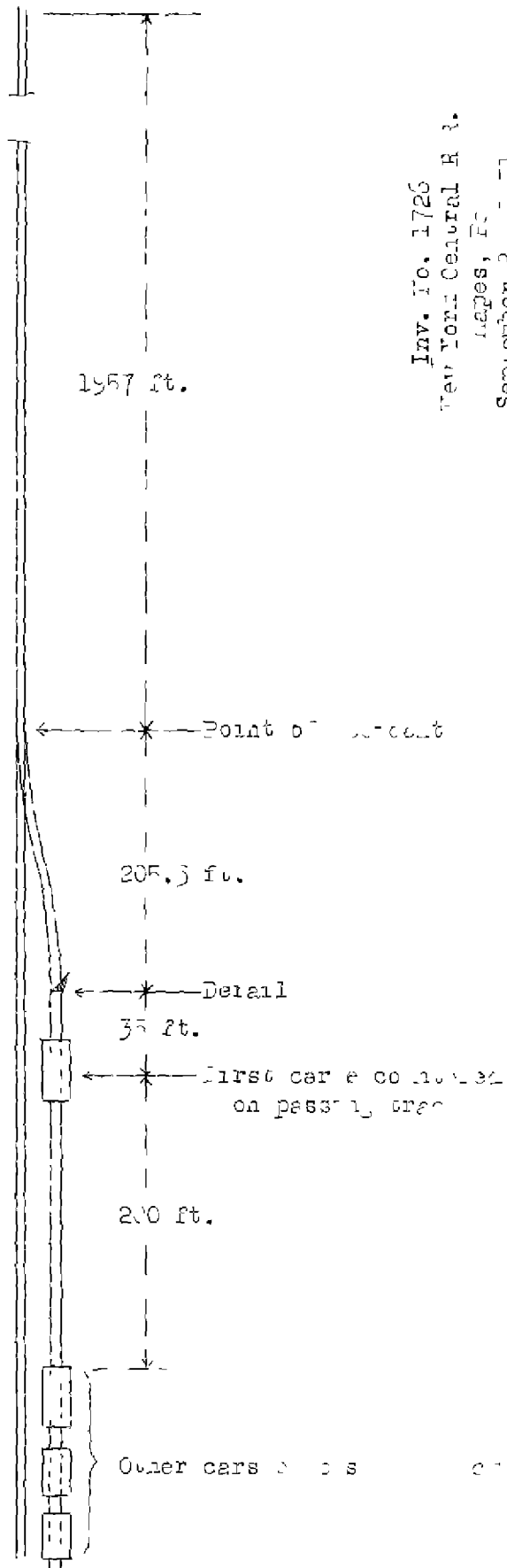
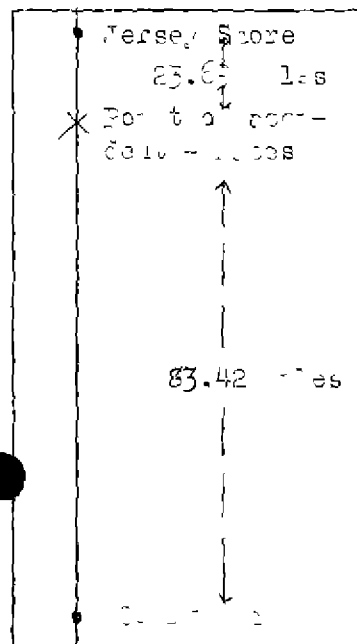
Location and method of operation

This accident occurred on that part of the Pennsylvania Division extending between Jersey Shore and Curry Run, Pa., a distance of 107.11 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred at the east switch of the passing track at Mapes; approaching this point from the east, there is a 2° curve to the left 543 feet in length, followed by 1,957 feet of tangent to the switch, this tangent extending for a considerable distance beyond. The grade for westbound trains is level, followed by a 0.339 per cent ascending grade for a distance of approximately 1,000 feet to the point of accident. The speed is restricted to 30 miles per hour for freight trains

The switch at which this accident occurred is a facing-point switch for westbound trains and leads off the main track through a No. 10 turnout to the left or south. The switch stand is of the Ramapo No. 31 type and is located on the north side of the main track, it is equipped with a semaphore target, 7 feet 11 inches above the top of the rail, and a switch lamp, the center of the lens being 9 feet 6 inches above the top of the rail. The track is laid with 105-pound rails, 30 and 33 feet in length, with an average of from 16 to 18 hardwood ties to the rail-length, single-spiked, fully tie-plated, and ballasted with crushed rock to a depth of 2 feet. The track is well maintained. A split-point derail is located on the passing track at a point 205.5 feet west of the switch

The weather was clear at the time of the accident, which occurred about 5.15 p.m.

Inv. No. 1726  
New York Central R. R.  
Harpes, Pa.  
September 2, 1951



### Description

Westbound freight train extra 5108 consisted of 30 empty cars and a caboose, hauled by engine 5108, and was in charge of Conductor White and Engineman Hudson. This train departed from Mill Hall, 10.09 miles east of Mapes, at 4.38 p.m., according to the train sheet, and was derailed at the east switch of the passing track at Mapes while traveling at a speed estimated to have been between 30 and 35 miles per hour.

Engine 5108 stopped on the passing track at a point 578 feet beyond the switch, with its pony-truck wheels and all wheels on the right side derailed. It had been partly derailed at the switch, and then, after colliding with a flat car loaded with rails standing on the passing track 35 feet west of the derail, it had continued until it encountered some stored cars about 200 feet farther west, resulting in four of these cars being derailed and demolished and engine 5108 badly damaged. The first car in extra 5108 remained coupled to the tender with the front wheels of the forward truck derailed. The employees killed were the fireman and a brakeman, and the employee injured was the engineman.

### Summary of evidence

Engineman Hudson stated that approaching Mapes he was sitting on his seat box, he sounded the whistle signal for a road crossing located 1,600 feet east of the passing track, remained on his seat box until after the engine passed over the crossing, and then after looking ahead and seeing nothing in sight he crossed over to the left gangway and looked out of the window to see if everything was running all right, this being the first trip of this engine after having been reconditioned. He then looked over the right side of the engine and when he returned to his seat box he glanced up and saw by the target that something was wrong with the switch. At this time the engine was probably two or three engine-lengths from the switch, traveling at a speed of 30 or 32 miles per hour, and he immediately applied the air brakes in emergency, but before he could get off the engine he was thrown off by the impact. After the accident he examined the switch and found it set for the siding and the lock lying on the ground beside the switch block. He further stated that at no time did he see any one in the vicinity of the switch, but that if he had been on his seat box, with his mind on the switch, he might have seen it far enough away to allow him to stop.

Conductor White stated that the train was traveling at a speed of between 30 and 35 miles per hour and he thought that the air brakes had been applied in emergency before the train collided with the cars on the siding. After the train came to a stop he walked toward the head end along the right side of the train and saw that the switch was set for the siding and latched, and that the switch lock was lying open on the ground with a short chain attached to it.

Brakemen Miller and Gottschall stated that they felt the air brakes apply in emergency, at which time the train was traveling at a speed of 30 miles per hour. After the train came to a stop Brakeman Miller went toward the head end of the train and found the switch lined for the siding and the lock lying nearby. Brakeman Gottschall went back to flag immediately and did not examine the switch until several hours later.

Brakeman Johnson, of extra 3888, stated that his train, eastbound, stopped at Mapes about 11 a.m. to leave a car on the passing track. He operated the derail on the passing track, opened the main track switch and again closed it after the car had been placed on the passing track, and in locking the switch he pulled on the lock in order to see if it was securely locked although he stated that it would be possible that the lock might have partly closed and yet did not pull apart. He noticed no one around the switch at that time.

Conductor Fries, of extra 3888, stated that he was riding in the caboose as his train pulled by the east switch of the passing track at Mapes after having left a car at that point. He looked out of the window on the right side and saw that the derail was set and then looked toward the left side to see if the switch was locked. He saw the lock hanging in the staple, but could not say definitely that it was securely locked.

Leonard Hahn, 11 years of age, and his brother Arthur, 9 years of age, who live on the south side of the track a short distance east of the east switch of the passing track at Mapes, stated they were sent to the section house for water. They went directly across the track and then westward along the track to the section house, a distance of about 1,950 feet, and on their way they placed two stones on the track, their purpose being to see if a train would smash them. On their way back they found that the switch was not entirely locked and Arthur, wanting to see how it worked, took the lock out of the staple and together they raised the lever but were not able to throw the switch entirely over, upon hearing a train approaching they tried

to close the switch but were unable to do so and then continued on their way home. They reached their home before the train arrived and were standing outside when the accident occurred. Leonard Hahn stated that they did not have any keys with which they might have unlocked the switch.

Section Foreman Miller, in charge of the section on which this accident occurred, stated that he had been working at a point about 1,500 feet west of the western end of the passing track at Mapes on the day of the accident and was not near the east switch at any time except when he passed by on his motor car from his day's work at about 3.40 p.m., and he did not notice whether or not the switch lock was in the staple

Air Brake Inspectors Kline and Johnson stated that they made an air-brake test of the cars in extra 5108 before its departure from Avis on the day of the accident and found all brakes to be working properly.

#### Conclusions

This accident was caused by a cocked switch, which had been mischievously tampered with by two young boys

Examination of the switch stand after the occurrence of the accident showed it lined for the passing track and the lock lying on the ground beside the switch block. The marks on the north or right switch point, rails, and ties, indicated that the right pony-truck wheel of engine 5108 caught the switch point, causing this pair of wheels to straddle the points, while the following wheels of the engine caught the switch points in such a manner as to set the switch for the turnout, throwing the switch points all the way over, and forcing the lever down into the socket of the switch stand. Two young boys, one 11 and the other 9 years of age, had been playing with the switch to find out how it worked. They found the lock in the staple not securely closed, took it out and raised the lever, but were unable to throw the switch over entirely; they then tried to replace the lever as they found it, but were unable to do so, and returned to their home nearby, the accident occurring very soon thereafter

Brakeman Johnson, of extra 3888, was the last known employee to have operated this switch. He stated that he closed and locked the switch after his train had placed a car on the passing track about 11 a.m. on the day of the accident. It is apparent that Brakeman Johnson did not securely lock the switch; had he done so these boys could not have opened the lock and played with the switch and

this accident would not have occurred. In this connection, examination of the lock by the Commission's inspectors showed that no one should have been mistaken in thinking it locked, and that only by using more than ordinary pressure could the hook of the lock be slipped into place.

Observations made under conditions similar to those which existed on the day of the accident showed that when 1,000 feet from the switch it was possible to determine definitely the indication displayed. The paint on the targets was badly faded, however, and had this not been the case it is probable they could have been seen for a greater distance.

All of the employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully,

W. P. BOULD,

Director