INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LOUISVILLE & NASHVILLE RAILROAD AT OLIVE, FLA., ON JUNE 24, 1931.

July 24, 1931.

To the Commission:

On June 24, 1931, there was a derailment of a passenger train on the Louisville & Nashville Railroad at Olive, Fla., resulting in the death of 1 employee and 1 trespasser, and the injury of 6 passengers, 1 employee, and 2 trespassers.

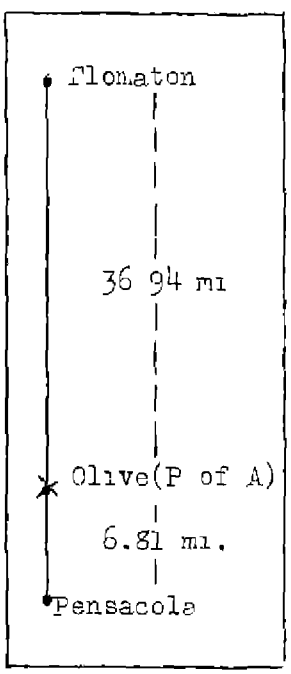
Location and method of operation

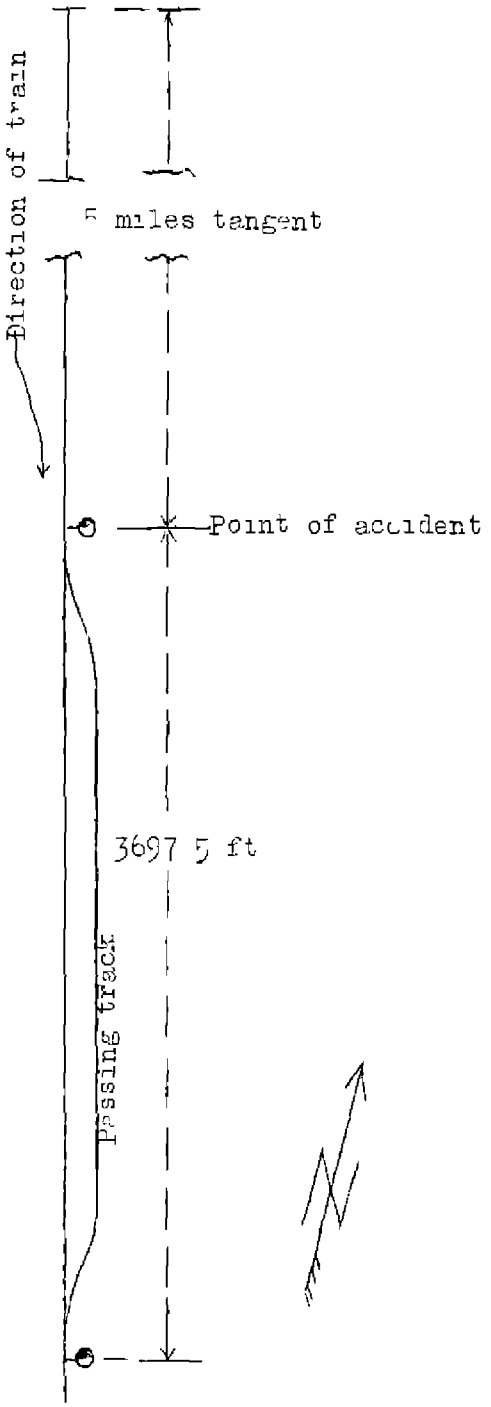
This accident occurred on that part of the Pensacola Division extending between Flomaton, Ala., and Pensacola, Fla., a distance of 43.75 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at the north switch of the passing track at Olive; approaching this point from the north, the track is tangent for approximately 5 miles, while the grade is slightly undulating, being 0.29 per cent ascending for southbound trains at the switch.

The passing track is 3,697.5 feet in length and parallels the main track on the east; the turnout is a No. 9½ turnout, and is a facing-point switch for southbound trains. The high switch stand, of the ground throw type, is located on the east side of the track; the switch target, of the two-position, upper-quadrant semaphore type, is located on top of the mast, with the switch lamp 14 feet 8 inches above the head block tie. The normal indication is green and the semaphore is vertical when the switch is closed, while it is red and the semaphore is horizontal when the switch is open.

The main track and turnout are laid with 90-pound rails, 33 feet in length, with an average of 18 ties to the rail-length, single-spiked and tie-plated; the main track is ballasted with 18 inches of slag. Both tracks are well maintained. The maximum permissible speed for passenger trains is 60 miles per hour.

The weather was clear at the time of the accident, which occurred about 5.40 a.m.





Inv. No. 1713
Louisville & Nashville R.R.
Olive, Fla.
June 24, 1931

Description

Southbound passenger train No. 3 consisted of 2 express cars, 1 baggage-mail car, 2 coaches, and 3 Pullman sleeping cars, hauled by engine 190, and was in charge of Conductor Eubanks and Engineman Villar. The cars were of all-steel construction with the exception of the second car, which was of steel-underframe construction This train left Cantonment, 8.21 miles north of Olive, at 5.28 a m , according to the train sheet, 14 minutes late, and was derailed at the north switch of the passing track at Olive while traveling at a speed estimated to have been between 55 and 60 miles per hour.

The entire train entered the passing track, the first mark of derailment appearing on a tie on the gauge side of the east rail of the passing track at a point 217 feet south of the north switch Engine 190 stopped on its left side parallel with and about 45 feet east of the passing track, with its front end 233 feet beyond the first tie mark; the tender was just beyond the engine, fouling the passing track. The first five cars were derailed in line with and fouling both tracks, remaining upright and coupled with the head end of the first car 225 feet beyond the engine; the east side of the second car was torn out, evidently having sideswiped the tender as it passed. The employee killed was the engineman, while the employee injured was the fireman.

Summary of evidence

Fireman Ivey, of train No. 3, stated that he had just finished putting in a fire and had gotten on his seat box at a point about 900 feet north of the switch; it was daylight, the sun was up, and the weather was clear. He observed that the switch target was displaying a clear indication, green, but when within about 20 feet of the switch points he observed that they were lined for the passing track. He at once shouted a warning to the engineman, who was sitting on the seat box in normal position and had started to sound or was sounding the station whistle signal, and then the engine entered the switch, at a speed of about 55 or 60 miles per hour, following which it turned over. Fireman Ivey stated that the engine rode properly en route, no unusual movement being noticed, that he had not noticed anything dragging, and that the air brakes had worked properly en route, but he did not think that any air-brake application was made just prior to entering the switch Statements of Conductor Eubanks, Flagman Giles, Baggagemaster McNeil, and Train Porter Harris, all of whom were riding back in the train, were to the effect that they were unaware of anything wrong prior to the accident, at which time the speed was from 55 to 60 miles per hour. After the accident members of

the crew observed that the switch was locked for the main track, with the switch target displaying a clear indication, green, but that the switch points were lined for the passing track Their statements also indicated that the brakes were not applied until the train was derailed. Conductor Eubanks said that the lug connecting the switch to the throw rod was broken, and apparently there was an old crack, as only about half of the metal of the lug had been holding, this half being a fresh break.

The last train to use the switch prior to the accident was northbound second-class train No. 28, consisting of about 60 cars and a caboose, which train took the siding and met southbound second-class train No. 27 about three and one-half hours prior to the occurrence of the accident Engineman Coenen, of train No. 28, stated that he brought the train to a stop on the passing track with the engine about 150 feet from the north switch. After train No. 27 passed, Engineman Coenen turned on the headlight, and in the meantime Brakeman Goodwin went forward to the north switch. Engineman Coenen said that he saw the brakeman throw the north switch, and as his engine got close to the switch the engineman saw that the east switch point was open but he could not see the west switch point. Engineman Coenen did not notice the position of the switch target, nor could he say whether the switch lamp was burning He estimated the speed of his train as it headed out from the passing track to the main track to have been about 4 or 5 miles per hour, and on looking back along the train he thought he saw two white lights at the north switch as the caboose came out of the passing track; he then received a proceed signal from the rear, and departed. Engineman Coenen was positive that the switch was properly lined for his train to come out on the main track and that he did not run through the switch, there being no unusual movement of the engine indicating that the switch had been run through. Brakeman Goodwin stated that after train No. 27 passed, he opened the switch, locked it, looked at the switch points, and then got on his engine. Brakeman Goodwin stated that he did not open the switch until after his own train had started to head out and that the engine was over a car-length from it, he then walked back toward the engine and boarded it on the engineman's side. He was positive that the switch was not run through. Fireman Carmichael saw Brakeman Goodwin open the switch, and also saw the switch target; the switch lamp was displaying a red indication and the west switch point was up against the rail. There was no unusual movement on the engine as it passed over the switch to indicate that the switch had been run through.

Conductor McEachin stated that after his train came to a stop on the passing track, he walked forward and had reached a point about four car-lengths from the engine

when train No. 27 passed His own train then started and he boarded the fourth car and rode to the north switch, where he got off, remaining at the switch while his train passed over it; the switch was lined for the passing track and locked, and the switch lamp was burning; he heard no rattle to indicate that the switch was loose. After his caboose passed over the switch about 2 feet, he unlocked the switch, closed it, and then locked it again, noticing nothing wrong with the way it handled, tested the lock and examined the switch points by shining his lamp on the rails, saying that the east point matched up against the east rail perfectly; he then gave the engineman a proceed signal, at which time the caboose was about two car-lengths north of the switch moving at a speed of about 2 or 3 miles per hour Conductor McEachin thought that Flagman Jordan was standing on the rear platform of the caboose and relayed the proceed signal from both sides to the head end of the train, first from the right side and then from the left. Conductor McEachin was of the opinion that train No. 3 must have split the switch; he was positive that he did not throw the switch between the trucks of his cabdose, and he also was positive that his train did not run through the switch.

Flagman Jordan stated that as his caboose passed the switch at a speed of about 4 miles per hour while moving out on the main track, there was no unusual movement to indicate that the switch had been run through; he was on the front platform steps and watched Conductor McEachin line the switch and then shine his light on the switch points. Flagman Jordan observed that the switch target displayed a green indication after the conductor had closed the switch, and said that he gave a proceed signal from each side of the caboose after the conductor got on; the flagman could not see the position of the switch points.

Section Foreman Colley stated that he last inspected the switch four days prior to the accident, at which time it operated properly, while two days prior to the accident he used the switch with a motor car and push car and it was all right then. After the occurrence of the accident he examined the switch and at that time the switch points were lined for the passing track, but the switch target was displaying a clear indication and the switch was locked for the main track. The lug or crank that holds the throw rod was broken, the break appearing to be new; there was no evidence of tampering. Marks appeared on the outside of the east switch point 6 or 7 feet in length, as though a wheel had rubbed up against it, the pressure being so great that something had to break, either the switch point or the lug, and it broke the lug. Section Foreman Colley thought the switch had been run through by a northbound train.

Roadmaster Batts stated that the broken lug showed a new break, although the discoloration in a small spot in the center of the break led him to believe that possibly a slight defect existed in the metal. There was no evidence of any wheels having been derailed at the switch; in his opinion the switch had been run through by a northbound train leaving the passing track, saying that had the switch been split by train No. 3, the derailment would have occurred at the switch points.

Examination of the track by the Commission's inspector after the wreckage had been cleared showed a mark, evidently caused by a wheel, on the east side of the east switch point; this mark was 6½ feet in length along the outside of the ball of the rail and extended to within 4 feet of the tip of the point. The first mark on a tie, 6 inches wide, appeared on the gauge side of the east rail of the passing track at a point 317 feet south of the north switch; this mark showed on 30 ties, approximately 50 feet, being more pronounced on some ties than on others, and had the appearance of something dragging. At a point 8 feet beyond where the first tie mark appeared, a splice bar on the inside of this rail was marked, as was the next splice bar on the outside of the rail, and then at a point 10 feet farther south there appeared the first mark on a tie on the outside of the east rail, showing on about 8 ties. At points 38 feet, 45 feet, and 48 feet, south of the first tie mark on the outside of the east rail, there were very light marks on the ball of the rail, but no corresponding marks on the opposite side of the track, these marks being 36 inches, 12 inches, and 18 inches long, respectively, and it was doubtful whether they were flange marks. The condition of the engine and tender was such that it was impossible to determine whether any part of this equipment had been dragging prior to the accident. The break in the lug, or crank, had the appearance of a new break, but at the time of this examination, several days after the accident, the metal was corroded to some extent; in the center of the break there appeared to be a defect in the metal, but whether or not this apparent defect weakened the crank is questionable.

Conclusions

This accident was caused by the damaged condition of a facing-point switch, which apparently had been run through by a train moving in the opposite direction.

Examination of the switch after the accident showed that it was locked for the main track and the switch target was displaying a clear indication, but the switch points were lined for the passing track. There were marks on the outside of the east switch point as though a wheel had rubbed against it, the pressure apparently breaking

the crank or lug that holds the throw rod; there was no evidence of malicious tampering. No repairs were made at the switch after the accident except to install a new stand; the switch points, frog, and track, were in the same alinement as before the accident and the gauge was proper. The indications were that the switch had been run through by a northbound train moving from the passing track to the main track.

Conductor McEachin, of northbound freight train No. 28, was the last person to have occasion to use the switch and he was positive that he did not throw the switch between the trucks of his caboose at the time his train headed out of the passing track, and equally positive that his train did not run through the switch, saying that he did not unlock the open switch until after the caboose had cleared it, following which he maintained that he closed the switch and locked it, then examined the switch points and saw that the east point matched up against the rail. The damage to the switch, however, coupled with the mark on the east switch point, point strongly to the conclusion that the switch had been run through, and apparently by train No. 28.

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 submitted,

W P. BORLAND,

Director.