

RAILROAD ACCIDENT INVESTIGATION

REPORT NO. 4106

MISSISSIPPI EXPORT RAILROAD COMPANY

MOSS POINT, MISS.

DECEMBER 27, 1966

DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

WASHINGTON

SUMMARY

DATE: December 27, 1966

RAILROAD: Mississippi Export

LOCATION: Moss Point, Miss.

KIND OF ACCIDENT: Rear-end collision

EQUIPMENT INVOLVED: Track motorcar & push car Yard locomotive

LOCOMOTIVE NUMBER: Diesel-electric unit 60

ESTIMATED SPEEDS: Slow 5-10 m.p.h.

OPERATION: Timetable, train orders; yard-limit rules

TRACK: Single; 9000' curve; 1.25 percent descending grade northward

WEATHER: Partly cloudy

TIME: 7:15 a.m.

CASUALTIES: 1 killed; 1 injured

CAUSE: Failure of crew members of the yard locomotive to maintain a proper lookout, and by failure of the carrier and a track foreman to provide adequate protection for the operation of the track cars

RECOMMENDATION: That the Mississippi Export Railroad Company immediately take such action as is necessary to provide for proper lookouts on train and yard movements and to provide adequate protection for the operation of maintenance-of-way on-track equipment

DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

RAILROAD SAFETY BOARD

RAILROAD ACCIDENT INVESTIGATION

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SYNOPSIS

On December 27, 1966, a rear-end collision occurred between a yard locomotive and a track motorcar with push car on the Mississippi Export Railroad at Moss Point, Miss. One maintenance-of-way employee was killed, and 1 maintenance-of-way employee was injured.

The accident was caused by failure of crew members of the yard locomotive to maintain a proper lookout, and by failure of the carrier and a track foreman to provide adequate protection for the operation of the track cars.

LOCATION AND METHOD OF OPERATION

The accident occurred on that part of the railroad extending between Pascalouga and Moss Point Jct., Miss., a distance of

5 miles. This is a single-track line over which trains operate, within yard limits, by timetable, train orders, and yard-limit rules. There is no block-signal system in use. Moss Point is 4 miles north of Pascalouga. A section tool house is adjacent to the west side of the main track 427 feet north of the Moss Point station.

The collision occurred on the main track, within yard limits, 570 feet north of the Moss Point station and 143 feet north of the section tool house.

A compound curve to the right, having a maximum curvature of $9000'$, extends northward from south of the Moss Point station to a point a considerable distance north of the section tool house.

Details concerning the main track, carrier's operating rules, locomotive and track cars involved, damages, and other factors are set forth in the appendix.

DESCRIPTION AND DISCUSSION

About 7:00 a.m. the day of the accident, a track force consisting of a foreman and six trackmen placed a track motorcar and a push car on the main track at the Moss Point section tool house and proceeded about $3/4$ mile northward to repair a damaged switch. After arrival at the switch, the track force unloaded equipment from the push car and returned southward with the track cars to obtain a frog, which was stored near the section tool house.

As the track motorcar shoved the push car southward on the curve at Moss Point, the foreman and other members of the track force saw a yard locomotive standing on the main track opposite the station. Shortly thereafter, the track cars stopped near the section tool house and the trackmen loaded the frog onto the push car. The track force then reboarded the track motorcar for the return trip northward to the damaged switch, with the foreman operating the track motorcar. At this time, the yard locomotive was apparently approaching the track cars from the south, but no member of the track force noticed it. A few moments later, at approximately 7:15 a.m., the track cars started to move northward on the main track. About the same time, some of the trackmen first noticed the yard locomotive approaching from the south at a distance between 50 and 180 feet, according to their various estimates. One of

the trackmen called a warning, and five trackmen immediately jumped from the track motorcar, leaving the foreman and one trackman on that car. The foreman applied power in an attempt to avoid a collision by having the track cars outrun the yard locomotive. However, before the track cars were able to increase speed materially, the push car at the rear of the track motorcar was struck by the yard locomotive, 143 feet north of the Moss Point section tool house.

The track foreman was injured. The trackman remaining on the track motorcar was killed. He fell to one side of the track structure as a result of the impact and was struck by appurtenances of the locomotive.

At 7:00 a.m. the day of the accident, a yard crew consisting of an engineer, conductor and two brakemen reported on duty at Moss Point for switching operations with road-switcher type diesel-electric unit 60. Soon afterward, the yard locomotive entered the main track at a switch located a short distance north of the section tool house, evidently after the track cars had left the tool house and proceeded toward the damaged switch. The yard locomotive then moved southward on the main track and, at approximately 7:05 a.m., stopped in front of the station without any crew member having seen the track cars involved. After the yard locomotive stopped at the station, a trainmaster boarded it and gave the conductor and front brakeman copies of switch lists together with verbal instructions concerning switching operations to be performed in the vicinity of Moss Point Jct. No mention was made of the operation of the track cars. When the trainmaster alighted from the locomotive, the engineer released the independent brake. The bell was not rung nor the whistle sounded before the yard locomotive moved northward in reverse, on the descending grade at Moss Point, without power being applied. The long hood of the locomotive was at the north end. The engineer was at the controls on the west side of the control compartment. The conductor and rear brakeman were seated at the side window on the east side of the control compartment. The front brakeman was standing in the middle of that compartment; hence, his view in the direction of movement was obstructed.

According to the conductor's and rear brakeman's statements, they studied and discussed the switch lists as the yard locomotive proceeded northward from the Moss Point station, and they did not see the track cars at any time while en route to the

collision point. The engineer said he was unable to see the track while the yard locomotive moved northward from the station, due to the long engine hood, track curvature, and his position on the west side of the control compartment. He said that neither the conductor nor the rear brakeman warned him of anything being on the track, and that he was unaware of anything being wrong before he saw one of the trackmen, who had jumped from the track motorcar immediately before the collision. According to the engineer's statements, the yard locomotive was moving between 5 and 10 miles per hour at that time, and he realized from the trackman's appearance and actions that something was wrong. The engineer promptly fully applied the independent brake. Immediately afterward, before its speed was reduced, the yard locomotive struck the push car coupled to the rear of the track motorcar. The conductor and two brakemen were unaware of anything being wrong before the engineer applied the independent brake.

According to statements of the conductor, about 10 or 12 months before the accident a trainmaster had verbally instructed conductors to inform brakemen that both conductors and brakemen were not to give signals or instructions to engineers from what was formerly the fireman's position in the control compartments. Statements made by the two brakemen involved in the accident, as well as those made by two trainmasters, tend to corroborate the conductor's statements. However, the trainmasters also stated that they were unable to recall if their verbal instructions included those occasions when yard locomotives were operating on running tracks and switching was not being performed.

Another carrier official stated that the carrier has no rules or instructions governing the operation of track motorcars.

FINDINGS

Under the carrier's operating rules, the yard locomotive was authorized to operate on the main track within yard limits and was required to move with caution unless the main track was seen or known to be clear. The rules require that the bell must be rung when a locomotive is about to move and also provide that in case of an accident within yard limits, the responsibility rests with the approaching train or locomotive. It is evident that the main track

was not clear as the yard locomotive proceeded northward from the Moss Point station. Since the engineer was unable to see the track in the direction of movement and no other crew member was maintaining a lookout in that direction, it is also evident that the yard locomotive was not being operated with caution as it proceeded from the station, resulting in the accident.

The investigation revealed that carrier officials apparently issued verbal instructions which restricted conductors and brakemen from calling signals or instructions to engineers from what was formerly the fireman's position in locomotive control compartments. Under certain circumstances, such instructions may result in trains or locomotives moving without proper lookout being maintained. However, in the instant case, the locomotive involved was engaged in yard service requiring only relatively short movements. Under these circumstances, the conductor or one of the brakemen could have maintained a proper lookout from the platform at the north end of the locomotive and signalled the engineer to stop when the track cars were seen to be occupying the track on the curve north of the station. Thus, the accident could have been avoided.

The investigation also revealed that the carrier had not issued any rules or instructions governing the movement of track cars or similar on-track equipment. Hence, the track foreman evidently was not required to take any particular course of action to protect the track cars when he and other members of the track force saw the yard locomotive occupying the main track at the Moss Point station. However, it is evident that members of the track force did not maintain a proper lookout when they boarded the track motorcar after loading the frog onto the push car, and thereby failed to see the approaching yard locomotive in sufficient time to take any action to avoid the collision.

CAUSE

This accident was caused by failure of crew members of the yard locomotive to maintain a proper lookout, and by failure of the carrier and a track foreman to provide adequate protection for the operation of the track cars.

RECOMMENDATION

It is recommended that the Mississippi Export Railroad Company immediately take such action as is necessary to provide

for proper lookouts on train and yard movements and to provide adequate protection for the operation of maintenance-of-way on-track equipment.

*Dated at Washington D. C. this
24th day of April 1967.
By the Federal Railroad Adminis-
tration, Railroad Safety Board*

BETTE E. HOLT
Acting Executive Secretary
Federal Railroad Administration

APPENDIX

Track

Northward on the main track from the Moss Point station there is a compound curve, having a maximum curvature of 9000' to the right, 570 feet to the collision point and a considerable distance northward. In this area the average grade for north-bound movements is 1.64 percent descending. The grade is 1.25 percent descending at the collision point.

Carrier's Operating Rules

30. Except in instances of momentary stops and starts in connection with continuous switching movements, the engine bell must be rung when an engine is about to move and while approaching and passing stations and public crossings at grade.

98. ***within yard limits, the main track may be used, clearing the time of first class trains.***

*** engines must move within yard limits with caution unless the main track is seen or known to be clear. In case of accident, the responsibility rests with the approaching train or engine.

Locomotive and Track Cars Involved

Locomotive 60 is provided with 24RL brake equipment, including a safety-control feature, actuated by release of downward pressure on the foot-valve pedal.

The track motorcar had a windshield and an aluminum canopy top. It was equipped with a 4-cylinder, 35-horsepower engine and a 4-speed transmission. It had a seating capacity for eight persons.

The push car had four wheels and a wooden platform. It was 7 feet long and 5 feet wide.

Damages

The yard locomotive stopped with the front end 20 feet north of the collision point and against the rear of the push car. It was not derailed, and was slightly damaged.

The track motorcar and push car were derailed and were slightly damaged.

Other Factors

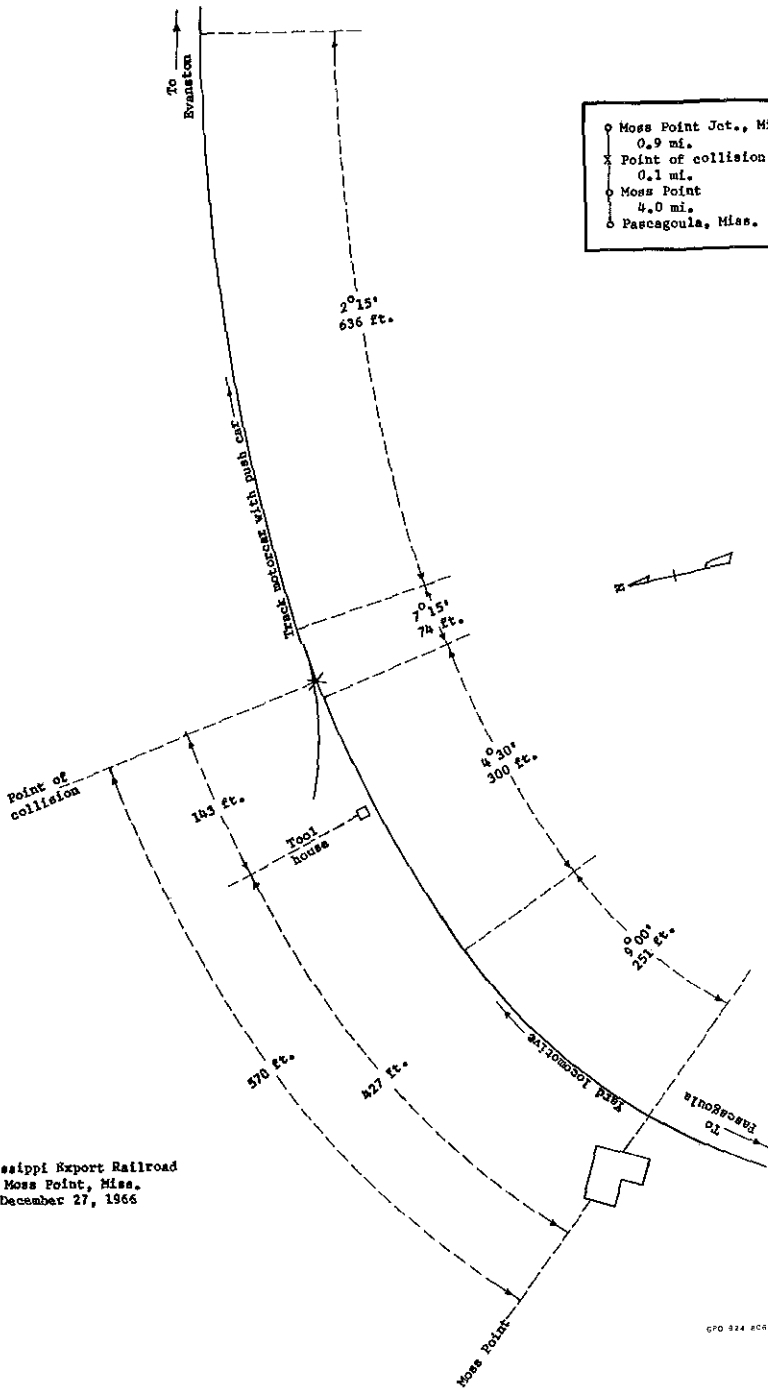
The accident occurred at 7:15 a.m., in partly cloudy weather.

The maximum authorized speed for yard locomotives in the accident area is 20 miles per hour.

At the time of the accident, the crew members of the yard locomotive had been on duty 15 minutes, after having been off duty 88 hours 30 minutes.

During the past 10 years 36 accidents involving track motor-cars were investigated. These accidents resulted in the death of 49 persons, and in the injury of 85 persons.

- Moss Point Jct., Miss. 0.9 mi.
- × Point of collision 0.1 mi.
- Moss Point 4.0 mi.
- Pascagoula, Miss.



Mississippi Export Railroad
 Moss Point, Miss.
 December 27, 1966