

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3418
MISSOURI PACIFIC RAILROAD COMPANY
IN RE ACCIDENT
AT MALVERN, ARK., ON
AUGUST 7, 1951

SUMMARY

Date: August 7, 1951

Railroad: Missouri Pacific

Location: Malvern, Ark.

Kind of accident: Collision

Equipment involved: Passenger train : Automobile

Train number: 21 :

Engine number: Diesel-electric :
units 8013A and
8002A

Consist: 15 cars :

Estimated speeds: 70 m. p. h. : Standing

Operation: Signal indications

Track: Single; tangent; level

Highway: Tangent; crosses tracks at angle
of 90°; level

Weather: Clear

Time: 1:28 a. m.

Casualties: 50 injured

Cause: Automobile becoming stalled on track
near rail-highway grade crossing

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3418

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

MISSOURI PACIFIC RAILROAD COMPANY

October 1, 1951

Accident at Malvern, Ark., on August 7, 1951, caused by
an automobile becoming stalled on the track near
a rail-highway grade crossing.

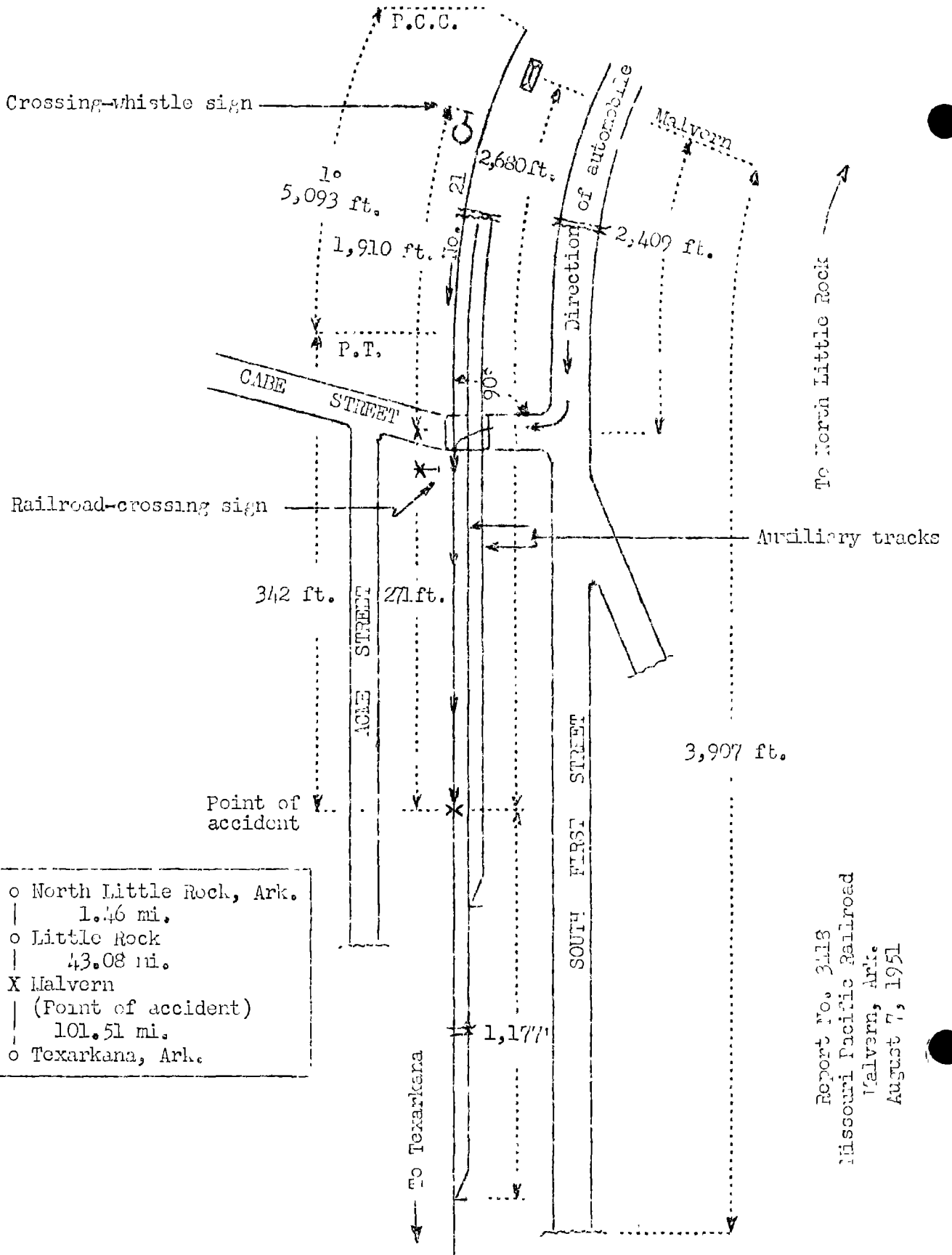
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On August 7, 1951, there was a collision between a passenger train on the Missouri Pacific Railroad and an automobile near a rail-highway grade crossing at Malvern, Ark., which resulted in the injury of 38 passengers, 2 railway-mail clerks, 2 train-service employees, and 8 dining-car employees.

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. 3418
 Missouri Pacific Railroad
 Malvern, Ark.
 August 7, 1951

Location of Accident and Method of Operation

This accident occurred on that part of the Arkansas Division extending between North Little Rock and Texarkana, Ark., 146.05 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by signal indications. The accident occurred on the main track at a point 45.05 miles south of North Little Rock, 2,680 feet south of the station at Malvern, and 271 feet south of the point at which the railroad is crossed at grade by Cabe Street. In the immediate vicinity of the point of accident two auxiliary tracks parallel the main track on the east. The main track and the auxiliary tracks are spaced 13 feet between track centers. The south end of the auxiliary track next to the main track connects with the main track at a switch located 1,177 feet south of the point of accident. From the north on the main track there are, in succession, a compound curve to the left, having a maximum curvature of 1°, 5,093 feet in length, and a tangent 342 feet to the point of accident and a considerable distance southward. The grade is level at the point of accident. Throughout a distance of 3,907 feet immediately south of the station at Malvern, South First Street parallels the tracks on the east. The west edge of the street is about 70 feet east of the center-line of the main track. At a point 2,409 feet south of the station, Cabe Street extends westward from South First Street and intersects the tracks at an angle of 90 degrees. The crossing is 23 feet in width. An area about 20 inches in width outside each rail of the main track and the area between the rails of the main track are surfaced with planking. The remaining area of the crossing is surfaced with ballast material to the level of the tops of the rails. The grade on Cabe Street on each side of the crossing is about 4 percent ascending toward the crossing. The crossing is practically level. West of the tracks, Acme Street extends southward from Cabe Street and parallels the tracks a short distance. The east edge of the street is about 55 feet west of the center-line of the main track. In the vicinity of the crossing South First Street is surfaced with gravel and Acme Street is unimproved.

A standard cross-buck railroad-crossing sign is located in the southwest angle of the intersection, 19 feet west of the center-line of the main track and 21 feet south of the center-line of the street. This sign is mounted on a mast, 11 feet 6 inches above the level of the tops of the rails, and

bears the words "RAILROAD CROSSING" in black letters on a white background. A sign bearing the numeral "2" over the word "TRACKS" is mounted on the mast underneath the cross-buck sign. A crossing-whistle sign for south-bound trains is located 1,910 feet north of the crossing.

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

14. Engine Horn or Whistle Signals.--* * *

NOTE.--The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. * * *

Sound.	Indication.
* * *	
(1) — — o ———	Approaching public crossings at grade. (Standard sign will designate point at which signal must begin.) To be prolonged or repeated until crossing is occupied by engine or car. * * *
* * *	

30. Ringing Bell.--* * * the engine bell must be rung * * * while approaching and passing public crossings at grade * * *

The maximum authorized speed for the train involved was 79 miles per hour.

Description of Accident

No. 21, a south-bound first-class passenger train, consisted of Diesel-electric units 8013A and 8002A coupled in multiple-unit control, one baggage-mail car, one coach-dormitory car, two coaches, one lounge-dining car, one sleeping car, one coach-dormitory car, one coach, one lounge-dining car, and six sleeping cars, in the order named. The first, fourth, and eighth cars were of lightweight steel construction, and the other cars were of lightweight aluminum alloy construction. All units of the train were equipped with tightlock couplers. This train departed from Little Rock, 1.46 miles south of North Little Rock, at 12:32 a. m., 12 minutes late, passed the station at Malvern at 1:27 a. m., and while moving at a

speed of about 70 miles per hour it struck an automobile which had become stalled on the main track at a point 2,680 feet south of the station at Malvern.

The automobile involved was a 1941 Pontiac sedan. It bore Arkansas 1951 license No. 296-863. The driver, who was the sole occupant, held a 1951 Arkansas driver's license. This automobile entered the crossing at Cabe Street from the east. It turned to the left on the crossing and proceeded southward from the crossing on the main track. It became stalled at a point 271 feet south of the crossing. A short time later it was struck by No. 21. The driver alighted from the automobile before the collision occurred.

The front truck of the first Diesel-electric unit of No. 21 was derailed 93 feet south of the point where the train struck the automobile, and both Diesel-electric units, the first six cars, and the front truck of the seventh car were derailed at the auxiliary-track switch, 1,177 feet south of the point of collision. The couplers between the Diesel-electric units and between the second Diesel-electric unit and the first car, the second and the third car, the third and the fourth car, the fourth and the fifth car, and the sixth and the seventh car were broken. There were no other separations between the units of the train. The first Diesel-electric unit stopped on its left side, about 30 feet west of the track and approximately parallel to it, with its front end toward the north and 185 feet south of the auxiliary-track switch. The second Diesel-electric unit stopped on its right side, with its front end 30 feet east of the track and 360 feet south of the auxiliary-track switch, and its rear end on the track structure. The first car stopped upright and practically in line with the track, with its front end against the rear end of the second Diesel-electric unit. The second car stopped with its rear end 44 feet west of the track. It leaned to the right at an angle of 30 degrees. The third car stopped on its left side, across the track and at right angles to it, with its front end near the rear end of the second car. The fourth car stopped across the track, with its front end against the rear end of the third car and its rear end 42 feet west of the track. It leaned to the right at an angle of 30 degrees. The fifth car stopped upright, with its front end against the rear end of the fourth car, and its rear end on the track structure. The sixth and seventh cars stopped upright and in line with the track. The Diesel-electric units and the first four cars were badly damaged, and the other derailed cars were somewhat damaged.

The automobile was demolished. The wreckage of the automobile stopped near the front end of the first Diesel-electric unit of No. 21.

The engineer and the fireman were injured.

The weather was clear at the time of the accident, which occurred about 1:28 a. m.

During the 30-day period preceding the day of the accident, the average daily movement over the crossing at Cabe Street was 31.1 trains. During the 24-hour period beginning at 7 a. m., August 15, 1951, 759 automobiles, 387 trucks, and 45 other vehicles passed over the crossing.

Discussion

The investigation disclosed that the driver of the automobile was driving south on South First Street, then turned west on Cabe Street and apparently intended to turn south on Acme Street. After the automobile entered Cabe Street the driver evidently became confused, and instead of continuing over the crossing to the junction between Cabe Street and Acme Street he turned to the left on the crossing and proceeded southward on the main track of the railroad. The automobile became stalled at a point 271 feet south of the crossing. The driver said that while he was attempting to remove the automobile from the track he heard the sound of the warning bell at a rail-highway grade crossing south of the point at which his automobile was standing. He then observed that a train was approaching from the north, and he immediately proceeded northward and gave stop signals. He did not have a light with which to give signals, and his hand signals were not observed by the enginemen of No. 21.

As No. 21 was approaching the point where the accident occurred the speed was 73 miles per hour. The enginemen were maintaining a lookout ahead from the control compartment at the front of the first Diesel-electric unit, and the members of the train crew were in various locations throughout the cars of the train. The brakes of the train had been tested and had functioned properly when used en route. The headlight and the oscillating signal light at the front of the first Diesel-electric unit were lighted brightly. The grade-crossing whistle signal was sounded for the crossing at Cabe Street and the bell was ringing. Because of curvature of the track

to the left and several freight cars which were standing on one of the auxiliary tracks the enginemen's view of the track ahead was restricted to a distance of several hundred feet. The engineer and the fireman observed the automobile about the same time. The engineer immediately made an emergency application of the brakes, and the speed of the train had been slightly reduced when the collision occurred.

A witness to the accident who resided in the immediate vicinity of the point of accident said he was awakened by the sound of the automobile motor. A few minutes later he became aware that the automobile was on the railroad track. He then arose and went outside. He observed a person walking around the automobile and immediately afterward the automobile headlights were extinguished. Soon afterward he heard the sound of the approaching train.

Cause

It is found that this accident was caused by an automobile becoming stalled on the track near a rail-highway grade crossing.

Dated at Washington, D. C., this first day of October, 1951.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.