

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3121
MISSOURI PACIFIC RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT JACKSONVILLE, ARK., ON
AUGUST 10, 1947

SUMMARY

Railroad: Missouri Pacific

Date: August 10, 1947

Location: Jacksonville, Ark.

Kind of accident: Rear-end collision

Trains involved: Passenger : Passenger

Train numbers: 26 : 226

Engine numbers: 5312 : 6624

Consists: 16 cars : 10 cars

Estimated speeds: Standing : 15 m. p. h.

Operation: Signal indications

Tracks: Double; tangent; 0.35 percent
ascending grade northward

Weather: Clear

Time: About 4:18 a. m.

Casualties: 1 killed; 177 injured

Cause: Failure properly to control speed
of following train in accordance
with signal indications

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3121

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

MISSOURI PACIFIC RAILROAD COMPANY

September 24, 1947

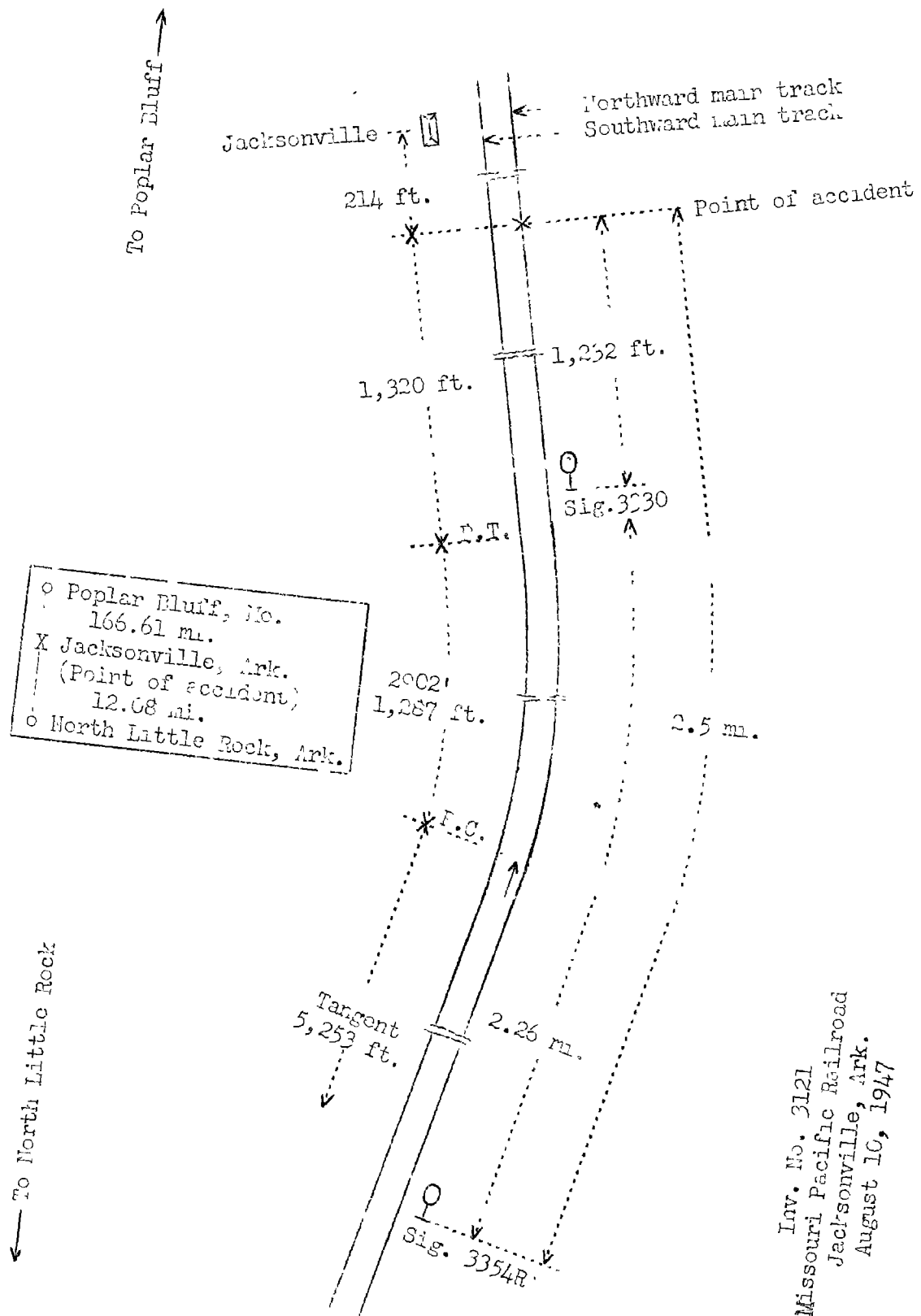
Accident at Jacksonville, Ark., on August 10, 1947, caused
by failure properly to control the speed of the
following train in accordance with signal indications.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On August 10, 1947, there was a rear-end collision between two passenger trains on the Missouri Pacific Railroad at Jacksonville, Ark., which resulted in the death of 1 railway mail clerk, and the injury of 161 passengers, 6 dining-car employees, 5 Pullman employees, 1 train porter and 4 train-service 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.



Location of Accident and Method of Operation

This accident occurred on that part of the Arkansas Division extending between North Little Rock, Ark., and Poplar Bluff, Mo., 178.69 miles, a double-track line in the vicinity of the point of accident, over which trains moving with the current of traffic are operated by signal indications. The accident occurred on the northward main track 12.08 miles north of North Little Rock and 214 feet south of the station at Jacksonville. From the south there are, in succession, a tangent 5,253 feet in length, a 2°02' curve to the left 1,287 feet, and a tangent 1,320 feet to the point of accident and some distance northward. The grade is 0.35 percent ascending northward.

Automatic signals 3354R and 3330, governing north-bound movements on the northward main track, are, respectively, 2.5 miles and 1,232 feet south of the point of accident. These signals are of the three-indication, color-light type. They are continuously lighted, and the involved aspects and the corresponding indications and names are as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
3354R	Yellow	PROCEED AT RESTRICTED SPEED THROUGH THE ENTIRE BLOCK	PERMISSIVE SIGNAL
3330	Red, with number plate	STOP, THEN PROCEED AT RESTRICTED SPEED THROUGH THE ENTIRE BLOCK (SEE RULE 509(a))	STOP AND PROCEED SIGNAL

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

DEFINITIONS.

* * *

Restricted Speed.--Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train or engine to be reduced.

* * *

11. A train finding a fusee burning on or near its track must stop and extinguish the fusee. Train may then proceed at restricted speed.

34. All members of engine and train crews must, when practicable, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.

35. The following signals will be used by flagmen:

* * *

(A red light,
Night signals (Torpedoes and
(Fusees.

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees.

When recalled and safety to the train will permit, he may return.

When the conditions require, he will leave the torpedoes and a lighted fusee.

The front of the train must be protected in the same way when necessary by the forward trainman or fireman.

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

* * *

509 (a). When a train or engine is stopped by a Stop, then Proceed at Restricted Speed indication it may proceed:

* * *

B.--* * * at restricted speed through the entire block, expecting to find a train in the block, broken rail, obstruction or switch not properly set.

* * *

510 (a). A train or engine approaching a signal displaying a Stop-indication must stop before the leading wheels pass the signal.

The maximum authorized speed for passenger trains in this territory is 75 miles per hour.

Description of Accident

No. 26, a north-bound first-class passenger train, consisted of engine 5312, nine express-baggage cars, one mail car, one baggage car, two coaches, one dining car and two sleeping cars, in the order named. The third and eleventh cars were of steel-underframe construction, and the remainder of the cars were of all-steel construction. This train departed from North Little Rock, the last open office, at 4:01 a. m., 1 hour 16 minutes late, and stopped about 4:15 a. m. on the northward main track in response to signals given by the flagman of a south-bound freight train, which had stopped on the southward main track after it had struck a motor vehicle on a grade crossing immediately north of the station at Jacksonville. No. 26 stopped with the rear end standing 214 feet south of the station, and about 3 minutes later it was struck by No. 226.

No. 226, a north-bound first-class passenger train, consisted of engine 6624, three baggage-mail cars, three coaches and four sleeping cars, in the order named. All cars were of steel construction. This train departed from North Little Rock at 4:05 a. m., 1 hour 15 minutes late, passed signal 3354R, which displayed proceed-at-restricted-speed, passed signal 3330, which displayed stop-then-proceed-at-restricted speed, and while moving at an estimated speed of 15 miles per hour it collided with No. 26 at a point 1,232 feet north of signal 3330.

None of the equipment of either train was derailed. The equipment of No. 26 was moved northward a distance of about 70 feet by the force of the impact. The south end of the tenth car of No. 26 was telescoped by the eleventh car a distance of about 30 feet. The fatality occurred in this car. The third, tenth, eleventh, twelfth, thirteenth and fifteenth cars were considerably damaged, and the fourteenth and sixteenth cars were badly damaged. The front end of the engine of No. 226 was badly damaged, and the cars of this train were more or less damaged.

The flagman of No. 26, and the engineer, the fireman and the flagman of No. 226 were injured.

The weather was clear at the time of the accident, which occurred about 4:18 a. m.

Discussion

No. 26, a north-bound passenger train, stopped about 4:15 a. m. on the northward main track at Jacksonville, with the rear end standing 1,232 feet north of signal 3330, in response to signals given by the flagman of a south-bound freight train, which had stopped on the southward main track after it had struck a motor vehicle on a highway crossing in the vicinity of the station at Jacksonville. About 3 minutes after No. 26 stopped, the rear end of this train was struck by No. 226, a north-bound passenger train.

When the flagman of No. 26 observed that his train was preparing to stop in the vicinity of Jacksonville he dropped a lighted fusee from the rear car at a point about 2,500 feet south of the point where the collision occurred. Just before his train stopped, the flagman alighted and proceeded southward to provide protection against No. 226. He said that at that time he could see the reflection of the headlight of No. 226, and he lighted a fusee and gave stop signals. He had reached a point about 700 feet to the rear of his train and was giving stop signals with the lighted fusee when the engine of No. 226 passed him.

When the engine of No. 226 was in the vicinity of signal 3354R, located 2.26 miles south of signal 3330, the speed was about 70 miles per hour. The enginemen called the proceed-at-restricted-speed indication displayed by signal 3354R, and the engineer made a 10 or 12-pound brake-pipe reduction. When the engine entered the curve immediately south of the tangent on which the accident occurred the speed was about 50 miles per hour. Then the fireman saw the stop-then-proceed-at-restricted-speed indication displayed by signal 3330 and a lighted fusee, and he called a warning to the engineer, who immediately moved the brake valve to emergency position. The speed of No. 226 was about 15 miles per hour when the collision occurred. The brakes of this train had been tested and had functioned properly en route. After the accident there was no condition found that would prevent proper application of the air brakes.

Under the rules, the proceed-at-restricted-speed indication displayed by signal 3354R required No. 226 to be so operated that it could be stopped short of a signal displaying a stop-then-proceed-at-restricted-speed indication. The stop-then-proceed-at-restricted-speed indication displayed by signal 3330 required No. 226 to stop short of this signal, then to be so operated that it could be stopped short of a preceding

train or an obstruction. The engineer of No. 226 said that during the trip involved, and in many instances during previous trips he had made on No. 226 when it was following closely behind No. 26, he had not reduced the speed of the train sufficiently to comply with the requirements of the rules governing the operation of trains moving under proceed-at-restricted-speed signal indications. In the instant case, before No. 226 passed signal 3354R, this train passed five consecutive signals displaying proceed-at-restricted-speed indications, and two succeeding signals, the indications of which changed from proceed-at-restricted-speed to proceed when the engine was approaching these signals. Throughout this territory the speed of the train was not less than about 60 miles per hour. Since No. 26 was not scheduled to stop at any station in the territory involved, the engineer of No. 226 expected No. 26 to proceed without stopping, and he operated his train accordingly, regardless of the restrictive signal indications, until the stop-then-proceed-at-restricted-speed indication displayed by signal 3330 was observed.

After the accident occurred this carrier issued instructions revising its definition of "Restricted Speed" to read: "A speed that will permit stopping short of another train or an obstruction, but not exceeding 15 miles per hour." Under the rules in effect at the time of the accident, the engineer of No. 226 was not required to make a specified reduction in the speed of his train when each restrictive signal indication was encountered, and therefore proper control of the speed depended entirely on his judgment.

Cause

It is found that this accident was caused by failure properly to control the speed of the following train in accordance with signal indications.

Dated at Washington, D. C., this twenty-fourth day of September, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.