

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2908
MISSOURI PACIFIC RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR PLUMERVILLE, ARK., ON
JULY 1, 1945

SUMMARY

Railroad: Missouri Pacific

Date: July 1, 1945

Location: Plumerville, Ark.

Kind of accident: Head-end collision

Trains involved: Passenger : Passenger

Train numbers: 116 : 117

Engine numbers: 6619 : 6603

Consist: 8 cars : 7 cars

Estimated speed: 45 m. p. h. : 15 m. p. h.
(backward motion)

Operation: Timetable and train orders

Track: Single; 3°08' curve; grade
practically level

Weather: Cloudy

Time: 12:22 p. m.

Casualties: 1 killed; 153 injured

Cause: Failure to obey meet order

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2908

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

MISSOURI PACIFIC RAILROAD COMPANY

- August 24, 1945.

Accident near Plumerville, Ark., on July 1, 1945, caused
by failure to obey a meet order.

REPORT OF THE COMMISSION¹

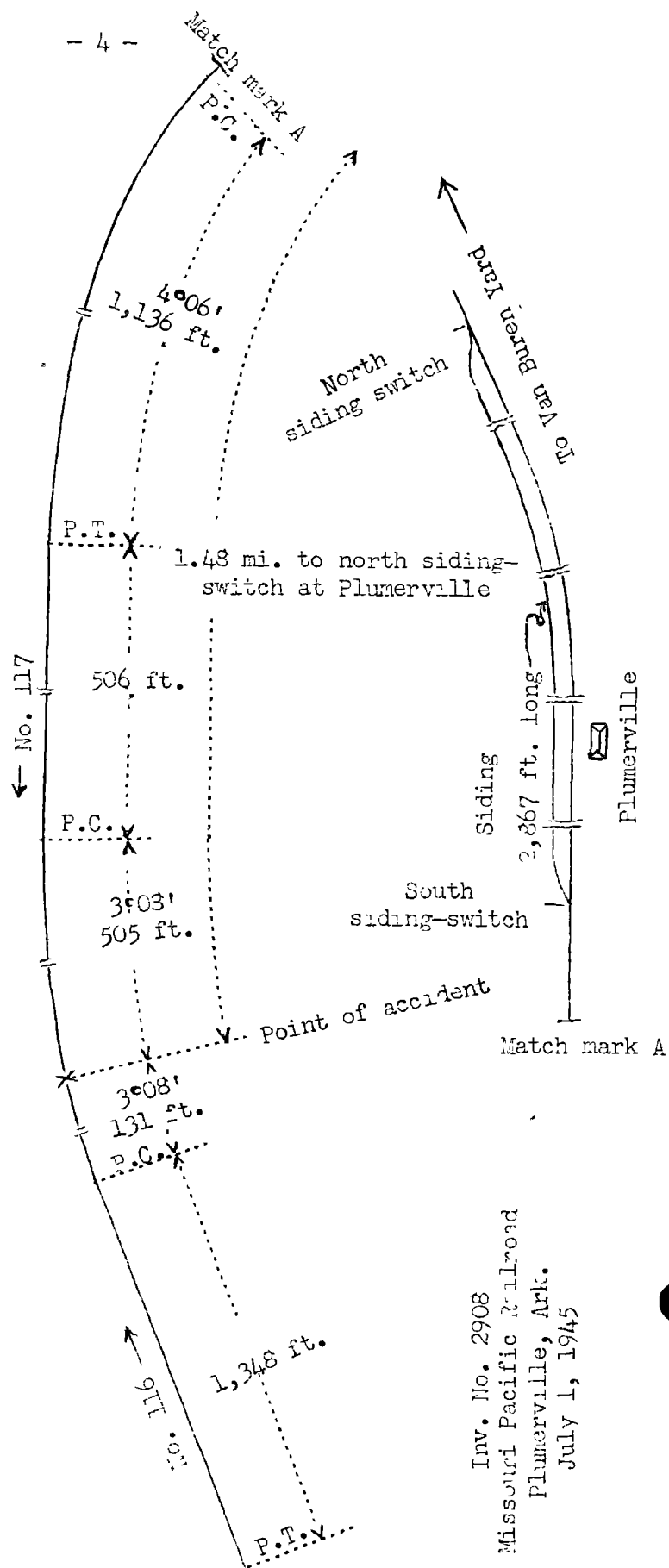
PATTERSON, Commissioner:

On July 1, 1945, there was a head-end collision between two passenger trains on the Missouri Pacific Railroad near Plumerville, Ark., which resulted in the death of 1 train-service employee, and the injury of 132 passengers, 1 railway-mail clerk, 12 dining-car employees, 1 train porter, 3 employees not on duty and 4 train-service employees on duty.

¹Under 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.

- o Van Buren Yard, Ark.
79.52 mi.
- o Russellville
25.24 mi.
- o Morrilton
5.73 mi.
- o Plumerville
1.48 mi.
- X Point of accident
3.93 mi.
- o Menifee
8.25 mi.
- o Conway
28.92 mi.
- o North Little Rock, Ark.

↓
To North Little Rock



Inv. No. 2908
Missouri Pacific Railroad
Plumerville, Ark.
July 1, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Southern Kansas and Central Divisions designated as the Van Buren Subdivision and extending northward from North Little Rock to Van Buren Yard, Ark., 153.07 miles, a single-track line in the vicinity of the point of accident over which trains are operated by timetable and train orders. There is no block system in use. At Plumerville, 42.58 miles north of North Little Rock, a siding 2,867 feet in length parallels the main track on the west. The north switch of this siding is 1,924 feet north of the station. The accident occurred on the main track 1.48 miles south of the north siding-switch. From the south there is a tangent 1,348 feet in length, which is followed by a 3°08' curve to the right 131 feet to the point of accident and 505 feet northward. From the north there are, in succession, a 4°06' curve to the left 1,136 feet, a tangent 506 feet, and the curve on which the accident occurred. The grade is practically level.

Operating rules read in part as follows:

14. Engine Whistle Signals.

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

Sound.	Indication.
--------	-------------

* * *

(n) ___ ___ o	Approaching meeting or waiting points. See Rule S-90.
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* * *

16. Communicating Signals.

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

Sound.	Indication.
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* * *

(b) o o	When running--stop at once.
---------------	-----------------------------

* * *

(1) _____	Approaching meeting or waiting points. See Rule S-90.
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* * *

S-71. A train is superior to another train by right, class or direction.

* * *

Direction is superior as between trains of the same class.

S-72. * * *

Trains in the direction specified by the timetable are superior to trains of the same class in the opposite direction.

S-89. At meeting points, the inferior train must take the siding * * *

* * *

S-90. On trains equipped with communicating signal system, the conductor must give signal 16 (1) to the engineman after passing the last station but not less than one mile preceding * * * a point where by train order it is to meet * * * an opposing train. The engineman will immediately reply with signal 14 (n). If the engineman fails to answer by signal 14 (n), the conductor must take immediate action to stop the train.

* * *

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.

* * *

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

* * *

204. * * *

* * *

Enginemen and firemen and, when practicable, forward trainman must read train orders, check with each other and have a definite and proper understanding of their requirements. Conductors and, when practicable, trainmen, must read train orders, check with each other and have a definite and proper understanding of their requirements.

204 (a). In addition to copies of all train orders and clearances delivered to each employe addressed, an extra copy will be furnished the engineman, and a copy to rear trainman. * * *

215. When clearing a train, the operator must fill out clearance, with proper address of train and the numbers of all train orders addressed to the train, if any; * * *

* * *

220 (a). Each train order must be delivered by the operator to the train addressed, unless the order is annulled by the train dispatcher.

* * *

FORMS OF TRAIN ORDERS.

* * *

S-A.

Fixing Meeting Points For Opposing Trains.

(1) No 1 Eng 25 meet No 2 Eng 31 at B.

* * *

* * *

Trains receiving these orders will run with respect to each other to the designated point and there meet in the manner prescribed by the rules.

* * *

L.

Annuling An Order.

(1) Order No 10 is annulled.

If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator, who will destroy all copies of the order annulled but his own, and write on that:

Annulled by Order No.....

* * *

S-P.

Superseding An Order Or a Part Of An Order.

This order will be given by adding to prescribed forms, the words "instead of"

(1) No 1 Eng 22 meet No 2 Eng 23 at C instead of B.

* * *

Form C

CLEARANCE

..... Station.....194 ...

C. & E.....

I have orders for your train,
numbers of which are shown hereon:
This does not affect any orders you
may have received.

ORDERS
NUMBERS

Conductor and Engineman must each have a copy, see that their train is correctly designated, and the order numbers on this form correspond with the orders delivered. * * *

* * *

Time-table special instructions provide that north-bound trains are superior to south-bound trains of the same class.

The maximum authorized speed for passenger trains in the vicinity of the point of accident is 55 miles per hour.

Description of Accident

Train order No. 234, addressed to No. 116 at Conway, 13.66 miles south of Plumerville, and to No. 117 at Russellville, 30.97 miles north of Plumerville, was made complete at 11:10 a. m., and read as follows:

No 116 Eng 6619 Meet
No 117 Eng 6603 at Plumerville

Train order No. 241, addressed to No. 116 at Conway and to No. 117 at Morrilton, 5.73 miles north of Plumerville, was made complete at 11:57 a. m., and read as follows:

No 116 Eng 6619 Meet No 117
Eng 6603 at Menifee instead
of Plumerville

Menifee is 5.41 miles south of Plumerville. Train order No. 242, addressed to the operators at Conway and Morrilton, was made complete at 12:01 p. m., and read as follows:

Order No. 241 is annulled

No. 116, a north-bound first-class passenger train, consisted of engine 6619, one baggage car, one baggage-mail car, three coaches, one dining-observation car and two coaches, in the order named. All cars were of steel construction. At Conway, the last open office, the crew of this train received copies of clearance Form C and train order No. 234. This train departed from Conway at 12:07 p. m., 19 minutes late, and while it was moving at an estimated speed of 45 miles per hour it collided with No. 117 at a point 1.48 miles south of the north siding-switch at Plumerville.

No. 117, a south-bound first-class passenger train, consisted of engine 6603, one baggage-mail car, one baggage car, two coaches, one tourist-sleeping car, one Pullman sleeping car and one dining-observation car, in the order named. All cars were of steel construction. At Russellville the crew of this train received copies of clearance Form C and train order No. 234. This train departed from Russellville at 11:35 a. m., 46 minutes late. At Morrilton, the last open office, the crew received copies of clearance Form C and train order No. 226 reading in part as follows:

Form C

Clearance

* * *

I have 1 orders for your train,
numbers of which are shown hereon:

* * *

ORDERS
NUMBERS
226

Order No. 226

No. 117 Eng 6603 wait at
* * *
Morrilton 1210 pm
* * *

In addition, the engineer received a copy of train order No. 241, which read as follows:

No 116 Eng 6619 Meet No 117
Eng 6603 at Menifee instead of
Plumerville
OCW

Annulled Order No 242

No. 117 departed from Morrilton at 12:10 p. m., 48 minutes late, passed the north siding-switch at Plumerville, where it was required by order No. 234 to enter the siding to meet No. 116, and stopped about 12:18 p. m., on the main track at a point about 1.5 miles south of the north siding-switch. About 4 minutes later, while this train was moving in backward motion at a speed of about 15 miles per hour it was struck by No. 116.

The engine of No. 116 was derailed and stopped on its right side, east of the main track and parallel to it, 220 feet north of the point of collision, and was badly damaged. The front truck of the first car was derailed. The engine of No. 117 was derailed and stopped upright and in line with the track, 320 feet north of the point of collision, and was badly damaged. The front truck of the first car was derailed, and the front end of the car was crushed inward about 6 feet.

It was cloudy at the time of the accident, which occurred at 12:22 p. m.

The engineer of No. 116 was killed. The fireman of No. 116, and the engineer, the fireman and the flagman of No. 117 were injured.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 20.2 trains.

Discussion

Train order No. 234, which established Plumerville as the meeting point between No. 116, a north-bound first-class train, and No. 117, a south-bound first-class train, was sent to Conway for delivery to No. 116 and to Russellville for delivery to No. 117. This order was made complete at 11:10 a. m., and copies of the order were delivered to the crew of No. 117 by the operator at Russellville about 11:30 a. m. Later, train order No. 241, which changed the meeting point between these trains to

Meniffee, 5.41 miles south of Plumerville, was sent to Conway for delivery to No. 116 and to Morrilton for delivery to No. 117. This order was made complete at 11:57 a. m. However, before train order No. 241 had been delivered to the crew of either train, train order No. 242, which annulled train order No. 241, was issued. This order was addressed to the operator at Conway and to the operator at Morrilton, and was made complete at 12:01 p. m. Under the rules, the operators at Conway and Morrilton were required to destroy all copies of train order No. 241 except one copy, which must be retained in the office file, and each operator was required to write the notation "Annulled by Order No. 242" on the office copy. The operator at Conway made the proper notation on his office copy of train order No. 241, filed the order and, about 12:05 p. m., delivered copies of train order No. 234 and clearance Form C to the crew of No. 116. The operator at Morrilton made the notation "Annulled Order No. 242" instead of the prescribed notation "Annulled by Order No. 242" on his copy of train order No. 241. After order No. 241 was annulled by the issuance of order No. 242 to the operators at Conway and Morrilton Plumerville continued to be the meeting point for Nos. 116 and 117, the same as though these two orders had not been issued.

In accordance with the rules, the operator at Morrilton delivered two copies of order No. 226, which required No. 117 to wait at Morrilton until 12:10 p. m., and two copies of clearance Form C to the engineer of No. 117 as the engine was passing the office. The clearance forms were folded separately with the train orders inside. However, the operator erroneously placed one of the copies of order No. 241 inside one of the clearance forms, but the number of this order was not written on the copies of the clearance form. The engineer gave the fireman the clearance form which contained only order No. 226 and retained for himself the clearance form which contained orders Nos. 226 and 241. In checking with each other they discovered the discrepancy, and the fireman asked the engineer to confer with the operator regarding the matter. The engineer informed the fireman that the notation "Annulled Order No. 242" was of no significance, and that this order superseded order No. 234 and changed the meeting point to Meniffee. However, this notation was written a considerable distance below the body of the order, and it was below the initials of the dispatcher authorizing the order. Also, the crew of No. 117 had not received an order bearing the number of 242, and order No. 241, a smaller number, would not be used in annulling order No. 242. In addition, the examples of train orders in the book of operating rules prescribe that the form, "Order No. ____ is annulled," shall be used in annulling an order under these particular circumstances.

No. 117 departed from Morrilton at 12:10 p. m. As it was approaching Plumerville the speed was about 65 miles per hour. The conductor was in the rear car and the flagman was in the rear vestibule of this car. These employees understood that, in accordance with the provisions of order No. 234, their train

was required to enter the siding at Plumerville at the north switch to meet No. 116. The flagman said that when their train was about 2 miles north of Plumerville he sounded the meeting-point signal on the communicating system. He did not hear the engine-whistle signal sounded in response to his signal, but he felt the brakes being applied and thought the engineer was preparing to stop the train in the vicinity of the north siding-switch. When the rear car passed the north siding-switch the flagman sounded the communicating signal for the engineer to stop the train. However, no action was taken by the engineer in response to the stop signal. After the train had passed the south siding-switch, the conductor opened the emergency valve. The engineer said that he did not hear any signal sounded on the communicating system. The train porter, who was on the engine, and the fireman said they heard the signals sounded when the engine was in the vicinity of the north siding-switch, and warned the engineer. No. 117 stopped about 1.5 miles south of the north siding-switch at Plumerville, then the train porter proceeded southward and was giving stop signals from a short distance south of his engine when the engine of No. 116 passed him. Soon after the train porter started southward to flag, No. 117 began to back northward in an attempt to clear for No. 116 at the siding at Plumerville, and was moving at a speed of about 15 miles per hour when the collision occurred. Because of vegetation on each side of the track and track curvature, the enginemen of No. 116 were unable to see No. 117 in time to take necessary action to stop their train short of No. 117. If immediate action to stop No. 117 had been taken by the train crew when the engineer failed to sound the engine-whistle signal in response to the meeting-point signal sounded on the communicating system the accident could have been averted.

At the time of the accident trains were being operated in this territory by timetable and train orders only. However, an automatic block-signal system is being installed in this territory, and the officers of the railroad estimate that the installation will be completed and placed in service about December 15, 1945.

Cause

It is found that this accident was caused by failure to obey a meet order.

Dated at Washington, D. C., this twenty-fourth day of August, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.