# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2806

THE ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT HAMLET, COLO., ON

JUNE 19, 1944

#### SUMMARY

Railroad: Atchison, Toneka & Santa Fe

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Date: June 19, 1944

Location: Hamlet, Colo.

Kind of accident: Side collision

Trains involved: Passenger : Passenger

Train numbers: 14 : 13

Engine numbers: 3720 : 3702

Consist: 10 cars : 10 cars

Speed: 28 m. p. h. : 4 m. p. h.

Operation: Timetable, train orders and

automatic block-signal system

Track: Single; tangent; practically level

Weather: Clear

Time: 3:44 a. m.

Casualties: 2 killed; 63 injured

Cause: Train fouling main track

without authority

# INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 2806

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

THE ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY

July 21, 1944.

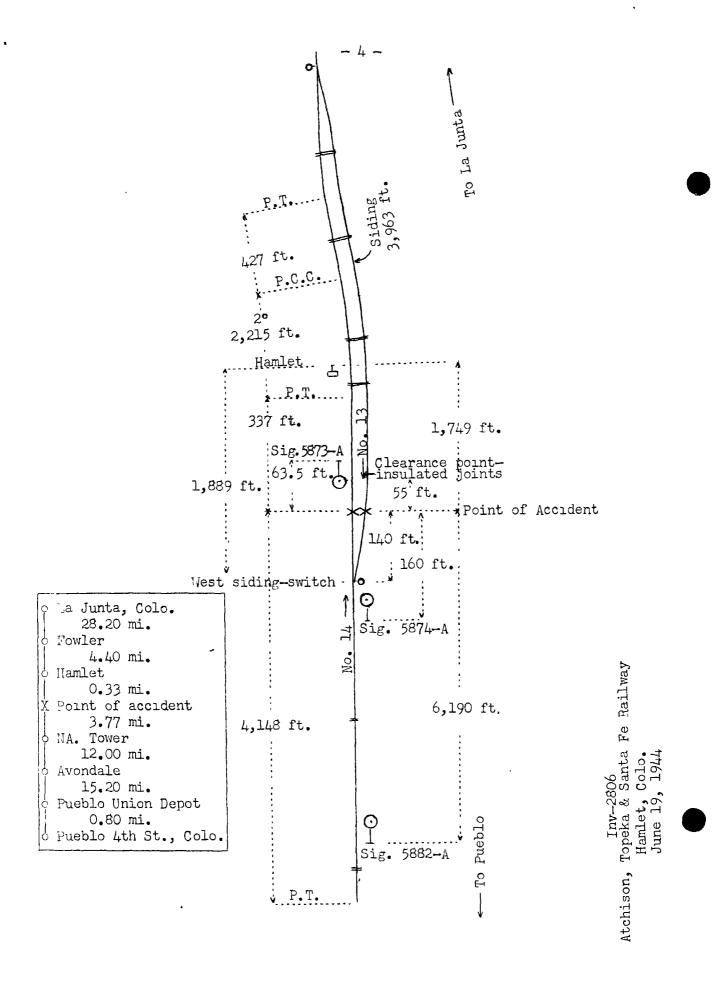
Accident at Hamlet, Colo., on June 19, 1944, caused by a train fouling the main track without authority.

REPORT OF THE COMMISSION

## PATTERSON, Chairman:

On June 19, 1944, there was a side collision between two passenger trains on the Atchison, Topeka & Santa Fe Railway at Hamlet, Colo., which resulted in the death of 2 passengers, and the injury of 58 passengers, 4 dining-car employees and 1 chair-car attendant.

<sup>&</sup>lt;sup>1</sup>Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Chairman Patterson for consideration and disposition.



## Location of Accident and Method of Operation

This accident occurred on that part of the Colorado Division designated as the Pueblo District and extending westward from La Junta to Pueblo, 4th Street, Colo., 64.7 miles. In the vicinity of the point of accident this was a single-track line over which trains were operated by timetable, train orders and an automatic block-signal system. At Hamlet, 32.6 miles west of La Junta, a siding 3,963 feet long paralleled the main track on the south. The west switch of this siding was 1,889 feet west of the station. The clearance point at the west end of the siding was 195 feet east of the switch. There was no mark or sign to indicate the location of the clearance point. The accident occurred 55 feet west of the clearance point and 140 feet east of the west siding-switch. The main track was tangent throughout a distance of 4,148 feet immediately west of the point of accident. From the east on the siding there were, in succession, a tangent 427 feet, a compound curve to the right 2,215 feet, the maximum curvature of which was  $2^{\circ}$ , and a tangent 337 feet to the point of accident At this point the grade was practically level.

The switch-stand for the west siding-switch was on the south side of the main track, and was of the hand-throw, intermediate-stand type. The switch-stand was provided with an oil lamp and a red circular target, 2.5 feet in diameter. When the switch was lined normally a green light was displayed. When the switch was lined for movement from the siding to the main track the target and a red light were displayed.

The automatic block system was arranged on the overlap principle and consisted of double-location signals at sidings and intermediate signals between stations. Signals 5882-A and 5874-A, governing east-bound movements, and signal 5873-A, governing west-bound movements, were located, respectively, 6,190 and 160 feet west and 63.5 feet east of the point of accident. These signals were of the three-indication, search-light type, and were continuously lighted.

Operating rules read in part as follows:

17. The headlight will be displayed to the front of every train by night. It must be concealed or extinguished when a train turns out to meet another and has stooped clear of main track, \* \* \*

S-72. \* \* \*

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Trains in the direction specified by the time-table are superior to trains of the same class in the opposite direction.

S-88(A). At meeting points between trains of the same class, the inferior train must clear the main track before the leaving time of the superior train. \* \* \*

#### FORMS OF TRAIN ORDERS.

S-Form A. Fixing Meeting Points for Opposing Trains.

### Examples:

(1) No 2 Eng 23 meet No 1 Eng 25 at B.

\* \* \*

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

Time-table special rules and regulations read in part as follows:

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\* \* \*Eastward \* \* \* trains are superior to Westward \* \* \* trains of the same class.

The maximum authorized speed for passenger trains in this vicinity was 50 miles per hour.

## Description of Accident

No. 14, an east-bound first-class passenger train, consisted of engine 3720, three baggage cars, three Pullman sleeping cars, one dining car and three coacnes, in the order named. The cars were of steel construction. At Pueblo Union Depot, 31.3 miles west of Hamlet, the crew received copies of train order No. 20, reading as follows:

No 14 Eng 3720 meet No 13 Eng 3702 at Hamlet

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No. 14 passed Avondale, 16.1 miles west of Hamlet, at 3:27 a. m., 5 nours 3 minutes late, passed NA. Tower, 4.1 miles west of Hamlet and the last open office, at 3:39 a. m., passed signals 5882-A and 5874-A, which displayed proceed, and while it was moving on the main track at a speed of 28 miles per hour the eighth car was struck by No. 13 at the fouling point of the main track and the turnout of the west siding-switch.

No. 13, a west-bound first-class passenger train, consisted of engine 3702, four baggage cars, two coacnes, one dining car, and three Pullman sleeping cars, in the order named. The cars were of steel construction. At La Junta, the crew received copies of train order No. 20. This train departed from Fowler, 4.4 miles east of Hamlet and the last open office, at 3:33 a. m., 8 minutes late, entered the east siding-switch at Hamlet, and while it was moving westward on the siding at an estimated speed of 4 miles per hour the engine entered the turnout of the west siding-switch and struck No. 14.

The ninth car and the front truck of the tenth car of No. 14 were derailed. The eighth and the tenth cars were slightly damaged. The right side of the ninth car was destroyed, and this car was otherwise badly damaged. The right cylinder of engine 3702 was considerably damaged.

It was clear at the time of the accident, which occurred about 3:44 a.m.

# Discussion

The investigation disclosed that the crews of both trains held copies of train order No. 20, which established Hamlet as the meeting point between No. 14, an east-bound first-class train, and No. 13, a west-bound first-class train. No. 13 was inferior by direction. This train was required to enter the siding at Hamlet at the east switch and to remain clear of the main track until No. 14 had been met. All employees concerned so understood.

No. 13 entered the siding at Hamlet at the east switch and nad proceeded westward a distance of 3,823 feet at a speed of about 4 miles per hour when the engine entered the turnout of the west siding-switch and struck the eighth car of No. 14. The last automatic signal No. 14 passed displayed proceed. The first warning the crew of No. 14 had of anything being wrong was when a separation occurred between the fourth and fifth cars, as a result of the collision, and the brakes became applied in emergency.

As No. 13 was approaching the west siding-switch, the enginemen were maintaining a lookout ahead. There was no condition of the engine that distracted their attention or obscured the view of the track ahead. When the engine reached a point about 1,500 feet east of the west siding-switch the engineer extinguished the headlight to indicate to the enginemen of No. 14 that No. 13 was into clear on the siding. The engine of No. 14 passed the engine of No. 13 at a point about 300 feet east of the west siding-switch, then the engineer of No. 13 turned the headlight on. The enginemen of No. 13 misjudged the distance from this point to the clearance point of the west siding-switch, and they first became aware of the actual location of the clearance point when their engine entered the turnout. Then the engineer moved the brake valve to emergency position, but the collision occurred before the brakes became effective. Signal 5873-A, a westward signal for main-line movements, was located north of the main track and 8.5 feet east of the clearance point near the west end of the siding. The engineer of No. 13 said his view of that signal was obscured by the front portion of No. 14.

There was no sign or mark to indicate the clearance point at the west end of the siding. If a distinctive sign had been provided, the engineer of No. 13 would have been aware of his location with respect to the clearance point, and this accident would have been averted.

## Cause

It is found that this accident was caused by a train fouling the main track without authority.

Dated at Wasnington, D. C., this twenty-first day of July, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL, Secretary.