

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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INVESTIGATION NO. 2746

THE ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY,

REPORT IN RE ACCIDENT

AT DEVORE, CALIF., ON

NOVEMBER 26, 1943

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SUMMARY

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Railroad: Atchison, Topeka & Santa Fe  
Date: November 26, 1943  
Location: Devore, Calif.  
Kind of accident: Side collision  
Trains involved: U. P. passenger : A. T. & S. F. engine  
Train numbers: First 208 : Extra 3778 West  
Engine numbers: 2708, 7018 : 3778  
Consist: 16 cars :  
Estimated speed: 25 m. p. h. : 15 m. p. h.  
Operation: Automatic block-signal system  
Track: Double; tangent; 2.2 percent  
ascending grade eastward  
Weather: Clear  
Time: 9:55 p. m.  
Casualties: 49 injured  
Cause: Unintentional throwing of a switch  
immediately in front of approaching  
train  
Recommendation: That the Atchison, Topeka & Santa Fe  
Railway Company install electric  
switch-locking at main-track hand-  
operated switches in automatic  
block-signal territory

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 2746

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

THE ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY

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January 20, 1944.

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Accident at Devore, Calif., on November 26, 1943, caused  
by the unintentional throwing of a switch immediately  
in front of an approaching train.

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REPORT OF THE COMMISSION<sup>1</sup>

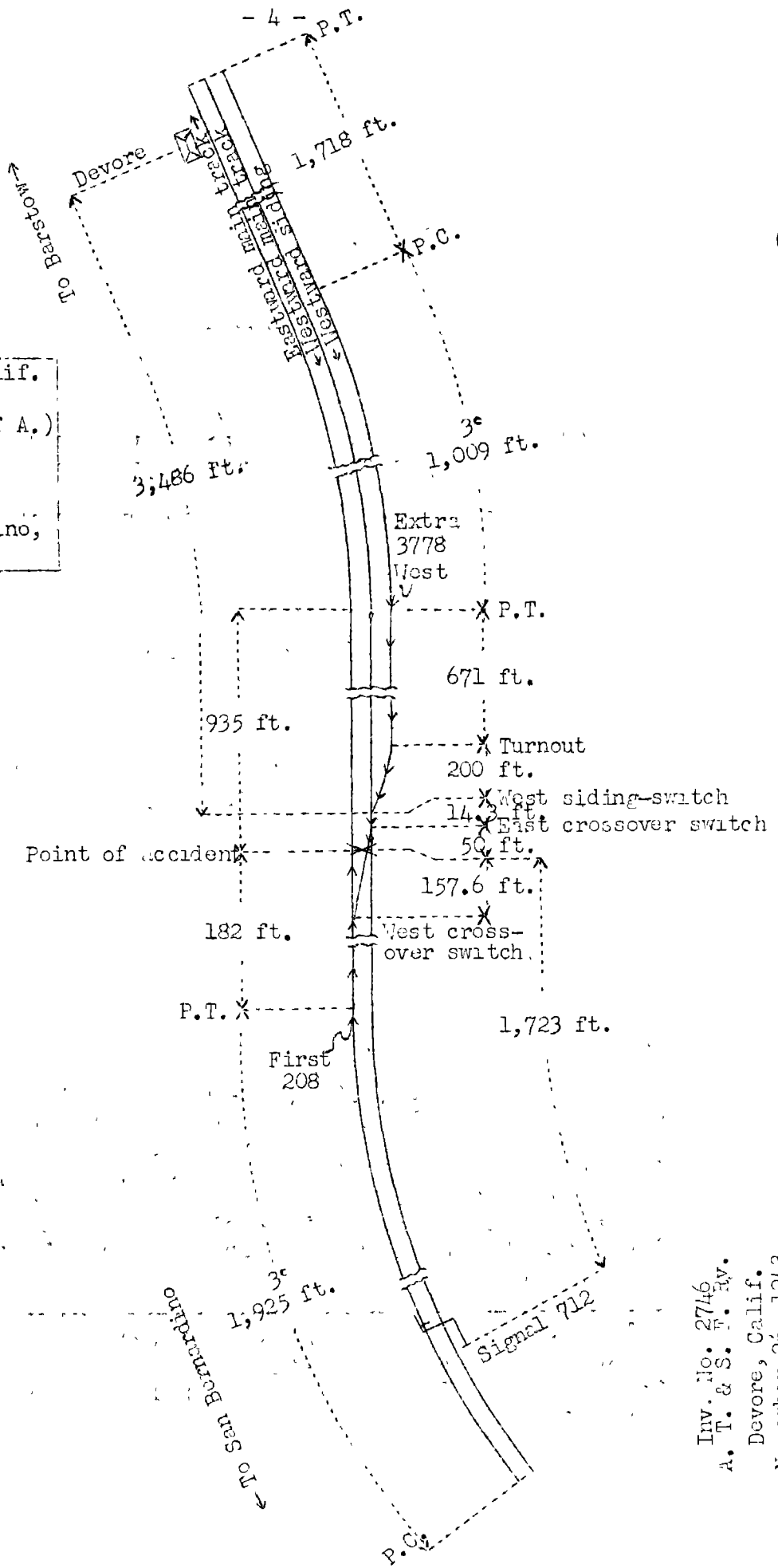
PATTERSON, Chairman:

On November 26, 1943, there was a side collision between a Union Pacific Railroad passenger train and an Atchison, Topeka & Santa Fe Railway engine on the line of the Atchison, Topeka & Santa Fe Railway at Devore, Calif., which resulted in the injury of 33 passengers, 13 dining-car employees and 3 coach attendants. This accident was investigated in conjunction with a representative of the Railroad Commission of California.

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<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.

- o Barstow, Calif.  
72.4 mi.
- x Devore (P. of A.)  
5.0 mi.
- o Ono  
5.4 mi.
- o San Bernardino,  
Calif.



Inv. No. 2746  
A. T. & S. F. Ry.  
Devore, Calif.  
November 26, 1943

### Location of Accident and Method of Operation

This accident occurred on that part of the Los Angeles Division designated as the First District and extending between Barstow and San Bernardino, Calif., 82.8 miles. Trains of the Union Pacific Railroad were regularly operated over this portion of the railroad. This was a double-track line over which trains moving with the current of traffic were operated by an automatic block-signal system, the indications of which superseded time-table superiority. The current of traffic was to the left. At Devore the westward siding was south of the westward main track, and its west switch was 3,486 feet west of the station. The east switch of a crossover 207.6 feet long, which connected the main tracks, was 14.3 feet west of the west switch of the westward siding, and was facing-point for movements from the westward main track to the eastward main track. The accident occurred at the fouling point of the eastward main track and the crossover. From the west on the eastward main track there was a 3° curve to the right 1,925 feet, which was followed by a tangent 182 feet to the point of accident and 935 feet beyond. From the east on the westward siding there were, in succession, a tangent 1,718 feet, a 3° curve to the right 1,009 feet, a tangent 671 feet, a No. 10 turnout 200 feet to the westward main track, a tangent 14.3 feet and a No. 10 turnout about 50 feet to the point of accident and 157 feet beyond. Throughout a distance of more than 1 mile immediately west of Devore the grade for east-bound trains varied between 2.06 percent and 2.25 percent ascending, and at the point of accident it was 2.2 percent ascending.

A derail was located on the south rail of the siding about 200 feet east of the west switch. This derail was connected to the west siding-switch and operated in conjunction with it. When the west siding-switch was lined for movement from the siding to the westward main track, the derail was in non-derailing position.

The switch-stand for the west siding-switch was on the south side of the westward main track and was of the low-stand, hand-throw type. The switch lamp was electrically lighted and the center of each lens was 5 feet above the level of the base of the rail. The switch-stand for the east switch of the crossover was of the high-stand, hand-throw type and was located south of the westward main track. The switch lamp was electrically lighted and the center of each lens was 7 feet 7 inches above the base of the rail. When the west siding-switch was lined for movement to the westward main track, and when the east crossover-switch was lined for

movement to the eastward main track, the switch lamp of each switch displayed a red aspect.

Automatic signal 712, which governed eastward movements on the eastward main track, was 1,723 feet west of the point of accident. This signal was of the two-unit, two-indication, searchlight type. The involved aspect, indication and name of this signal were as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Yellow-over-yellow, vertical	Proceed - Approach next signal prepared to proceed at restricted speed. * * *	Medium Speed Signal.

#### DEFINITIONS

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

Operating rules read in part as follows:

104. \* \* \*

When practicable, the engineman must see that the switches near the engine are properly lined.

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The maximum authorized speed for a movement through a No. 10 turnout was 15 miles per hour.

#### Description of Accident

First 208, an east-bound first-class U. P. passenger train, consisted of engine 2708 and 7018, 1 baggage car, 6 coaches, 2 dining cars and 7 coaches, in the order named. The cars were of steel construction. This train passed Ono, 5 miles west of Devore, at 9:40 p. m., 9 minutes late, passed signal 712, which displayed yellow-over-yellow, and while moving on the eastward main track at an estimated speed of 25 miles per hour the eighth car was struck by Extra 3778 West at the fouling point of the crossover.

Extra 3778 West, a west-bound train, consisted of engine 3778. About 9:55 p. m., after this train had moved from the westward siding to the westward main track, it entered the crossover at the east switch, and while moving at an estimated speed of 15 miles per hour it struck First 208.

The rear truck of the seventh car, and the eighth, ninth and tenth cars of First 208 were derailed and considerably damaged. The seventh and tenth cars remained upright and in line with the eastward main track. The eighth and ninth cars stopped on their left sides north of the eastward main track and parallel to it. Engine 3778 was derailed and stopped, considerably damaged, upright and in line with the crossover.

It was clear at the time of the accident, which occurred about 9:55 p. m.

#### Discussion

Extra 3863 West, a west-bound freight train, had stopped on the westward main track between the siding switches at Devore. Extra 3778 West entered the westward siding to pass Extra 3863 West, and stopped near the clearance point at the west siding-switch. Soon afterward the west siding-switch was lined for entry to the westward main track, and Extra 3778 proceeded. When the engine was a short distance west of the east crossover-switch, the fireman saw the aspect of the lamp for this switch change from green to red. He immediately called a warning to the engineer, who moved the brake valve to emergency position, but the engine entered the crossover and struck First 208 before the brakes became effective.

The investigation disclosed that the fireman of Extra 3863 lined the west siding-switch for movement of Extra 3778 from the siding to the westward main track, and gave proceed signals, then lined the east crossover-switch immediately in front of engine 3778. He said he thought the first switch was for operating the derail only, and that the second switch was for operating the west siding-switch. He was not aware that a crossover was located in this vicinity. It was dark, and he was carrying a lighted white lantern. His entire railroad experience covered only about 6 months. He had never been instructed regarding the manner in which derails operated in conjunction with siding switches.

If the switches of the crossover at Devore had been equipped with electric switch-locking, it would not have been possible to operate the switches to permit movement on the crossover when a train was moving on the eastward main track in the vicinity of the crossover, as in this case and the accident would not have occurred.

Cause

It is found that this accident was caused by the unintentional throwing of a switch immediately in front of an approaching train.

Recommendation

It is recommended that the Atchison, Topeka & Santa Fe Railway Company install electric switch-locking at main-track hand-operated switches in automatic block-signal territory.

Dated at Washington, D. C., this twentieth day of January, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.