

INTERSTATE COMMERCE COMMISSION

SECOND SUPPLEMENTAL REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ATCHISON, TOPEKA & SANTA FE RAILWAY NEAR CAJON, CALIF , ON JULY 15, 1923.

March 19, 1925.

To the Commission:

Under date of August 31, 1923, a report was made covering investigation of the derailment of a runaway freight train of the Union Pacific System on the line of the Atchison, Topeka & Santa Fe Railway, near Cajon, Calif., on July 15, 1923, resulting in the death of two employees and the injury of one employee.

The train involved in the accident had passed from the Union Pacific tracks to those of the Atchison, Topeka & Santa Fe Railway at Barstow, Calif. The distance from Barstow westward to Summit is 56.2 miles, and from Summit to San Bernardino the distance is 25.4 miles, a portion of which is on a descending grade which averages about 3 per cent for several miles. It was on this descending grade that the train got beyond control, resulting in its being derailed on a curve while moving at a high rate of speed. At that time the inspection of Union Pacific trains at Barstow amounted only to a running inspection. The train involved in the accident had picked up cars en route, cut in a helper before ascending the east slope of the mountain, and cut out the helper at Summit; no test of the air brakes was made on the first two occasions, while on the third occasion the only test made was to see that the brakes could be applied from the engine on the last car in the train. The report criticised the Atchison, Topeka & Santa Fe Railway because of its inadequate system of brake inspection and test.

The report covering the first supplemental investigation was issued under date of October 6, 1924. At that time it appeared that provisions had been made for a complete inspection and test of trains before their departure from Barstow, but it was stated that there had been no change in air-brake practice after the departure of trains from Barstow, that cars were picked up and set out, and helper engines cut in and cut out, with the train crews governed entirely by rule 876, of the Rules and Regulations of the Operating Department, and tire-table rule 24, which rules read as follows:

Rule 876:

"When the engine is detached, or train is cut between air cars, or parts, or when cars are added, the brakes must be tried from the engine before proceeding."

Time-table rule 24:

"Rule 876: In making this test one of the trainmen will watch last car in train and if brakes apply and release properly, proceed signal may be given. Trains must be stopped and this test made on all trains immediately before departure from Summit."

The officials of the railway were criticised in this first supplemental report for continuing to operate trains on this heavy grade under the provisions of the above-quoted rules alone, interviews with officials having indicated that there had been no changes of consequence affecting the handling of trains after leaving Barstow, while interviews with employees were to the same effect.

This report was questioned by Atchison, Topeka & Santa Fe Railway officials as failing to consider other rules appearing in the company's Air-brake Instruction Book which were amply sufficient to cover the situation, and consequently a second supplemental investigation was made of the air-brake conditions existing in this particular territory. As a result of this latter investigation it appears that the criticism contained in the first supplemental report was not well founded, inasmuch as there were in effect at the time, and still are in effect, two paragraphs in the "Instructions for Operating and Maintaining Air Brake Apparatus" which contain ample provision for meeting the situation where cars have been picked up or set out. These paragraphs read as follows:

"When cars are picked up between terminals such individual cars should be given the same test as is required for the train at the terminal (See "Terminal Test of Brakes") and the other brakes should be proven operative throughout the train by proving that the rear brake can be applied and released from the engine.

"Also, whenever the brake pipe is parted for any purpose, or after an extended stop, the brakes should be proven operative throughout the train in the manner just described.

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"Freight trains must be stopped by air brakes before more than one-half of the train had passed the summit, and when the stop is made trainmen (or inspectors) will examine the brakes to see that they are applied throughout the train, brakes will then be released from the engine, after which all retainers must be turned up, and air pressure fully restored before the train is started.

"The retainers should also be tested on any cars that have been picked up en route, and on the entire train unless previously tested (and Clearance Card Form 1184 issued) at a terminal."

Instead of failure on the part of the officials to provide for adequate inspection and test it appears that the criticism should have been confined to a practice involving non-observance of the rules.

The second supplemental investigation further developed that circular 201, issued under date of December 1, 1924, and effective that date, provides that no train may leave its initial terminal with less than 100 per cent operative air brakes except upon authority from a trainmaster, and that even this exception does not apply to westbound trains out of Barstow. This circular also refers to rule 876, previously quoted, and to rule 872, which prescribes the manner of making a terminal test; it also directs attention to two paragraphs in the "Instructions for Operating and Maintaining Air Brake Apparatus," one of which is the paragraph previously quoted prescribing what shall be done when a train reaches the summit of a grade, while the other reads as follows:

"Where the brake pipe had been closed or separated for any reason, the subsequent brake test required (see operating rule 876) will be made as follows, except at the summit of mountain grades, a terminal or other point where a train is picked up. The condition of brakes on cars picked up should be ascertained, but for the remainder of the train it is necessary only to determine that the rear brakes can be applied and released from the engine.

"Trainmen should advise the engineer of brakes cut out, or other changes made that affect the holding power.

"For method of testing retainers see 'Mountain Grade Work', also 'Terminal Tests. '"

The second supplemental investigation was made in February of this year and during the course of the investigation statements were taken from many witnesses, principally car foremen and car inspectors of the Atchison, Topeka & Santa Fe Railway, and from Atchison, Topeka & Santa Fe and Union Pacific train and engine service employees, all of whom either inspected or operated trains in the territory between Barstow and San Bernardino. Their statements indicate that the rules are being rigidly enforced and obeyed, that trains are not allowed to depart from Barstow westbound with less than 100 per cent operative air brakes and retaining valves, that these tests apply to Union Pacific trains as well as to those of the Atchison, Topeka & Santa Fe Railway, and that careful inspections and tests are made of cars picked up en route. Records of the examination of 54 freight trains moving westward from Barstow to San Bernardino during the first week of February show that they arrived at San Bernardino with the brakes cut out on only 2 out of the total of 2,469 cars making up the trains. It should also be noted that the requirement of 90 pounds brake-pipe pressure on westbound freight trains out of Barstow is still in effect, while there is also a requirement restricting the tonnage on the descending grade between Summit and San Bernardino to 75 tons per operative brake.

Conclusions

The second supplemental investigation of air-brake conditions on that part of the Atchison, Topeka & Santa Fe railway extending between Barstow and San Bernardino showed that rules which had been previously in existence are being enforced and obeyed on the part of all concerned, while the requirements as to the percentage of operative air brakes have been made more rigid through the issuance of circular 201.

Respectfully submitted,

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Director.