

December 1, 1914.

**IN RE INVESTIGATION OF ACCIDENT WHICH OCCURRED ON THE MISSOURI,
KANSAS & TEXAS RAILWAY OF TEXAS NEAR BARTLETT, TEXAS,
ON OCTOBER 19, 1914.**

On October 19, 1914, there was a derailment of a passenger train on the Missouri, Kansas & Texas Railway of Texas near Bartlett, Texas, which resulted in the death of 3 employees and the injury of 22 passengers, 3 employees and 2 mail clerks. After investigation of this accident, the Chief of the Division of Safety reports as follows:

The train involved in this accident was northbound passenger train No. 6, en route from Houston, Texas to St. Louis, Mo. At the time of the accident it consisted of 1 mail car, 2 baggage cars, 1 combination mail and baggage car, 1 chair car, 2 Pullman sleeping cars, 1 coach, 1 chair car and 3 Pullman sleeping cars, in the order given, hauled by locomotive No. 757 and was in charge of Conductor Massey and Engineman Johnson. According to the conductor's statement, it left Bartlett, its last stopping point, at about 4.00 a.m., 58 minutes late, and was derailed at a point about 1.65 miles north of Bartlett at about 4.10 a.m., while running at a speed estimated to have been between 35 and 40 miles per hour.

The locomotive came to rest on its left side at a point 462 feet north of the point of derailment. The mail car lay on its right side directly across the track and nearly at right angles to the same. The next five cars in the train were derailed but all remained upright and were not materially damaged.

This part of the Missouri, Kansas & Texas Railway of Texas is a single-track line, train movements being protected by the automatic block-signal system. The track is straight, on a slight fill, and at the point of accident is in a hollow at the foot of two grades, each about 1%. It is laid with 85-pound rails, 33 feet in length, with about 20 treated ties under each rail, the majority of the ties being pine. The track is single-spiked and no tie plates are used except on curves. The ballast consists of 6 inches of burnt clay, with about 12 inches of gravel underneath. The rails and ballast were placed in 1913 and in general all of the track was in good surface and alignment.

Examination of the track showed that the eleventh rail on the left side, north of bridge No. 901.2, which is about 1½ miles north of Bartlett, had turned over. There were flange marks on the web of this rail, and also the following rail, which indicated that the driving wheels of the engine had been running upon them. The turning over of these left hand rails resulted in the driving wheels on the right side of the engine dropping off the rail and running on the ties about 10 inches inside of the right hand rail. The engine continued on the ties parallel with the rails for a distance of about 54 feet, beyond which point the track was entirely demolished for a distance of about 400 feet.

Beginning at a point 21 rail lengths south of the bridge and going in a northerly direction the rails were found to be spread on alternate sides of the track for a distance of about

13 rail lengths, as follows: The twenty-first rail south of the bridge, on the right side, was spread one-half inch for about 12 feet; about one rail length farther north the left rail was spread three-quarters of an inch for a distance of about one rail length; three rail lengths farther north the right hand rail was spread three-quarters of an inch for about one rail length; 33 feet farther north the left rail was spread three-quarters of an inch for about one rail length, while five rail lengths farther north the right rail was spread one-half inch for about 12 feet. Between this point and the northern end of the bridge the track was in good condition.

About three rail lengths north of the bridge the left rail was spread three-quarters of an inch for about 12 feet. Twelve feet farther north the right rail was spread 1 inch for about 45 feet, followed by the spreading of the left hand rail $1\frac{1}{2}$ inches for a distance of about 40 feet. The right rail was then spread for one and one-quarter inches for about 39 feet, followed by the spreading of the left hand rail $1\frac{1}{2}$ inches for about 55 feet. The right hand rail was then spread $1\frac{1}{2}$ inches for about 33 feet, followed by the spreading and turning over of the left rail, the eleventh rail from the bridge.

The superintendent and road master stated that on the day following the accident they found the track to be spread in a similar manner for a distance of about 13 or 14 rail lengths at a point near mile-post No. 205, which is about $3\frac{1}{2}$ miles south of the point of accident.

Locomotive No. 757 is a freight locomotive of the 2-8-2

type built in June, 1914. It weighed 214,500 pounds on the driving wheels and had a total weight, engine and tender loaded, of 457,000 pounds. This locomotive was carefully examined but nothing was found which could in any way have contributed to the accident.

Conductor Massey stated that no application of the air brakes was made by the engineman at the time the accident occurred. He secured his lantern and on going forward found the fireman beside the track and asked him if the tender had jumped the rails the fireman replying that it was the engine that had jumped the track. He tried to secure a further statement from the fireman, but on account of the man's condition, was unable to do so. Conductor Massey thought the speed of the train was about 35 or 40 miles per hour. He further stated that his train left Bartlett at 4.00 a.m. and that he thought the accident occurred at 4.10 a.m.

Flagman Carter was walking through the sixth car in the train at the time of the accident. He at once got out and went back to flag. He did not know how fast the train was running, but thought it was making about ordinary speed. Flagman Carter further stated that he did not feel any application of the emergency brakes.

This accident was caused by the spreading and turning over of the rails on the left side of the track, the spikes on the outside being pushed outward to such an extent that the rails turned over without disturbing the spikes on the inside.

As stated above, the locomotive hauling this train was a freight locomotive. This type of locomotive had been used on

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this and other heavy, through trains since September 27, 1914, the speed being restricted to 45 miles per hour by superintendent's bulletin No. 1601, issued September 28, 1914. It is believed that the locomotive rolled from one side to the other to such an extent that it spread the track in the manner described, finally resulting in the turning over of the rails and the consequent derailment of the train.