

## INTERSTATE COMMERCE COMMISSION.

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August 15, 1922.

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE MISSOURI, KANSAS & TEXAS RAILWAY NEAR ALSUMA, OKLA., ON JULY 19, 1922.

To the Commission:

On July 19, 1922, there was a head-end collision between a passenger train and a freight train on the Missouri, Kansas & Texas Railway near Alsuma, Okla., resulting in the death of 2 employees, and the injury of 9 passengers and 6 employees.

**Location and method of operation.**

This accident occurred on the Tulsa Division extending between Osage and Wybark, Okla., a distance 79.1 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. Time-table directions are used in this report, as the northbound and southbound trains involved were traveling east and west, respectively, at the time of the accident. The accident occurred about one-half mile north of Alsuma, approaching this point from either direction the track is straight for more than a mile, while the grade is undulating, being 0.611 per cent ascending for northbound trains in the immediate vicinity of the point of accident. There was a dense fog at the time of the accident, which occurred at about 5.40 a.m.

**Description.**

Northbound passenger train No. 224 consisted of 1 coach, 1 combination compartment car, and 1 baggage car, in the order named, all of wooden construction, hauled by engine 208, and was in charge of Conductor Jones and Engineman Morris. On account of washouts, this train was annulled between Osage and Tulsa, and was being operated only between Tulsa and Wybark. Train No. 224 left Tulsa, 8.6 miles from Alsuma, at 5.08 a.m., 8 minutes late, the engine which was headed south was turned on the wye at Alsuma. After this train had proceeded about one-half mile beyond Alsuma it collided with extra 613 while traveling at a speed variously estimated to have been between 20 and 30 miles an hour.

Southbound freight train extra 613 consisted of engine 613 and a caboose and was in charge of Conductor Daharb and Engineman Stemple. Among the train orders received by the

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crew at Muskogee, 5 miles from Wybark, were copies of train order No. 2 Form 31, and train order No. 7, Form 31, reading as follows:

Train Order No. 2, Form 31:

"Nos. 227 - 229 - 226 & 230 of  
July 19th annulled between  
Wybark & Tulsa  
No. 84 & No. 81 No. 224 & No. 225  
of July 19th annulled between  
Tulsa & Osage"

Train Order No. 7, Form 31:

"Eng. 613 run Exa Muskogee to  
Tulsa has right over No. 84  
Wybark to Tulsa  
No. 3 wait Wybark until 4:10 am  
over due Tulsa Divn trains  
Wybark 2:05 am have arrived &  
departed over due trains  
Muskogee 2:05 am have arrived  
& departed except No. 3"

Extra 613 left Wybark, 38 miles from Alsuma, at 3:46 a.m., made a stop at Coweta, 21.2 miles beyond, on account of an over-heated journal, and after having proceeded about 16½ miles farther collided with train No. 224 while traveling at a speed variously estimated to have been between 12 and 20 miles an hour.

The engines recoiled from the impact and came to rest 4 or 5 feet apart, badly damaged, while the cars and caboose were only slightly damaged, the second pair of driving wheels of engine 613, and the leading wheels of the front truck of the tender of engine 208 were derailed. The employees killed were the engineman of train No. 224, and the flagman of extra 613.

Summary of evidence.

While Conductor Daharb, of extra 613, was securing copies of train orders Nos. 2 and 7, quoted above, from the operator at Muskogee, he instructed Head Brakeman Thomas to procure a copy of supplement No. 1-A to time-table No. 2-B, effective May 28, 1922, which was done, and after the conductor read the orders to the operator, they were checked with the supplement. On their way back to the train, Head Brakeman Thomas inquired of Conductor Daharb if train No. 224 was annulled. Conductor Daharb said extra 613 was en route in

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the same direction as train No. 224; however, on being corrected of this wrong impression by Head Brakeman Thomas, he again looked at his orders, and told Head Brakeman Thomas train No. 224 was annulled. Conductor Daharb delivered a set of these orders to Engineman Stemple, who read them back to him, after which Conductor Daharb entered the caboose, where he read the orders to Flagman Richardson, and then passed them to him for his information. Engineman Stemple read the orders to Fireman Wagner before the train departed, after work was done on the overheated journal and the train was again en route, it was getting close on the time of train No. 224, and as Fireman Wagner was uncertain about that train being annulled, he crossed over to the engineman's side of the cab, at this time being in the vicinity of Oneta, 10.6 miles from Alsuma, and asked him what arrangements had been made for meeting that train. Engineman Stemple told him that train No. 224 was annulled, however, as Fireman Wagner remained on the engineman's side of the cab after this conversation, Engineman Stemple again read the orders, looked at the time-table, and informed him the second time that train No. 224 was annulled. Engineman Stemple saw the headlight of train No. 224 through the fog when about 150 feet away, he immediately shouted to the fireman, made an emergency application of the air brakes, shut off steam, and jumped just before the accident occurred. Engineman Stemple stated that in conversation with the chief dispatcher, and also the fireman of a passenger train which arrived at Muskogee on the evening prior to the accident, he was informed of various washouts on the Tulsa Division, which led him to believe that there would be no opposing train to protect against on this trip. He stated that the air brakes were working properly, and the headlight was burning brightly. Conductor Daharb and Head Brakeman Thomas were riding in the caboose at the time of the accident, and the first intimation they had of anything wrong was when the air brakes were applied in emergency. Conductor Daharb discovered the mistake that had been made when he again read the orders after the accident. Conductor Daharb and Engineman Stemple admitted the accident was caused by their misunderstanding of train order No. 2, Form 31, being of the impression that train No. 224 was annulled between Tulsa and Wybark, when as a matter of fact this order clearly stated that train No. 224 was annulled between Osage and Tulsa.

Conductor Jones and Fireman Miller, of train No. 224, stated that the air brakes had been tested and were working properly. When about three car lengths from extra 613, Fireman Miller saw the headlight, shouted to Engineman Morris, and jumped. None of the other members of this crew was aware of anything wrong until the air brakes were applied in emergency.

### Conclusions.

This accident was caused by extra 613 occupying the main track on the time of train No. 224 due to a misunderstanding of a train order by Conductor Daharb and Engineman Stemple.

The evidence indicates that Conductor Daharb and Engineman Stemple observed the instructions relative to the reading of the train orders to the other employees designated by the rules, but it appears that this reading was done in a perfunctory manner when they failed to notice that train No. 224 was not annulled between Tulsa and Wybark.

Train order No. 7 gave extra 613 right over train No. 84 between Wybark and Tulsa. As trains Nos. 84 and 224 were both scheduled northbound trains, the receipt of this order should have indicated to the crew of extra 613 that opposing superior trains were being operated between Wybark and Tulsa, and should have called their attention to the fact that as no instructions were issued giving extra 613 right over train No. 224 between these points, it was necessary for extra 613 to protect against train No. 224.

Too much importance cannot be attached to the proper reading, checking, comparing and handling of train orders. In view of the fact that the attention of both Conductor Daharb and Engineman Stemple was called to train No. 224, by Head Brakeman Thomas and Fireman Wagner, respectively, they should have made certain of a correct understanding of the train orders before proceeding, and especially so when they knew that Fireman Wagner and Head Brakeman Thomas were not certain as to the status of train No. 224.

This accident again calls attention to the liability of error under the train order method of train operation, and the necessity for extending the block system. Had an adequate block system been in use on this line, this accident would no doubt have been averted.

The employees involved were experienced men, at the time of the accident the crew of extra 613 had been on duty less than 4 hours, after having been off duty 14 hours or more.

Respectfully submitted,

W. P. BORLAND,

Chief, Bureau of Safety.