IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE MISSOURI, KANSAS & TEXAS RAILWAY OF THEAS AT GRANGER, TRASS. ON JAGUARY 10. 1916.

February 18, 1918.

On January 10, 1918, there was a rear-end collision between two passenger trains on the Missouri, Kensas & Texas Railway of Texas at Granger, Texas, resulting in the death of 5 passengers and injury to 12 passengers, 1 employee on duty and 2 employees deadheading. After investigation, the Chief of the Bureau of Safety reports as follows:

The Sen Antonic Division of the Smithville District, on which this accident occurred, extends from Bellmead to Sen Antonia, a distance of 194.3 miles. With the exception of 10 miles of double track between Bellmead and Newitt, it is a single-track line, over which train movements are governed by time-table and train orders. Three-position semaphore type of automatic block signals are in use from Yaco to the north and of the Granger yard, but the collision occurred outside the automatic block signal zone, about 3,000 feet south of the last signal and about 103 feet south of the last bonded rail.

approaching the point of accident from the north the track is tangent for a distance of 1.84 miles. for which distance the view of enginemen is unobstructed. The grade approaching the point of accident from the north is generally slightly descending. At the tile of the socident the night was dark and it was a little hary and cool.

The passing track at Granger is located on the west side of the main track and extends north of the stetion for more than 3,700 feet. The north end of this track is known as the "Lake Track." There is a cut-off from this track to the main track, located about 550 feet north of the station, or opposite the east chute. Trains on route to San Antonio use this out-off, moving on to the Lake Track from whence they then divert to San Antonio.

The trains involved in this accident were the first and second sections of train No. 5, known as the "Kety Flyer," which runs daily from St. Louis, No., to Galveston, Texas. On the date of the accident it was running in two sections from Waso to Granger. When there are two sections of train No. 5, the first section diverts at Granger and runs to San Antonio as train No. 25, or lat No. 5, while the second section runs as train No. 5 from Granger to Galveston. It is customary for San Antonio trains to take coal at Granger but not customary

for the Galveston trains to do so at that point.

Trein 1st No. 5, in charge of Conductor Carney and Enginemen Carrett, consisted of locomotive 387, 1 all-steel baggage car, 1 steel-underframe coach, 1 steel-underframe chair car, 1 all-steel Pullman sleeping car and 5 steel-underframe sheeping cars, in the order named. It left Hillsboro on time at 10.20 p.m., and upon arriving at Bartlett, 6 miles morth of Granger, took the siding and met extra 285 and trein No. 26. Train 1st No. 5 then left Bartlett at about 1.50 a.m., about 22 minutes late, and at about 2.06 or 2.07 a.m. stopped at the coal chute located about 550 feet north of Granger station; while standing here its rear end was struck by train 24 No. 5.

Train 2d No. 5 was in charge of Conductor Welker and Engineene Hooney and consisted of locanotive 369, 2 ell-steel baggage cars, I steel-underframe coach, I steel-underframe chair car and 2 steel-underframe sleeping cars. This train left Hillsbore et 11.00 p.m., and upon arrival at Bartlett took siding and met extra 285 and train No. 26, the same trains that train 1st No. 5 met at Bartlett. Train 2d No. 5 left Bartlett about five or aix minutes after the first section and at about 2.09 a.m., while running at a speed variously estimated at from 10 to 25 miles an hour, collided with the rear and of train lat No. 5.

The front end of locomotive 389 of trein 2d No. 5 buried itself into the rear end of the rear sleeping ear of trein 1st No. 5 up to about the drawing room door of the latter. The underframe of this ear overrode the underframe of the car sheed, telescoping it for more than two-thirds of its length. The front truck of the rear sleeping ear was torn loose and was jemmed back against the rear truck, the front and middle pairs of wheels being dereiled. The remainder of the cars of train 1st No. 5 sustained little damage. The front end of the bocomotive of train 2d No. 5 was erushed, the pilot was broken off, the front engine frame was broken, the headlight was broken off, while other minor damages were sustained by the locomotive. The remainder of this train sustained practicelly no damage.

Enginemen Garrett, of trein 1st No. 5, stated that as his train passed the north end of the Lake Track at Granger, he noticed southbound freight train extra 853 occupying it and saw one of the brakemen of that train give him a proceed signal with his lantern. He stated that his train stopped at the coal chute north of Granger station between 2.03 and 2.05 a.m. and had been standing there not over three minutes when the collision occurred.

Firemen Miller, of train let No. 5, stated that upon arrival of his train at the soal chute, he got off the locomotive and started loading the tender with soal; at that time he saw the reflection of a headlight coming from the morth and knew that train 24 No. 5 was approaching. He also noticed at that time that the markers on the rear end of his arein were burning. Firemen Miller further stated that his train had been standing at the soal chute between 2 and 4 minutes when struck by train 24 No. 5.

Conductor Cerney, of train let No. 5, stated that his train arrived at the coal chate between 2.06 and 2.07 e.m. and the rear brokenen got off immediately with his white and red lanterns and started back, while he in the meantime attended to the duty of discharging and letting on passengers. He stated that the train had been standing two or three minutes when it was struck by train 2d No. 5 and he thought his ringman aid not have time to get back more than 4 or 5 car lengths. He said the markers on the rear of the train were burning brightly and he could see no resson say they should not have been seen by the engine crew of train 2d No. 5 in time to avoid the collision.

Reer Brekesso Card. of train 1st No. b. stated that on the might of the accident his train met extra 185 and train No. 0 st Bertlett and that he saw train La Mo. S behind them at that time. Just as soon as his train stopped at the coal chute at Granger, he storted back to flag and again see the reflection of the headlight of train 60 No. 5. He also noticed that the automatic block signal at the north end of the yard was in the saution position and saw it change to rea when train &d bo. b entered the next place to the rear. He stated further that he gave stop signals to the engine erow of the following train as he went back and when he had reached a point about 4 telegraph poles from his train, the enginemen of truin id No. 5 survered his signals with two blasts on the whistle, train 2d No. 5 than being 6 or 8 telegraph poles from his train. He estimated the apped of train ld No. 5 as it passed him to be 35 or 40 miles an hour and he stead that he called out to the eminemen but could not see bis at all. Rear Brakessa Utrd further stated that he is very particular about having his lights burning brightly and he is sure that on the night of the socident the merkers on the rear of his trein, as well as his hand lantorns, showed plainly.

Engineers Mooney, of train 2d No. 5, stated that leaving Bertlett be found the first block signal at eaution, and saw it change to clear before his train passed

it; he found ell of the other signals between Bartlett and Granger in the clear position. He stated that coming into Granger he saw extre 853 should, the headlights on the locomotive of that trein being out and he did not remember seeing any red light on it. He said that had be seen a red light on the looscotive he would have brought his trein down to a low speed until he sould see whether or not it was on the side track. He thought, however, that his locomotive was on the side treek. but wes fust about to apply the air brakes when he received a proceed signal from a member of the wew of the extre. After passing the can who gave him the proceed signal, he sew a red lantern and made a service spalication of the brakes. He stated that the red lanters was handled in such a vey that he understood it as a slow signal instead of a stop signal. He seid be saw no markers on the year of brain lat No. 5, that his electric headlight was burning poorly and that if the markers had been burning, they would have shown unbetter on account of the poor headlight. He further stated that the flagger of train lot No. 5 was close to the rear of his train but while he did not see the train until not more than 150 or 200 feet from it, he say the red lantern held by the flegmen when about 30 car knoths from it and in plenty of time to stop had the signal been properly given. He further stated that the speed of his trein at the time of the collision was between 20 and 25 miles Markour. Engineers Mooney elso claimed that he did not know it was customary for San Antonio trains to take coal at Granger.

Piremen Bernett, of train 2d Ro. 5, stated that upon entering the Granger yard. Enginemen Mooney nade a service application of the brakes. He stated that he himself was busy shoveling coal approaching the point of next-dent, but looked up when about 5 car lengths from the rear of train lat No. 5 and sew that the markers were burning. He did not know why Enginemen Mooney failed to see them unless it was because the glass was smoked or because they were burning dimly. He also said that he thought the flagman of train lat No. 5 was about 4 or 5 car lengths back from the rear of his train, but did not see the manner in which the stop signal was given. Fireman Bernett estimated the speed of his train at the time of the collision at 10 miles an hour.

Conductor Falker, of train 2d No. 5, stated that he knew nothing of the impending accident until the brakes were applied in emergency just before it occurred. He said that the speed of his train at that time was about 20 or 25 miles an hour.

Rear Brakeman Harroll, of train 2d No. 5, also estimated the speed at about 20 miles an hour at the time the emergency application of the brakes was made.

Enginemen Hewkins, of southbound extra 855, standing on the Lare Track at Oranger at the time of the socident, stated that about 3 minutes elapsed between the time train 1st No. 5 passed him and the time train 24 No. 5 passed. He noticed that the rear markers on train 1st No. 5 were burning at the time that train passed. He said that there was a red light on the tank of his locomotive and that as train 1st No. 5 approached, Brakeman Cole of his crew gave Enginemen Nooney a proceed signal in order not to cause him to make an unnecessary stop on their account. He thought the speed of train 2d No. 5 as it passed was about 35 or 40 miles an hour. Enginemen Hawkins further stated that after passing him, Enginemen Mooney sounded the whistle in answer to some signal, but he did not know to what signal.

Firemen Gunn, of extra 835, stated that he noticed that the markers on the rear of train lat No. 5 were burning at the time that train passed him. After train lat No. 5 stopped at the each chute and after train 2d No. 5 passed, he looked to see if he could see the markers on the rear of the first train, but on account of the electric headlight shining on them, he could not tell whether or not they were burning.

Brakemen Werner, of extra 835, stated that he moticed that one of the markers on the rear of train lat No. 5 was burning at the time it passed his train, but he did not notice whether or not the others were.

Brakemen Cole, of extra 855, stated that because of the red light on the rear of the tank of his train, he gave proceed signals to the engine arews of both trains lat and fd No. 5, so as to counteract that light. He said that about 5 or 6 minutes alapsed between the time the two trains went by and he judged the speed of train 24 No. 5 as it passed to be 45 miles an hour. Brakemen Cole also stated that the rear lights on train lat No. 5 were burning.

This accident was caused by the failure of Enginemen Mooney of train 2d No. 5 to operate his train under control within the yard limits of Granger, as required by rule 98-b and special time-cord instructions. Rule 98-b reads as follows:

"When more than one section of a passenger train, all but the first section must approach and pass all water tanks and coal chutes, and all stations that are regular or flag stops for such trains, completely under control so that under no cironestances whatever shall it be possible for it to strike the preceding section. Responsibility for safety at such points tests with the approaching section. A passenger train stopping at a station not shown on time-table as a stop or flag for such train, sust protect against following section."

The special time-card instructions referred to read as follows:

"All trains must move under control between Kign and San Marcos, and through Granger, Smithville and Houston yards."

Then Ingineses Mooney found the block at caution leaving Bertlett, he knew the treak was occupied by some train. Then he got to Tidewell, which is 3.3 miles south of Bertlett and 2 miles north of Granger and found no train there, he should have known that train 1st No. 5, or some other train was immediately sheak and should have approached Granger under control. Thile it shows to the controly in his statement, yet Engineers Mooney has been working on this district long engough to know that it is the practice of San Antonio trains to take soal at Granger. Engineera Money's statement that he misunderstood the signal given by Brakesen Curd as a slow signal does not excuse him. A red light is a stop signal and it was his duty to stop. His statement that had he seen a red light on the rear end of the locomotive standing in clear at the north end of the Lake Track, be would have reduced speed until be could have seen whether or not all wes clear, indicates that he has not made it a prectice strictly to observe this mest important signal. Unless signals are strictly observed, such unfortunate, and wholly avoidable accidents may be expected to occur.

Rear Brekessa Cura, of train 1st No. 5, had been in the service only about 8 weeks and had no previous reilroad experience. A more experienced flagman would probably have used a fusee in addition to a red lantern to flag train 2d No. 5, which might have prevented the accident.

The accident might also have been prevented if the block signal system in use on a portion of this line had extended through Granger yard.

Enginemen Mooney entered the service of the Missouri, Kenses & Texas Railway Company of Texas in Merch, 1889 and had a clear record. At the time of the secident he had been on duty 5 hours and 10 minutes after a lay-over at Hillsboro of 4 hours and 50 minutes.