## INTERSTATE GOIDERON CONTRISSION

PEPORE OF THE DIRECTOR OF THE TURBAU OF SATERY IN RE INVES-TIGATION OF AN ACCIDENT WHICH OCCUPRED ON THE AUCHISON, FOREXA & SALTA TO RAILDAY AS DEMING, M.M., OH AUGUST 80, 1924.

September 24, 1924.

To the Commission:

On August 30, 1924, there was a represent collision between a yard engine and a work train on the Atchison, Topeka & Santa Fe Railway at Demin, N. M., resulting in the death of one employee and the injury of seven employees.

Location and rethod of operation.

This additiont occurred on that part of the Enird District of the Pio Grande Division extending between Rincon and Deming, N. II., a distance of 55.5 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, he block-signal system being in use. The accident occurred on the rain line, vithin the yard limits of Deming, at a point approximately 40 feet east of the switch leading to the Southern Papilic transfer track; this is a facing-point stated for restbound trains and leads off the main track to the south. Approaching the point of accident from the east the track is tangent for more than a mile, then there is a 70 30' curve to the right 396 feet in length, followed by a tangent of considerable length, the accident occurring on this latter tangent at a point about 125 feet from its eastern end. The grade is level. The weather was clear at the time of the accident, which occurred at about 12.20 p. m.

## Description.

Yard engine 894, headed west, in charge of Engine Foreman Filkey and Engineman Taylor, consisted of one loaded gonfola car, ahead of the engine, and two loaded gonfola cars behind the engine. As work extra 1035 approached the smitch leading to the Southern Pacific transfer track the gard engine backed out upon the winh track, then the stitch was closed and the yard engine started westward, and after acving a short distance, while traveling at a very low rate of speed, the near car was struck by work extra 1033.

Vork extra 1055 consisted of lime flat cars ahead of the engine, engine 1055 haded vost, and a caboose, and was in charge of Conductor Harthorne and Enginerah Davey; it held orders to took ertra from 7 a.m. to 7 p.m. between Deming and Nutt, this last-haned station being 28 miles east of Deming. Around 3.15 a.m. this train departed from Deming and proceeded to a point about 13 liles cast thereof, in order to perform took on bridge 1119-D. About 11.30 a.m. it left the bridge, en route to Deming, at which point the employees intended to eat, and on reaching a point approximately 6,150 feet west of the east yard-limit board at Deming, while traveling at a speed estimated to have been about 10 or 13 miles an hour, the head flat car in the train collided both the rear goodcla car of yard engine 894.

The co gondole cars on the rear of yard engine 894, the yard engine and its tender, and the first two flatcers in took extra 1003, were only slightly damaged, as was engine 1055. The remaining three flat cars were derailed, the first of these coming to rest on top of and across the second car in the train, while the west end of the car ahead of the engine has partly on top of the fourth car, with its rear end against the stoke box of the engine. The employee killed has a bridge and building carpenter, who was riding on the forward end of the first car in work extra 1053.

## Sulary of evidence.

Yard engine 894 had been switching in the vicinity of the stitch leading to the Southern Pacific transfer track just prior to the accident, the main line switch being left hen work was completed Engine Foreman Wilkey gave the signal to back out on the isin line. Although Switchman Ball said he stood at the main line s itch about two minutes in all, he did not look in the Silection of the work train prior to the wise the yard engine backed out on the main line. Engineran Taylor had seen the work train east of the east stock yard statch, which is 2,000 feet east of the point of accident, but he did not know whether it was approaching or standing still. The cars behind the engine did not obstruct the view and shile backing out on the main track he looked back several hundred feet in the direction of the work train but did not see it, and thought the way was clear. After backing out Stitchman Ball closed the stitch, and just after the yard engine started to hove westward on the main track he sat the world train approaching a short distance aray, and the brakeman on the head end of the leading flat car aging stop signals; Stitchman Ball shouted a rarning of danger, but the yard engine had moved forward only a short distance then the accident occurred. Engineman Taylor estimated the speed of his train to have been about 2 miles an hour at the time.

Engine Foreman Wilkey stated that before giving the signal to back out on the main truck he did not observe, or instruct other members of the crew of the yard engine to ascertain, that the vay was olear. Stitchman Sampson ald not notice the work train approaching until efter the yard engine had backed out on the nail track, and at this time it was about five or sit pole lengths away; however, he was of the opinion that it was approaching under control and would look out for the warf engine.

Approaching Deming, Head Brakeman Weber was riding on the forward end of the lessing flat car in the work train, while Conductor Harthorne and Flagman latson were riding in the capoose. At the east end of the yard the engine whistle was sounded and while crossing a oridge located about 1 tile east of the point of accident Engineman Davey reduced the speed to about 18 to 20 miles an hour. Then about opposite the stock yards, located about 1,050 feet east of the point of accident, Brakeman Weber saw the yard engine hear the transfer track, on account of the curve ahead he was not sure which track it was occupying and he said he could not tell the position of the switch, and therefore, gave a slow signal and turned around to see whether or not Engineman Davey received it, as there were a number of carpenters riding on the flat cars between there he was stationed and the engineman. In response to this signal the speed was reduced. On again looking anead Brakeman Weber saw the yard engine back out on the rain line and gave violent stop signals when about 500 feet from the point of collision; the air brakes were applied in emergency, but it was too late to avert the accident.

Engineman Davey stated anat on reducing the speed at the east end of the yard he kept the air brakes applied for a distance of about 15 car lengths. Then about at the stock yards he noticed that the main track was clear and the switch closed, but on receiving the slow signal, at which time the speed was about 15 or 18 miles an hour, he made about a five or six-pound brake-pipe reduction, holding the brakes applied about three or four car lengths and reducing the speed to about 12 miles an hour. Just after the brakes were released the brakeman waved violent stop signals. He immediately applied the air brakes in emergency, opened the sanders, an hat started to place the engine in reverse hen the accident courref, at hich time he estimated the speed to have been about 10 miles an hour; Engineman Davey did not think that the proper effect was obtained from the energency application, oring to the previous service application, as the speed was only about 10 or 12 miles an hour at the time the emergency application of the air brakes was made and the train triveled about six or eight car lengths before the collision occurred. Engineeran Davey further

stated that he thoroughly understood the rule in recard to approaching ward limits; that he is thoroughly familiar This the physical characteristics and satisfies in this -nointsy, and that the east yard-limit board is in a conspicious position: that the air brakes had been tested and worked property; that there was nothing about the engine to district his attention from heeping a proper lookouv amend, am institut braheman mas in plain vier; that the position of the slitch can be seen for at least a malf mile fro. the east; that he noticed the sicke from the pard entire then he sounded the entire whistle in the vicinity of the else tard-limit board; then he was arare the pard entire secally works at Deming, that he was of the impression the crew of the far entine set his train approaching and sould not back out on the sain line directly in fromt of the mork train, which was fone them it was about 12 or 15 or lengths aray, and that Juli air pressure was being corried then he received the slot signal and he reduced the speed merely as a preception, not realizing there was a possibility of a collision, as more was no one standing at the smitch, and therefore he did not think the yard elitine would lack out on the aim line.

Fireman Parsons we rising on the deck of the engine just prior to the accident, he, Confuctor Hawthorne and the man lauson were analare of anothing wrong until the air brakes were applied just before the accident occurred. They man lauson estimated the speed of the work train to lave been about 35 miles an hour when passing the yard-limit board. Confuctor Harmorne stated he hid not take up a position at the forward end of the leading flat car in this instance as he had implicit confidence in the ability of his crew.

The testimony of the bridge and building compenters was to the effect that the air brakes here applied in emergency just brion to the accident, and that the speed of the fork train has betheen 8 and 10 miles an hour when the accident occurre. Foreman Inches stated that there here the airbrake applications made in the limitediate vicinity of the point of accident.

## Conclusions

This accident has decaded to a failure of form exchalloss to be operated under proter collinol and cascilla. Sail is for thich Entineman Davet, Conductor Tautholine and Transpan Tever are responsible; and the failure of the orest of mand engine 854 definitely to ascertain that she thin track has clear for the novement about to be tile, for which Foreman Wilkey, Engineeran Taylor, and Brake on Bill are pri arily responsible.

Rule 93 of the book of rules of this railroad reads in part as follows:

"All except first class trains will approach yard limits under control. The responsibility for accident at such points will rest with the approaching trains."

The book of rules also defines "Under Control" as "Ability to stop a train within the distance track is seen to be clear."

The evidence is conlicting as to enother the main track stitch was open or closed when ort extra 1033 apcroached, before en ine 884 tover out on the main track, but in viet of the fact that it was fighter, with the view unoscured for a long distance, an with the curve on the entineman's side, there is no reason may both Brakeman Teber and Inginemen lavey should not have seen the smitch if already opened, or when subsequently opened, neither is there any reason by they should not have seen engine 894 back out on the main track, in ample time to stop, provided their train was being operate un er full control; the confirming of the equipment after the accident, however, as well as the statements of the various employees involved, indicate that rom entra 1030 has not being operated under proper control. has the speed of the work extra been properly reduced then approaching the point there the sold engine was seen to be working, the work extra could have been brought to a scop in sime to avert the accident.

The evidence also indicates that the crew of the spitch engine failed to ascertain whether or not the way wis clear before occupying the main truck. Engineman Taylor sat the fork extra then it was some distance away, and as he also was on the inside of the curve he should have seen it at the time he bayth to have out on the main track. Entire Toreman Vilkey apparently gave a signal to back out on the main track without having any knowledge of the fact that the work extra was closely approaching, while Stitchman Ball, an inerpartanced can, was standing at the ain-track switch and was in most tion to signal to either train; instead, he had not look in the circotion of the work extra until after he engine had backed out on the main track and the stitch was closed, the collisions occurring immediately afterwards.

All of the employees involved were experienced men, except Switchman Ball and the firemen of engine 894. At the time of the accident the crew of the work train had been on duty less than 6 hours, and the switch crew less than 1½ hours, prior to which they had been off duty more than 12 hours.

Fescectfully submitted,

T. P. BORLAND.

Director.