INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN REINVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE HOUSTON & TEXAS CENTRAL RAILROAD, SOUTHERN PACIFIC LINES, AT BRYAN, TEXAS, ON OCTOBER 4, 1925.

January 14, 1926.

To the Commission.

On October 4, 1925, there was a head-end collision between two passenger trains on the Houston & Texas Central Railroad, Southern Pacific Lines, at Bryan, Texas, which resulted in the injury of 46 passengers, 4 employees and 1 Pullman conductor.

Location and method of operation

This accident occurred on the Hearne Subdivision of the Dallas Division, extending between Eureka and Hearne, Tex., a distance of 114.7 miles, which in the vicinity of the point of accident is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. point of accident was about 350 feet east of the west switch of the stock-pen track, approaching this point from the east the track is tangent for a distance of about 2 miles, while approaching from the west there are more than 3 miles of tangent track, followed by a 20 curve to the right 2,927 feet in length, and then tangent track extending to the point of accident, 887 feet east of the curve. The grade is variable, and at the point of accident it is 0.432 per cent ascending for east_bound trains. The view of the point of accident from the cab of an eastbound engine is restricted by buildings on the inside of the curve to a distance of about 1,500 feet.

The single-track line of the International-Great Northern Railroad crosses the track of the Houston & Texas Central Railroad at a point about 2,200 feet east of the station, movements over this crossing being handled by means of an interlocking plant controlled from Bryan Tower, located close to the intersection of the tracks. The passing track is east of this crossing, the west passing-track switch being about 600 feet distant therefrom, or about 2,800 feet east of the station, while the

point of accident was about 2,500 feet west of the station. All the points mentioned are located within yard limits, and under the rules all trains are required to move through such limits prepared to stop unless the main track is seen or known to be clear.

The weather was clear at the time of the accident, which occurred at about 2.51 p.m.

Description

Westbound passenger train No. 13 consisted of one combination baggage and express car, one coach, two chair cars and one cafe-observation car, all of steel construction, hauled by engine 276, and was in charge of Conductor O'Leary and Engineman McCarthy. At Navasota, 28.9 miles from Bryan, train order No. 257, Form 19, was received, reading as follows:

"No. 13 wait at Bryan until Three One 301 p.m. for No. 16 and has right over No. 14 Navasota to Hearne."

Train No. 13 departed from Navasota et 2.12 p.m., 35 minutes late, passed Bryan tower at 2.47 p.m., 30 minutes late on its time-table schedule and 14 minutes ahead of the wait order, receiving a train order which was not involved in this accident, and was brought to a stop near the west switch of the stock pen track, it was then decided to back in on another track for train No. 16 and the back-up movement had just started when the train was struck by train No. 16.

Eastbound passenger train No. 16 consisted of one combination mail and baggage car, one combination baggage and express car, four coaches and one Pullman sleeping car, all of steel construction, hauled by engine 706 and was in charge of Conductor Shirley and Engineman Torrence. This train departed from Hearne, 21 miles from Bryan and the last open office, at 2.15 p.m., on time, after having received a copy of train order No. 257, previously quoted, and collided with train No. 13 at Bryan while traveling at a speed variously estimated to have been from 20 to 35 miles an hour.

The engine truck of engine 706 and the rear truck of the first car in train No. 16 were derailed. Slight damage was sustained by both engines and also by practically all of the cars in both trains, although none of the other cars was derailed.

Summary of evidence

Dispatcher Rawlins said he issued train order No. 257, addressing it to train No. 13 at Navasota and to trains No. 14 and 16 at Hearne, but did not send it to the operator at Bryan tower because at that time the conductor of train No. 16 was being detained in the office at Hearno for the order, and after ringing the office at Bryan once and receiving no response he presumed that the operator was busy with his duties in connection with the interlocking plant, and accordingly issued the order to the above stations. Later he issued train order No. 260 to the operator at Bryan, addressed to train No. 13, and while he did not then give the operator a copy of train order No. 257, as he admitted he should have done, he said he did tell him that train No. 13 had an order to wait at Bryan until 3.01 p.m. for train No. 16, this information being given so the operator would know why train No. 13 was stopping clear of the passing track switch east of the tower. Dispatcher Rawlins said he did not tell the operator to stop or hold train No. 13 at that point and did not think that the receiving of a Form 19 order at that point should have caused the engineman of train No. 13 to pass the clearance point of the west switch of the passing track.

Operator-Towerman Black, who was on duty at Bryan tower at the time of the accident, said that at 2.12 p.m. Dispatcher Rawlins sent him train order No. 260, Form 19, addressed to train No. 13, and immediately after copying this order he asked the dispatcher about train No. 16 and was told that train No. 13 had an order to wait at Bryan until 3.01 p.m. for that train. At 2.40 p.m. as asked the dispatcher to clear train No. 13 with train order No. 260 and he filled out a clearance card for that train. When the annunciator gave warning of the approach of train No. 13 he cleared the distant signal and then lined the route through the interlocking plant, and as the train approached the tower he raised and lowered the train-order signal twice, indicating that there was a Form 19 order for delivery to that train. which was handed on as the train passed; he then went back into the office and recorded the train as having passed at 2.47 p.m. At about 2.50 p.m. he reported the passage of the train to the dispatcher, who inquired if that train were by, and he told the dispatcher that it was then standing at the oil mill track or stock pen track and that it looked as if the crew were going to head train No. 16 in on one of those tracks. Operator-Towerman Black sold that in the 2 years that he had worked at Bryan he had never known passenger trains to meet on any track other than the passing track east of the tower.

Engineman McCarthy, of train No. 13, said a signal indicating that there was a train order on Form 19 for delivery to his train was received as it approached Bryan tower and that the speed was reduced to about 6 miles an hour. He read the order after it had been handed on and as it did not affect his wait for train No. 16 he proceeded slowly to the station, expecting to stop clear of the crossover switch near the station and head No. 16 in on the house track, but upon finding that that track was not clear of cars he moved on at reduced speed to the west switch of the stock pen track, stopping clear of that switch at 2.50 p.m. was his intention to head train No. 16 in on the stock pen track, but very smortly after his train had stopped Conductor O'Leary came to the engine, told him that that track was occupied and it was then decided that time would be saved if their train were backed in on the house track. A back-up whistle signal was sounded and the back-up movement was about to start when the fireman called a warning of the approach of train No. 16, he succeeded in starting his train in backward motion and had noved it about 15 feet when it was struck by the He said that when he first saw train opposing train. No. 16 it was traveling at a speed of about 50 miles an hour, which had been reduced to about 25 miles an hour at the time of the accident. Engineman McCarthy at first stated that as no track was designated in train order No. 257 for the wait for train No. 16 he had used his own judgment, and thinking to avoid the delay of Waiting east of the station/while train No. 16 did its station work he woved his train west of the station, intending to have train No. 16 nove around his train, which would enable his own train to leave Bryon several minutes earlier than otherwise would have been the case, and he said he thought Conductor O'Leary was in accord with the movement he was making as no signal had been received from the conductor at any time while they were approaching Bryan or while subsequently moving westward although he said he did not think to look back toward the rear end to see if any aind signal were being He later admitted, however, that the time shown in the wait order, 3.01 p.m., applied to the passing track east of the International-Great Northern crossing. He also said he thought train No. 16 would come into Bryan expecting to find the main track occupied and be prepared to enter any of the side tracks.

Fireman Estes corroborated the statements of Engineman McCarthy relative to the movement of their train at Bryan and added that at no time while in the vicinity of Bryan did he hear any kind of signal on the communicating signal.

Conductor O'Leary, of train No. 13, said he was riding in the second car from the engine as his train approached Bryan and after the station whistle signal had been given by the engineman he sounded one short blast on the communicating signal to remind the engineman of the wait at that point for train No. 16, which signal was acknowledged. An order was handed on at the tower, and after reading the order and checking the clearance card he realized that the wait with train No. 16 had not been changed, and immediately gave a stop signal on the communicating cord which was answered by two blasts on the engine whistle, the train kept moving, however, passed the station at a speed of about 6 miles an hour, and he said he again sounded a stop signal, which on this occasion was not acknowledged. He told the train porter, who was on the steps of the car, to stop the engineman, but apparently the porter's hand signals were not observed as the train continued to move slowly, all the time apparently about to stop, until it was brought to a stop three or four car-lengths from the west switch of the stock pen track. Conductor O'Leary then got off and went to the engine and in answer to this question regarding train No. 16 Engineman McCarthy replied in effect that they would wait at that point and head train No. 16 in on the stock pen track; they then noted that a car was standing on that track and it was decided that their train would first back up and it would be decided later where they would wait for train No. 16. It was at this time, however, that train No. 16 was seen to be approaching at a high rate of speed. Conductor O'Leary said he understood that the time specified in the wait order applied to the passing track east of the crossing and admitted that he should not have permitted his train to pass that point but should have stopped it by applying the air brakes by means of the conductor's emergency valve. The statements of the other members of the train crew brought out no additional facts of importance.

Engineman Torrence, of train No. 16, said that when train order No. 257 was received at Hearne he and Conductor Shirley talked the matter over and it was decided that upon the arrival of their train at Bryan they would head in at the house track or east track if either were clear and then the conductor would telephone the operator at the tower to let train No. 13 move down and pass them, this arrangement, it was thought, would minimize the delay to both trains. Good time was made after leaving Hearne and after passing the last station, Benchley, he looked at his watch and it appeared then that they would be able to perform the necessary station work at Bryan and move on down to the passing track and clear train No. 13 without delay to that train. He said he had shut off steam and had sounded the station whistle

signal, immediately after which the conductor sounded the communicating signal calling attention to the meet with train No. 13 at Bryan, and had just passed around the 20 curve when he saw train No. 13 on the main track 12 or 13 car-lengths distant. He immediately applied the air brakes in emergency, opened the sanders and jumped from the engine just before the collision occurred; not having used the air between Benchley and the point of accident, he thought that a full emergency effect was obtained and that the speed of his train had been reduced from about 40 miles an nour to 25 or 30 miles an hour at the time of the collision. Engineman Torrence said that had he been complying with the city speed ordinances he would have been running at a speed of 6 miles an hour, and had he been complying with rule 93 of the book of rules of the operating department, which requires all trains to move within yard limits prepared to stop unless the main track is seen or known to be clear, he would have been running at a speed of about 15 or 18 miles an hour, and he admitted that in his anxiety to avoid delaying train No. 13 he was operating his train at a higher rate of speed than was permitted. Engineman Torrence also said that he might have seen train No. 13 earlier than he did had he looked across the inside of the curve, but when approaching the point of accident he was watching the road crossing near the leaving end of the curve, resulting in his failure to see train No. 13 until too close to stop. A test afterwards made showed that a box car standing at the point of accident could have been seen by him for a distance of about 1,500 feet. The statements of Fireman White brought out no additional facts of importance.

Concuctor Shirley, of train No. 16, said that after receiving train order No. 257 at Hearne he and Engineman Torrence discussed the meet with train No. 13 and it was decided that their train would head in at the crossover to the house track just west of the passenger station and if the express were not too heavy they would unload it from that track, he would then telephone to the operator at the tower to let train No. 13 proceed and in this manner save delay to either train while the other did its station work. Conductor Shirley said he was riding in the fourth car from the engine as his train approached Bryan and after giving the meeting point signal on the communicating cord, which was acknowledged, he walked through the car and stepped down on the steps on the station side of the car, where he was standing at the time the brakes were applied in emergency, about the time the train was coming off the curve; he say some one jump from the engine and immediately thereafter he saw train No. 15 on the main track a short distance ahead, the collision occurring while his train was moving at a speed he estimated to have been about 20

miles an hour. It was his understanding that the time stated in the wait order applied to the passing track east of the tower and he said he had never met a train at Bryan on any other track than the passing track. The statements of the other members of the train crew of train No. 13 brought out nothing additional of importance.

Conclusions

This accident was caused by failure to obey a wait order, for which Engineman McCarthy and Conductor O'Leary were responsible. A contributing cause was the failure to operate train No. 16 within yard limits prepared to stop, for which Engineman Torrence was responsible. Dispatcher Rawlins was also at fault for his failure to send a copy of the wait order to the operator at Bryan.

Engineman McCarthy had not forgotten the wait order and finally admitted that it restricted the movement of his train beyond the clearance point of the west passing-track switch, instead of obeying the order he proceeded a distance of about 1 mile with the intention of heading train No. 16 in on some of the nearby side tracks. Conductor O'Leary also remembered the wait order and at all times was in position to know exactly what was transpiring, and on account of his failure to obey the rules and to bring his train to a stop by means of the conductor's emergency valve he is equally responsible with the engineman for the occurrence of the accident.

Engineman Torrence operated his train from Benchley to the point of accident, a distance of more than 7 miles, in approximately eight minutes and entered the yard limits at Bryan at a high rate of speed, with the result that when he finally saw train No. 13 occupying the rain track he was unable to bring his train to a stop. He was a man of long experience, knew of the 6-mile-an -hour speed restriction within the corporate limits of Bryan and also was fully aware of the requirements of rule 93, and is at fault for his failure to obey these rules.

Dispatcher Rawlins said that before giving train order No. 257 to the crew of train No. 16 he rang the operator at Bryan, did not receive an immediate answer and then gave the order to the crew of train No. 16 without also giving a copy of the order to the operator at the waiting point. The dispatcher acknowledged that a copy

of the order should have been given to the operator and had this been done it is possible the accident might not have occurred, inasmuch as the rules also provide that the operator shall not deliver an order of this character until the train affected has been brought to a stop.

The investigation indicated that all of these various failures to obey the operating rules were the result of a desire to save time, Engineman McCarthy said he intended to head train No. 16 in on a side track and thus avoid the delay which would have occurred had he waited until that train arrived, performed its station work, and then pulled down to the passing-track switch, and there is a question whether the conductor was not entirely willing that such a procedure be followed in view of his failure to take effective measures toward bringing his train to a stop; Engineman Torrence was operating his train at an excessive rate of speed in order to be able to perform station work at Bryan and also to meet train No. 13 without causing delay to that train, and the dispatcher failed to issue a copy of the train order to the operator at Bryan at the time he gave it to the conductor of train No. 16 because the conductor was waiting for the order and he did not want to delay It is thus apparent that the desire to save delay resulted in several different violations of the rules, and it is equally apparent that had any one of these violations not occurred the accident probably would have been prevented; a clear case of sacrificing safety for speed.

Had an adequate block signal system been in use on this line this accident probably would not have occurred, an adequate automatic train stop or train control device would have prevented it.

All of the employees involved were experienced men; at the time of the accident the crew of train No. 13 had been on duty about 3 1/3 hours and the crew of train No. 16 about 5 hours, previous to which all of these employees had been off duty for periods ranging from 16 to 40 hours.

Respectfully submitted,

W. P. BORLAND

Director.