INTERSTATE COMMENCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AF ACCIDENT WHICH OCCURRED ON THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY OF TEXAS MEAR PITTSBURG, TEX., ON DECEMBER 13, 1929

March 8, 1930

To the Commission:

On December 13, 1929, there was a rear-end collision between two freight trains on the line of the St. Louis Southwestern Railway Company of Texas, near Pittsburg, Tex., resulting in the injury of five employees

Location and method of operation

This accident occurred on the Mt Pleasant Subdivision of the Texas Pivision, extending between Mt. Pleasant and Tyler, Tex., a distance of o7 03 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. The accident occurred at a point 2.21 miles north of the denot at Pittsburg, or 5,531 feet north of the north switch of the passing track, the passing track is 4,200 feet in length and parallels the main track on the east. Approaching the point of collision from the north the track is tangent for a distance of 2,260 feet, then there is a 30 curve to the left 1,319 feet in length, followed by 500 feet of tangent, the accident occurring on this tangent at a point 36 feet from its northern end. grade for southbound trains approaching and for some distance beyond the point of accident is ascending, being 1.87 per cent at the point of collision.

The view of the point of collision across the inside of the curve from the fireman's side of the cab of a southborn engine is restricted to a distance of 919 feet.

The weather was cloudy at the time of the accident, which occurred between 2.40 and 2.50 a.m.

Description

Southbound freight train extra 759 consisted of 41 cars and a caboose, of 1,515 tons, hauled by engine 759, and was in charge of Conductor Starling and Engineman Blackwell. This train departed from Mt. Pleasant, 11.64 miles north of Pittsburg, at 2.08 a. m., according to the train sheet, and while either moving at a very low rate of speed or having just stalled on the ascending grade the caboose was struck by extra 766-774.

Southbound freight train extra 766-774 consisted of 40 cars and a caboose, of 3,600 tons, houled by engines 766 and 774, coupled, and was in charge of Conductor Holmes and Enginemen Conder and Waller. This train departed from Mt. Pleasant at 2.18 a. n., according to the train sheet, and collided with the rear end of extra 759 while traveling at a speed estimated to have been/18 and 25 miles per hour.

The caboose of extra 759 was demolished and the four cars ahead of it were derailed and damaged. Engine 766 came to rest on its right side, east of the main track, almost reversed and about 125 feet beyond the point of collision; its tender came to rest almost upright. Engine 774 came to rest on its left side across the roadbed, about 110 feet south of the point of collision, the tender was on its side. The first car in this train was derailed. The employees injured were the enginemen, firemen and the head brakeman of extra 766-774.

Surmary of evidence

Conductor Starling, of extra 759, stated that the caboose of his train passed the depot at Mt. Pleasant at about 2.08 a. m., then his train proceeded to the south end of Jouble-track and was brought to a stoo, where it remained for about 10 or 12 minutes, waiting for an opposing train, extra 576, northbound. After that train passed, his own train pulled ahead on to the single track and then stopped while the engine took on water, about three minutes being consumed for this purpose, the engine not being cut off. He said that his train departed from the water tank at 2.20 a. m., and that a speed of about 30 miles per hour was maintained after leaving Mt. Pleasant; while moving up the grade near Pittsburg, however, he noticed that the speed of his train was being retarded. He said he got down from the cupola of the caboose and told Flagman Skidmore that the double-header extra was following and to look out for that train, that if anything should happen to their own train to make it necessary to double the hill he would be over at the forward end of the train. Conductor Starling said that he looked back but sav nothing of the following train, then he started ahead over the train and found the air brakes sticking on the second car ahead of the caboose, a flat car; he tried to bleed off the air from the deck of the car, but being unable to do so he got off the car, on the west side of the train, and bled off the air, then ran ahead to bleed

off the air on about the fifth or sixth car from the caboose While running ahead toward about the fifteenth car from the caboose in order to bleed off the air, he looked back and saw the reflection of the headlight of the following train as it rounded the curve and then the collision occurred, at about 2.40 or 2 41 a m., at this time his own train was roving at a very low rate of speed, about 1 or 2 miles per hour. No stops were made en route between Mt. Pleasant and the point of accident. Conductor Starling could advance no reason for the air brakes sticking, saying that he looked for retainers turned up, but saw none While the air brakes had been tested at Texarkana, about 60 miles north of Mt. Pleasant, he did not receive any report of the test. No trouble had been experienced with the air brakes previous to the accident and subsequent thereto his engine handled the head 37 cars, including the fifteenth car ahead of the caboose, to Tyler without any trouble being experienced with sticking air brakes, the air was not bled off the fifteenth car before leaving the point of accident. Conductor Starling further stated that he did not instruct his flagman to drop off lighted fusees, nor did he know whether the flagman was protecting, but the flagman said that he would protect and the conductor was depending on him to protect the train.

Flagman Skidmore, of extra 759, corroborated the statements of Conductor Stailing as to what transpired between Texarkana and the time his train started up the hill near Pittsburg, including time of departures, stops en route, length of stops, time of collision, speed, air brake condition, etc Flagran Skidmore stated that he got down from the cupola of the caboose with Conductor Starling and on looking at his watch it was 2.40 a The conductor went out on the front end of the caboose and the flagman stated that after the conductor had been gone about three minutes he malked to the rear end with a lantern and fusee, opened the rear door and that the headlight on the engine of the following train shone directly in his face, being only about five car lengths away, the flagman gave a stop signal with his white lantern and jumped off on the engineman's side, at which time he estimated the speed to have been between 5 and 7 miles per hour, then the collision occurred. Flagman Skidwore said that he did not have his red lantern with him when he went out of the door, but that that lantern was burning properly and hanging on the rear end of the caboose, the cupola lamp and the two markers were also burning properly. Flagman Skidmore stated that while in

the cupola the conductor told him that the air brakes were sticking on the second car ahead of the caboose and that he would bleed off the air on that car and that if it was necessary for their own train to double the hill for the flagman to protect the rear end, and the flagman informed the conductor he would protect, then got down from the cupola. Flagman Skidmore stated that the doubleneader extra was standing in the yard at Mt Pleasant when his own train passed, but he did not know that it closely followed his own train from that point, nor did he look back to see if any train was following prior to the time he stepped out of the rear door of the caboose, just before the collision occurred. He did not hear a flag whistled out. Flagman Skidmore did not know what pressure was registered on the air gauge in the caboose on leaving Texarkana, and after leaving Mt. Pleasant he did not look at the gauge, although no trouble was expersenced prior to going up the hill near Pittsburg Flagman Skidmere stated that he Jid not afford any protection whatever prior to the time he gave the stop signal with his white hand lantern at the time he stepped out the rear door of the caboose and saw extra 760-774 about five car lengths away, he had no idea that that train was coming and said that the reason he did not drop off a fusee was that it would have caused the following train to fouble the hill and also that he figured that his own train was 10 minutes ahead of the following train and that it was not necessary to drop off a lighted fusee Since the accident, however, he felt satisfied that had a lighted 10-minute fusee been dropped off on the tangent, just before starting around the curve, that the accident would have been evoided, as that train would then have been held 10 minutes behind his own train.

With regard to the qualifications of Flagman Skidmore, the investigation developed that although he was
an old employee in point of service he had not, according
to his own statements, kept himself posted on bulletin
instructions relative to the speed of trains, nor was he
properly acquainted with the rules, he took an examination on the rules the past summer, but said that he did
not get through and that at the present time he was not
in possession of a certificate of qualification on the
rules governing the employees of the operating department.
During the course of the investigation, Flagman Skidmore
was interrogated as follows.

and the same are

- Don't "our duties as a brakeman require you to protect your train and keep a lookout on the rear end?
- A. Yes, sir, when we stop on the main line short of yard limit board, that's the first thing I always do.
- Doesn't the rile require you, when your speed gets down pretty low and there is a possibility of somebody getting into you on a bad hill to throw off a fusee and protect your train?
- I think so, am not positive how the rule reads
- Did you mow that on November 15, 1929, bulletin No. 70 was assued by Mr Post that authorized freight trains without loaded tanks to make 35 miles an hour between Vinona and Mt. Pleasant, without any restrictions on ballast trains?
- No. I have not read that bulletin.
- Did you know anything about bulletin No. 78?
- Mo, sir.
- Or bulletin 79 or other bulletins?
- Know nothing regarding speed restrictions.
- Mr. Skidnore, is there not a bulletin board at lt. Pleasant mere you can read these bulletins and which you are supposed to read?
- There is a little board up there.
- Then there are bulletin boards at Texarkana where you have been working out of and at lit. Pleasant where you could have read all these bulletins and kept yourself posted A. Yes, sir.
- Q. Are you not supposed to keep posted on those bulletins?
- A. I suppose I am, yes, sir.
- Then you could have gotten the benefit of all
- this information, if you had tried?
 A. I guess I could. I am just a brake an doing a brakeman's work and did not consider it necessary to keep posted on those bulleting governing speed restrictions.
- Q. Then if there were other things regarding the operation of the railroad, don't you think you are required to keep posted?

A. Yes, sir.

Q. Are you familiar with rule 91?
A. No, sir, I don't know what rule 91 is.

(Rule 91 was then read to Flagman Skidmore, this rule reading as follows:

Unless some form of block signals is used, trains in the same direction must keep at least ten minutes apart, except in closing up at stations.)

Q Do you think that this rule would have prevented you from throwing off a fusee in the vicinity of where the accident occurred.

A. Yes, sir. I figured he was 10 minutes behind me and him being 10 minutes behind me, I had 10 minutes to get back around the curve and protect my train, if I stopped."

Engineman Blackwell, of extra 759, stated that the air brakes were tested at Texarkana and that no trouble was experienced with them en route prior to going up the hill near Pittsburg, the gauge on the engine registered the maximum brake-pipe pressure, 70 pounds, no indication of any leakage being noticed, and the main reservoir pressure was 90 pounds. The speed was about 30 miles per hour when first starting up the hill, however, while going up the grade he noticed that the speed was being considerably retarded, so he told the head brakeman that he thought the air brakes were sticking and to get off and look out for sticking brakes on the cars, which the head brakeman did. Engineman Blackwell did not know when the collision occurred, saying that it caused no jar on the engine, but thought that it occurred at about 2.44 a. m , as it was about that time that the air brakes applied in emergency from the rear, just about the time that the engine stalled. Engineman Blackwell stated that the rail was good and that the driving wheels were not slipping; the engine steamed freely and he could advance no reason for the air brakes sticking. He Thistled out a flag just before he closed the throttle and the train came to a stop. After the accident the head portion of the train was moved to Tyler, and no trouble was experienced with sticking air brakes. ments of Fireman Acker developed nothing additional of importance, he thought that the accident occurred at about 2.43 a. m. Head Brakeman Womack stated that the gauge registered 70 pounds brake-pipe pressure before he got off the engine and that after getting off, on the west side of the train, while going up the hill he found the air brakes sticking so hard that the brakes squeaked, on about the fifteenth and seventeenth cars from the engine, and he bled off the air on those cars as he walked along beside the train.

Engineman Conder, of engine 760, the lead engine, stated that he saw extra 759 on its arrival at Mt Pleasant, it having passed the telegraph office at 2.05 a m He knew that that train met a northbound train at the end of double-track and presumed that extra 759 took water before departing, but did not know exactly what time it actually departed Before his own train departed, however, he went to the second engine, 774, got a drink of water and remarked to Engineman Waller that they would give extra 759 plenty of time to get out of the way before following them. Engineman Corder stated that his train departed from Mt. Pleasant at 2.25 a m., and that while rounding the curve going up the hill near Pittsburg at a speed of about 50 miles per hour, when about 7 to 10 car lengths from the caboose ahead, the fireman shouted a warning of danger, the engineman said that he immediately applied the air brakes in emergency and reveised the engine, the air brakes taking proper effect. He did not see the markers of the caboose aread around the outside of the curve until about $2\frac{1}{2}$ or $3\frac{1}{2}$ car lengths from it and estimated the speed to have been about 25 miles per hour of the collision. Engineman Conder did not know whether an air brake test had been made before his train left Mt. Pleasant, nor was he actually aware of their condition until going down the hill beyond Kilfoyle, this station being located 3.47 miles south of Mt. Pleasant, at which time he made a heavy service air brake application, about a 15 to 20 pound reduction, and the air brakes responded properly. Engineman Conder stated that there are no carmen at Mt. Pleasant, but that when coupling the engine to the train at that point he places the brake valve nandle on lap, thereby keeping applied all the brakes that are set on the cars in the train, then the air is cut in and the brake valve handle moved to full release and returned to running position. The air brake system is then pumped up until the air gauge registers 70 rounds brake-pape pressure and 90 pounds main reservoir pressure, which was the case in this instance. Engineman Conder further stated that he could have brought his train to a stop in time to have averted the accident had he been given proper warning of the caboose ahead.

Fireman Craycraft, of orgine 766, the lead engine, stated that he was aware that extra 759 had departed shead of his own train. While going up the nill he was sitting on his seat box maintaining a lookout ahead across the inside of the curve and saw the marker on the right side of the caboose when about 7 or 8 car lengths from it, he

called a warning of danger, but his engineman raised up as if he was going to look out of the window in order to ascertain what was ahead, the fireman jumped over to the engineman's side, started to grab the brake valve handle, but the engineman applied the air brakes in emergency before the fireman got hold of it. Fireman Claycraft estimated the speed to have been about 30 miles per hour after leaving Mt Pleasant, about 25 miles per hour when he saw the marker on the caboose ahead, and about the same when the collision occurred, saying that the air brakes had not taken effect at the time he jumped, when about one car-length from the caboose. The front and side cab windows of his engine were open, and the electric headlight was burning properly

Statements of Head Brakeman Duggan, who was riding on engine 760, as well as those of Engineman Waller and Fireman Hill, of engine 774, the helper engine, brought out nothing additional of importance. Conductor Holmes stated that he made an air brake test at Mt. Pleasant before the engines were coupled to the train by having the head brakeman open the angle cook on the first car and then the conductor went back over the train until he met the flagman coing forward. Conductor Holmes said that the air brakes were applied on all of the cars that he looked over and that the flagman advised him likewise, no report, however, was made to the enginemen as to this test. Conductor Holmes and Flagman Bennett were unaware of anything wrong until the air brakes applied in emergency, they estimated the time of the accident as between 2.48 and 3.50 a m.

Operator Sinclair, on duty at Mt. Pleasant, stated that extra 759, southbound passed the telegraph office at 2.05 a m, but that it had a meet with extra 576, northbound, and continued to the south end of double track. He said that extra 573, northbound, passed the telegraph office at 2.18 a m., and since it required about 6 or 8 minutes for extra 576, after meeting extra 759, to travel the distance from the vater tank to the telegraph office, he assumed that extra 759 could have left Mt. Pleasant at about 2.12 a m. Operator Sinclair further stated that extra 756-774, southbound, left the telegraph office at 2.23 a m., but that he OS'd that train out of Mt. Pleasant at 2.18 a m, as a matter of form, knowing that extra 756-774, southbound, would have to also meet extra 576, northbound, at this point and that he OS'd extra

766-774 on the arrival of extra 576, saying that extra 766-774 was still standing in the yard opposite the yard office at the time extra 576 passed and continued to stand there until 2.23 a. m.

Conclusions

This accident was caused by the failure of Flagman Skidmore, of extra 759, to provide proper flag protection, and the failure of Conductor Starling to take proper precautions for the safety of his train.

Under the rules, when a train stops or is moving under circumstances in which it may be overtaken by a following train the flagman must take such action as may be necessary to insure full protection, by night, dropping off lighted fusees at proper intervals. According to his own statements, Flagman Skidmore made no attempt whatever toward affording protection until about three minutes after the conductor left the caboose, and when the flagman finally did start out the rear door for the purpose of protecting it was then too late to avert the accident. Flagman Skidmore stated that he did not drop off a lighted fusee for the reason that it would have made it necessary for the following train to double the hill. He should have dropped off a fusee on the straight track north of the curve, where it could have been seen by the engine crew of the following train for a distance of more than 2,000 feet, and had he done so the accident could have been averted. Apparently, however, he assumed that the following train was spaced 10 minutes behind his own train and for that reason did not act promptly to provide the required flag protection. Conductor Starling was in the caboose when his train began to slow up on the grade, and he should have seen to it that proper protection was immediately provided That he was aware that another train was closely following his own is apparent from the fact that he cautioned the flagman about the following train before he started ahead over the cars in order to release sticking air brakes. Conductor Starling should himself have dropped off a fusee or seen to it that Flagman Skidmore did so.

As a result of the investigation it appears that extra 759 and extra 768-774 were not spaced the required 10 minutes on leaving Mt. Pleasant. The train sheet shows extra 759, southbound, as leaving Mt. Pleasant at 2.08 a m., when as a matter of fact that train had a meet

with extra 576, northbound, at Mt. Pleasant and after extra 759 passed the telegraph office it continued to the south end of double track, met extra 576, pulled ahead to the water tank, took water, and then left ht. Pleasant, between 2 20 and 2.22 a.m., according to members of the crew. According to the train sheet, extra 576, northbound, passed Mt. Pleasant at 2.18 a. m., this also being shown as the time that extra 760-774, southbound, left Mt Pleasant, Operator Sinclair, however, maintained that he OS'd that train as a matter of form, saving that extra 760-774 was still standing in the yard office at the time extra 576 passed and continued to stand there until 2.23 a. n. Members of the crew of extra 760-774 placed the time of departure as 2.25 a m If these figures are correct, then extra 759 departed from the water tank between 2 20 and 2.22 a.m., while extra 76b-774 departed from the yard office between 2.23 and 2 25 a 1. Officials of this road should immediately take steps to see that trains in the same direction are spaced in accordance withthe provisions of the rules. Consideration should also be given to the need for additional protection which would be afforded by the use of the block system on this line. At the time of this accident the average movement was approximately 15 trains per day.

The competency of Flagman Skidmore is seriously questioned and his statements during this investigation did not indicate that he had a proper understanding or realized the importance of his duties. He was not in possession of a certificate of qualification on the rules governing the employees of the operating department

Flagman Skidmore entered the service of this rail-road as brakeman on October 15, 1915, was relieved from duty on March 8, 1922, and reinstated as brakeman on December 15, 1923. With the exception of Head Brakeman Duggan, who entered the service on June 8, 1928, all of the employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.