

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE ST. LOUIS SOUTHWESTERN RAILWAY OF TEXAS AT
NAPLES, TEXAS, ON MAY 20, 1930.

August 1, 1930.

To the Commission:

On May 20, 1930, there was a rear-end collision between a Texas & Pacific Railway passenger train and a St. Louis Southwestern Railway of Texas freight train, on the tracks of the latter company at Naples, Texas, which resulted in the injury of 4 passengers, 6 persons carried under contract, and 10 employees.

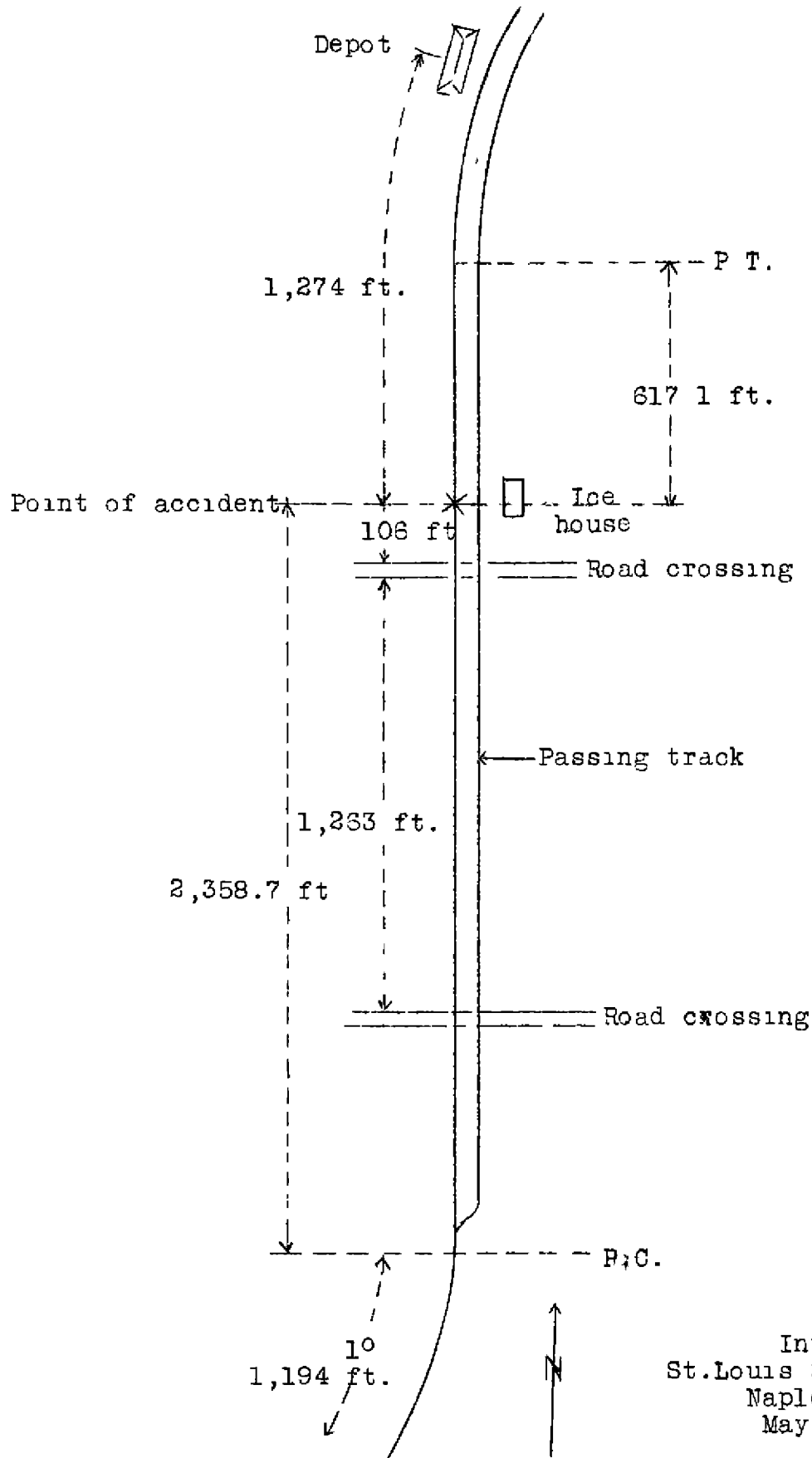
Location and method of operation

This accident occurred on the Commerce Sub-Division of the Texas Division, which extends between Texarkana and Commerce, Texas, a distance of 117.43 miles, and is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use. The accident occurred at a point 1,274 feet south of the station at Naples; approaching this point from the south there is a 1° curve to the left 1,194 feet in length, from which point the track is tangent for a distance of 2,975 feet, the accident occurring on this tangent at a point 617 feet from its northern end. The grade at the point of accident is 0.5 per cent ascending for northbound trains. There is a passing track at Naples, located on the east side of the main track, the south switch of which is located 3,628 feet south of the station. The speed permitted for freight trains hauling loaded tank cars is restricted to 22 miles per hour with a maximum variation of 5 miles per hour, and that for passenger trains is limited to 55 miles per hour, also with an allowed variation of 5 miles per hour.

The weather was foggy at the time of the accident, which occurred about 6.38 a.m.

Description

Northbound StLSW second-class freight train third No. 18 consisted of 36 loaded tank cars, hauled by engine 766, and was in charge of Conductor Phillips and Engineman Johnson. At Mount Pleasant, 18.02 miles south of Naples, the crew received a message to the effect that northbound passenger train extra 393 would leave that point between 5.50



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and 6 a.m., and that they should not delay that train. Train third No. 18 departed from Mount Pleasant at 5.50 a.m., 2 hours and 40 minutes late, and arrived at Naples at 6.35 a.m., according to the train sheet, where it was brought to a stop on the main track, and it was standing at this point when it was struck by extra 393.

Northbound T&P passenger train extra 393 consisted of three baggage cars, one mail car, one baggage car, two coaches, two Pullman sleeping cars, and one dining car, in the order named, hauled by engine 393, and was in charge of StLSW Conductor-Pilot Pearson and Engineman-Pilot Chumley. The crew in charge received a message at Mount Pleasant stating that train third No. 18 left that point at 5.50 a.m. Extra 393 departed at 6.12 a.m., and collided with train third No. 18 at Naples while traveling at a speed estimated to have been between 20 and 25 miles per hour.

After the collision the caboose of train third No. 18 was standing on one end, between the rear car of that train and engine 393, and was practically demolished. The first and fourth cars, the rear truck of the third car, and the forward truck of the sixth car ahead of the caboose, were derailed, while the six rear cars were damaged. Engine 393 was damaged to some extent, and its truck and the forward pair of driving wheels were derailed; the first car was slightly damaged.

Summary of evidence

Engineman Johnson, of train third No. 18, stated that his train arrived at Mt. Pleasant at 5.25 a.m., running as extra 766, and while at that point the conductor informed him that T&P passenger train extra 393 would arrive there between 5.50 and 6 a.m. After the crew had eaten lunch, the train departed as third No. 18 at 5.50 a.m., the conductor having advised him that the operator had been instructed to inform the engineman of the T&P train that train third No. 18 would not leave until 5.50 a.m. A heavy fog prevailed in the vicinity of Naples, and he reduced speed approaching this point to 10 miles per hour, having in mind that the train-order board would be displayed. Before reaching the station, he whistled for the board but it was not cleared, and the engine had reached a point approximately 12 car-lengths beyond the station when he stopped the train at 6.35.45 a.m. Engineman Johnson also said that in addition to sounding the whistle for road crossings and calling for the board when approaching Naples, he thought that before the train stopped he sounded the required whistle signal for flag protection, but was not certain of it.

Fireman Pemberton, of train third No. 18, corroborated the statements of Engineman Johnson as to the arriving and leaving time of their train at Mt. Pleasant, the reduction of speed approaching Naples, and the location of the engine at the time the train stopped, although he did not remember of having heard a whistle signal for flag protection.

Head Brakeman Beal, of train third No. 18, stated that road-crossing whistle signals and a signal for the board were sounded while approaching Naples, but he did not hear a signal for flag protection at any time. He got off the engine at the station, and the train stopped when the engine reached a point about seven or eight car-lengths beyond the station. He noted the time to be 6.35 a.m. when the train stopped, and estimated that the collision occurred three minutes later.

Conductor Phillips, of train third No. 18, stated that his train remained at Mt. Pleasant 25 minutes while the crew was eating lunch. Before leaving that point, he received a message to the effect that T&P passenger extra 393 would leave Mt. Pleasant between 5.50 and 6 a.m. and telling him not to delay that train. He did not consider this message as a restrictive order as, according to his understanding of the rules, his train had a right to proceed ahead of an extra passenger train. His train departed at 5.50 a.m., and did not stop until it arrived at Naples. As a matter of precaution, four 10-minute red fusees were thrown off en route, the last one being about 1 mile south of Naples; he was not certain that one was thrown off at this latter point, as he did not see its reflection, but only heard the flagman state that a fusee had been thrown off at that location. The train nearly stopped as it approached the station at Naples, and then increased speed, which led him to believe that speed was reduced to obtain orders while the train was passing the station, but after the train had moved an additional distance of approximately 10 car-lengths it was stopped. The flagman immediately started back with a lighted red fusee and a red flag, and at about the same time he heard the whistle of the T&P train; he shouted to the flagman to hurry and the flagman started running, disappearing from view in the fog about four car-lengths from the rear of the caboose. Conductor Phillips further stated that it was his duty to see that proper flag protection was afforded, and in view of his knowledge that the T&P train would follow his own train closely from Mt. Pleasant, in addition to the much higher rate of speed permitted for that train, he should have instructed his flagman to go back when the train first reduced speed at Naples, but he said he did not do so for the reason that he did not hear a whistle signal for protection and did not expect the train to stop at that point.

Flagman Hart, of train third No. 18, stated that he was aware that T&P passenger extra 393 would pass Mt. Pleasant about 5.50 or 6 a.m., and said that the conductor threw off three fusees after leaving that point. Upon reaching a point about 1 mile south of Naples, Flagman Hart threw off another lighted fusee from the rear platform of the caboose, which landed on the right side of the track and was still burning when it passed from view. Approaching Naples speed was reduced to 8 or 10 miles per hour and then increased to about 12 miles per hour, but after traveling a distance of about 10 or 12 car-lengths the train stopped. He got off the caboose as soon as it stopped, taking fusees, torpedoes, and a red flag with him. He at once lighted a fusee, and ran back, giving stop signals with the burning fusee and the flag, but these signals were not acknowledged by the approaching train. He estimated that 1 minute and 20 seconds elapsed from the time his train stopped until the engine of the passenger train passed him, and when it did so he shouted a warning and then heard the brakes on that train apply in emergency. After the collision, he was standing a short distance back of the rear car of the passenger train, or a distance of about 700 feet from the point of accident. Flagman Hart also said that the reason he did not get off and provide flag protection when the train first reduced speed was that in his opinion the last fusee thrown off would provide such protection until he could get back a sufficient distance, providing his train stopped, and that when the train increased speed he thought orders had been handed to the engine crew and that the train would proceed without stopping. After the accident, he extinguished the fusee that had been used to flag and dropped it at the location at which he was standing, the thought not occurring to him to retain this fusee and show it to the conductor and engineman of the passenger train as proof that he had a lighted fusee to warn the engine crew of the impending danger. It also appeared from his statements that the markers and cupola light on the caboose were burning.

Engineman-Pilot Chumley, of extra 393, stated that while the engine was passing the station at Mt. Pleasant, which was at 6.12 a.m., the operator handed on a message stating that train third No. 18 left that point at 5.50 a.m. He thought the average speed after leaving Mt. Pleasant was about 40 miles per hour, with no stops prior to the accident. He saw no lighted fusees en route, but in order to approach the train-order board at Naples prepared to stop, he shut off steam about $\frac{1}{2}$ mile south of the south passing-track switch and estimated that the train passed over the switch at a speed of 35 miles per hour. Just before reaching a highway crossing, approximately 1,265 feet south of the point of accident, he made an 8-pound brake-pipe reduction and then placed the brake valve in lap po-

sition. After traveling a distance of approximately 600 feet, and while moving at a speed of about 30 miles per hour, he saw an outline of a caboose through the fog and immediately moved the brake-valve to emergency position and opened the sand blower. He said this emergency application had the proper effect, but in view of the short distance he was unable to stop the train, and when the engine reached another road crossing, located 106 feet south of the point of accident, he jumped off, at which time his train was traveling between 20 and 25 miles per hour. He did not see a flagman with a fusee while approaching the point of accident, but noticed the conductor of train third No. 18 standing about midway between the caboose of his train and the first crossing south of the point of accident. In view of injuries he sustained when he jumped off, Engineman Chumley made no inquiry of the crew of train third No. 18 after the accident as to whether or not a flagman was out to protect their train, and he had not noticed whether the caboose markers were burning.

Fireman Aldridge, of extra 393, stated that the speed of his train was not excessive at any time after leaving Mt. Pleasant, and was positive no burning fusees were encountered between that point and the point of accident. He thought the speed was about 40 miles per hour approaching Naples, when the engineman made a service application of the brakes, this application being closely followed by the engineman applying them in emergency. At about the time the emergency application was made, he observed a flagman with a red flag, but no fusee, standing in the middle of the track approximately 300 feet in the rear of the caboose. Fireman Aldridge also jumped off when about 75 or 100 feet from the point of accident, and thought the speed had been reduced to 18 or 20 miles per hour at that time.

Conductor-Pilot Pearson, of extra 393, stated that his train passed the telegraph office at Mt. Pleasant at 6.12 a.m., and that a message was handed on indicating that train third No. 18 had departed at 5.50 a.m. His train passed the south passing-track switch at Naples at a speed of about 40 miles per hour, and at the time the brakes were applied in emergency he was standing on the steps on the left side of the fifth car from the rear of the train in order to observe the position of the train-order signal as soon as it came into view. In his opinion the train moved a distance of about 150 feet after this application was made before the collision occurred, although from his position on the train he was unable to estimate the distance exactly. As soon as the collision occurred he looked at his watch, noted the time to be 6.38 a.m., and then stepped off the train, but as he could not see anything ahead he boarded it again, crossed over and got off on the

right side, but did not see a flagman in the vicinity. After ascertaining that flag protection was being afforded his own train, he went forward and met the flagman of train third No. 18 near the head end of the passenger train, and upon inquiring of the flagman whether he had been flagging, the flagman replied that he was back as far as he could get after his train came to a stop. He noticed the flagman held a red flag but no fusee, and did not make inquiry if the flagman used a fusee in providing protection.

T&P Conductor Nelson, of extra 393, stated that six cars were set off before entering the tracks of the StLSW Railway, after which an air-brake test was made by a car inspector, who reported the brakes to be functioning properly, and the train was not uncoupled again prior to the accident. A pilot-conductor and pilot-engineman were provided for the movement over the StLSW tracks. He estimated the train was traveling at a speed of 40 miles per hour when the brakes were applied in emergency, following a service application just prior thereto, and both applications had the proper effect; he was unable to estimate the distance the train traveled after the emergency application, but thought the speed was reduced to 20 or 25 miles per hour at the time of the accident. He said the accident occurred at 6.38 a.m., and afterwards he observed a man with a red flag on the right side of the track, approximately 400 feet from the point of collision. The statements of Brakeman Metts, Train Porter Hill, and T&P Engineman Hillier, who was riding in one of the cars, added no facts of importance.

Operator Lockhart, on duty at Naples, stated that he held the train-order signal against train third No. 18 for the reason that he was copying a train order for the crew of that train upon its arrival at his station. He noted the time this train arrived on the register as 6.35 a.m., and thought that 6.38 a.m. was very close to the time of the accident. He did not hear the engineman whistle out a flag.

W. N. Ellis, an employee of the Southwestern Gas & Electric Company, whose plant is located along the east side of the track and almost opposite the point of accident, stated that he was in the office when the freight train pulled by and stopped. Although he did not check the time, he thought that from 6 to 10 minutes elapsed after this train stopped before he heard someone call a warning to another person to run, and becoming alarmed he stepped to the door and saw a man running southward holding either a lighted fusee or a torch. He also noticed the passenger train approaching with its headlight burning, and the engine of that train passed the flagman approximately 200 to 250 feet south of the point of accident.

W. S. Higgins, another employee of the Southwestern Gas & Electric Company, stated that he was on the platform of that plant when the freight train arrived, but could not say how long it was standing at that point. His first knowledge of anything unusual was when he observed a man with a lighted fusee running towards the south, and at that time this person was just north of the first road crossing south of where the caboose was standing; this crossing is 106 feet south of the point of accident. He did not know how far back the flagman was when the passenger train passed him, but it was at least 100 yards, as the flagman disappeared from his view behind a dump about 100 yards from the building at which he was working.

Operator Fallin, on duty at Mt. Pleasant, stated that he made entries on the train register showing the arrival of extra 766 at 5.25 a.m., and the departure of the same train as third No. 18 at 5.50 a.m., also the arriving and departing time of T&P extra 393 at 6.12 a.m. While the latter train was passing the telegraph office, at a speed of about 4 miles per hour, he handed train orders to the crew, among them being a message that train third No. 18 did not depart until 5.50 a.m.

Train Dispatcher Porter, on duty at Tyler at the time of the accident, stated that had he known the freight train would be delayed at Mt. Pleasant while the crew ate lunch, he would have arranged for the passenger train to pass at that point. The message sent to the crew of train third No. 18 was timed at 5.35 a.m.; he knew the train had not yet departed, but thought the passenger train would be delayed due to meeting other trains and complying with slow orders between Tyler and Mt. Pleasant, and that it would be safe for the freight train to leave first. Dispatcher Porter further stated that it was his practice to run a passenger train, having a maximum speed of 60 miles per hour, as an extra train when following a train having a maximum speed of only 27 miles per hour, and that ordinarily he would run the passenger train on a schedule, but on account of track conditions covered by slow orders, in addition to detouring T&P passenger trains on the division on which the accident occurred, which practically doubled the amount of work, there was insufficient time to place them on special schedules. This opinion was endorsed by the night chief dispatcher.

On May 25, 1930, an inspector of the Commission, accompanied by a representative of the StLSW Railway, searched the track for portions of burned fusees, beginning at the point of accident and continuing southward for a distance of more than 1 mile. About 880 feet south of the point of collision the spike end of a burned fusee and a small piece of red paper were found between the main

track and the passing track. Three other ends of burned fusees were located south of where the first one was found, but no partly burned fusee was located within the territory in which the search was made.

Conclusions

This accident was caused primarily by failure to provide proper flag protection, for which Conductor Phillips and Flagman Hart, of train third No. 18, are responsible.

The rules provide that when a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees. When a train is moving under circumstances in which it may be overtaken, the flagman must take such action as may be necessary to insure full protection; by night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals. Flagmen must obey the signal from the engineman prescribed by the rules, but must never wait for such signal or for orders from the conductor when their trains need protection.

The evidence is conflicting concerning the length of time train third No. 18 was standing at Naples before the collision occurred. Conductor Phillips and Flagman Hart indicated that it was from one and one-half to two minutes, while an employee of a commercial firm in the vicinity thought that it was at least six minutes. The time of the arrival of this train is shown on the office register at Naples as 6.35 a.m., and T&P Conductor Nelson definitely placed the time of the accident at 6.38 a.m., these latter figures being practically substantiated by other employees. The short distance he was out indicates that the flagman did not get back as promptly as he should have done.

There was also a question in the testimony as to whether or not the flagman used a lighted fusee when he went back to protect. Both the conductor and the flagman of train third No. 18 maintained that a burning fusee was being used while two employees of the commercial firm stated that the flagman had a light of some kind. The engine crew of extra 393, however, did not see a fusee when approaching Naples.

According to the conductor and flagman, four 10-minute fusees were thrown off after leaving Mt. Pleasant, the last one being about 1 mile south of Naples, but the crew of extra 393 stated they did not encounter any burning

fusees prior to the accident. A search was conducted five days subsequent to the accident for a distance of over 1 mile south of the point of collision, and a number of spike-ends of fusees completely burned out were found, but no partly burned fusee was located which would have substantiated the statement of Flagman Hart that he extinguished the fusee he used in flagging extra 393 and left it at the location where he was standing when that train passed him. However, in view of the time that elapsed from the time of the accident until this search was made, it is not believed the finding of these remnants of fusees establishes anything of importance.

The weight of evidence indicates that Engineman Johnson, of train third No. 18, did not whistle out a flag. He reduced speed to a low rate, and then pulled along until his engine was 12 car-lengths beyond the station. Engineman Johnson knew a fast train was behind him, and in view of the dense fog prevailing, there can be no excuse for his failure to whistle out a flag; the rules required such action on his part, and he should have done so even before his train came to a stop. Had Flagman Hart left the train and gone back as soon as speed was reduced he would have had considerably more time in which to properly protect his train.

Engineman Chumley, of extra 393, was aware train third No. 18 did not leave Mt. Pleasant until 5.50 a.m., and he should have had his train under better control approaching Naples, which he knew was an open office and where he might expect to find the freight train stopped or reducing speed for orders. The dense fog which restricted the range of vision very materially also should have prompted him to have his train under full control, with the expectation of closing up on the train ahead.

The evidence indicated that the dispatchers had more than the usual amount of work to perform, due to high water conditions which necessitated slow orders and also the detouring of trains, and it would have taken a little more time to place the T&P passenger trains on a schedule. On the other hand, however, the taking of such action, giving the T&P train right over all except first-class trains, would have required train third No. 18 to clear its time at least 10 minutes, in which event train third No. 18 probably would not have left Mt. Pleasant ahead of the passenger train and the accident would have been prevented.

For a period of 30 days prior to this accident there was a daily train movement averaging approximately 9 trains in each direction over this line, which is sufficient to justify the use of a suitable form of block system.

The employees involved were experienced men and at the time of the accident none of them had been on duty in violation of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.