

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE HOUSTON & TEXAS CENTRAL RAILROAD, SOUTHERN
PACIFIC LINES, NEAR ALMA, TEXAS, ON OCTOBER 15,
1925.

December 2, 1925.

To the Commission:

On October 15, 1925, there was a rear-end collision between two freight trains on the Houston & Texas Central Railroad, Southern Pacific Lines, near Alma, Texas, which resulted in the death of one employee and the injury of two employees.

Location and method of operation

This accident occurred on the Ennis Sub-division of the Dallas Division, which extends between Hearne and Ennis, Texas, a distance of 110.2 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 about 1.7 miles west of Alma; approaching this point from the east the track is tangent for several miles, while the grade is ascending for a considerable distance, 0.30 per cent descending for a distance of about 1,100 feet, and then level to the point of accident, an additional distance of about 1,200 feet. Freight trains are restricted to a speed of 35 miles an hour.

The weather was cloudy and very foggy at the time of the accident, which is believed to have occurred at about 7.15 a.m.

Description

Westbound freight train extra 809 consisted of 35 cars, switch engine 103 which was being towed in back-up motion, and a caboose, hauled by engine 809, and was in charge of Conductor Osborn and Engineman Cox. It left Corsicana, 15.1 miles east of Alma and the last

open office, at 6.30 a.m., according to the train sheet, and at about 7.10 a.m. was brought to a stop at a point west of Alma, the brakes having been applied by the conductor. Shortly after the train came to a stop its rear end was struck by extra 780.

Westbound freight train extra 780 consisted of 25 cars and a caboose, hauled by engine 780, and was in charge of Conductor Seelye and Engineman Johns. It left Corsicana, according to the train sheet, at 6.40 a.m., and collided with the rear end of extra 809 west of Alma while traveling at a speed estimated to have been between 30 and 40 miles an hour.

The caboose of extra 809 was destroyed while switch engine 103 was badly damaged; damage was also sustained by three of the cars in the train of extra 809. Engine 730 turned over on its left side and was quite badly damaged. The first eight cars of the train of extra 780 were derailed, the majority of them being demolished. The employee killed was the head brakeman of extra 780.

Summary of evidence

According to the train sheet extra 809 departed from Corsicana at 5.48 a.m., was delayed at the western end of the yard on account of pulling out a draw bar, and finally departed at 6.20 a.m. Conductor Osborn, however, stated that his train departed the first time at 5.45 a.m. and the second time at 6.30 a.m. After leaving Corsicana for the second time he was working at his desk but at the same time he knew that his train was passing through a more or less dense fog. While he was engaged with his work he heard the messenger in charge of switch engine 103 sound a stop signal and not knowing what the matter was or whether the engine was derailed he ran up the steps leading to the cupola and opened the conductor's emergency valve, bringing the train to a stop. He estimated the speed of the train to have been between 30 and 25 miles an hour when this application of the air brakes was made. In the meantime Flagman Honeycutt, who had been riding in the cupola, came down and picked up his flagging equipment, got off and started back to flag. Conductor Osborn said he himself got off on the left side of the caboose, at which time it was 7.09 a.m., saw the flagman about 100 yards in the rear of the train on his way eastward, and he said he thought the flagman had a lighted fusee in his hand but he was not positive on this point. Conductor Osborn then went to switch engine 103, was told by the messenger in charge that everything was then all right, went back around the rear end of the caboose and started to run toward the head end of the train on the engineman's side in order to give a signal for the

train to proceed. On reaching a point about 8 or 10 car-lengths from the caboose he saw the head brakeman, who was back several car-lengths from the engine, and gave him a proceed signal which the brakeman in turn transmitted to the engineman. It was at this time that Conductor Osborn heard extra 780 approaching, the collision occurring very shortly afterwards, at a time which he thought was between 7.12 and 7.13 a.m., and he said he thought the flagman had had time enough to go back seven or eight times the distance between two telegraph poles. Conductor Osborn further stated that his train had run at a moderate rate of speed between Corsicana and the point of accident, estimating this speed to have been between 20 and 25 miles an hour, that it had not occurred to him that the rear end of his train was in any danger, that no fuses had been thrown off at any point en route although required by the rules in case of fog or stormy weather, and that he was responsible for this failure to throw off fuses at proper intervals.

Flagman Honeycutt said that when the messenger in charge of switch engine 103 sounded the stop signal he got down out of the cupola, picked up his flagging equipment, consisting of red and white lanterns, fuses and torpedoes, and dropped off the caboose, which was then moving at a speed of about 10 miles an hour. He estimated that he got off at a point about one car-length west of the cattle guard at the first road crossing west of the section house; if this estimate was correct he left the caboose at a point approximately 600 feet from where it finally came to a stop, and he said that he lighted a fuse on reaching the road crossing and continued on his way back to protect the train. He then heard extra 780 approaching and placed one torpedo on the rail on the engineman's side at about the time he could see the headlight of the approaching train, approximately 1/2 mile distant. Flagman Honeycutt said he continued eastward giving violent stop signals with the lighted fuse, and when the engine was about 175 yards distant from him he realized that there was no one on the engineman's side of the cab. He said he then stepped off the track on the engineman's side, at a point between 30 and 50 yards east of where he had placed the torpedo, and threw the lighted fuse at the cab as the engine passed him, the fuse striking the forward corner of the tender. The engine then exploded the torpedo and continued working steam up to the time of the collision, with no application of the brakes having been made. He estimated the speed of extra 780 to have been between 35 and 40 miles an hour. Flagman Honeycutt further stated that when extra 780 came to a stop after the collision he was about three or four car-lengths east of its caboose. He went forward to

the scene of the collision and shortly afterwards, in company with Conductor Seeley of extra 780 and Brakeman Fleetwood of his own train, he returned to the rear end of extra 780 to look for the remains of the fusee and torpedo and he said he found a part of the shell of a torpedo under the forward truck of the caboose of extra 780 while the fusee, about one-third burned, was found at a point about 30 or 40 yards east of where the shell of the torpedo was found. He did not, however, see any sand on the rails to indicate that the engineman of extra 780 had used sand in stopping the train. Flagman Honeycutt thought that about two minutes had elapsed between the time his train stopped and the time he first heard the exhaust of engine 780, but he said he did not look at his watch either at the time his train stopped or at the time the collision occurred. It further appeared from his statements that he knew extra 780 was going to follow his own train out of Corsicana but that his train had been traveling at a speed of 25 or 30 miles an hour and that he had not thrown off any fusees en route because he did not think it necessary, it not occurring to him that extra 780 might overtake his own train, and he acknowledged his responsibility for his failure in this respect to comply with the flagging rules.

Fireman Rasor, who was the messenger in charge of switch engine 103, said extra 809 had been maintaining a speed of 25 or 30 miles an hour until it reached the vicinity of mile post 227 and that at that point the reverse lever of the switch engine had dropped down in the corner in back motion; thinking that damage might result to the engine he sounded a stop signal on the whistle. Just before the train came to a stop he heard the engineman sound a whistle signal for the flagman to protect the train and he said he saw the flagman get off just west of the highway crossing and run back with a lighted fusee, in addition to which he could see that the flagman was carrying his red and white lanterns. At about the time the train stopped Fireman Rasor had succeeded in restoring the reverse lever to a position about three or four notches back from the center of the quadrant and after the train stopped he got off on the south side, told the conductor it was all right to proceed, and he said the conductor went around to the opposite side of the train, started for the head end and had reached a point about 350 feet from the rear of the train when he heard the exhaust of engine 780. At this time he could not see anything of the flagman on account of the fog and he listened to see if the engineman of extra 780 acknowledged the stop signals

of the flagman. Suddenly he saw the headlight appear through the fog, concluded that in some manner the train had passed the flagman and got out of the way before the collision occurred, at a time which he estimated to have been between 7.15 and 7.20 a.m. Fireman Rasor said the exhaust of extra 780 indicated that no change had been made in the position of the throttle between the time he first heard it and the time the collision occurred, and he also said that he did not see or hear anything to indicate that the brakes had been applied and the only person he saw around the engine was the head brakeman who appeared to have one foot on the rear of the tender and the other on the head end of the first car in the train. After the accident had occurred Fireman Rasor assisted in reviving the fireman of extra 780 and he asked him what the trouble was; he quoted the fireman as telling him that he had not been able to get Engineman Johns to stop the train. Later on he asked Engineman Johns how he happened to pass the flagman and he said Engineman Johns replied that he did not see him. Fireman Rasor further stated that he did not hear the explosion of a torpedo and that the last he saw of the flagman was when he disappeared in the fog after passing over the highway crossing approximately 600 feet east of the point of collision.

Engineman Cox, of extra 809, said his train left Corsicana at 6.28 or 6.30 a.m., was operated at a speed of 25 miles an hour and occasionally at a lower rate of speed, particularly when on grades, and that it was stopped at the point of accident at about 7.10 a.m. He sounded the whistle signal for the flagman to protect the train and judging from the things which he did between that time and the time the train was struck by extra 780 he estimated that the accident occurred at about 7.13 a.m. Fireman Hare said his train had been moving between 15 and 20 miles an hour, that the collision occurred about two or two and one-half minutes after the train had been brought to a stop, and that when he looked at his watch about three or four minutes after the accident occurred it was then 7.20 a.m.

Head Brakeman Fleetwood, of extra 809, said his train had been running at a speed of 25 or 28 miles an hour and that after it had been brought to a stop by an application of the air brakes made from the rear of the train he got off and started back, reaching a point about 12 car-lengths from the engine when he heard the exhaust of an approaching train. At about this time he saw Conductor Osborn giving a proceed signal which he transmitted to the engineman, but the accident occurred

before the train had started. Brakeman Fleetwood said he then ran to the engine, notified the engineman of what had happened and that the two of them went back about 15 car lengths, saw Conductor Osborn in the high-way paralleling the railroad track and after going over to him and talking with him Brakeman Fleetwood looked at his watch and said it was then 7.15 a.m. from which he judged that the accident had occurred between 7.05 and 7.10 a.m. and he thought that his train had been standing about four minutes when it was struck by the following train. Brakeman Fleetwood said the fog was very dense and that an object the size of a box car could have been seen a distance of 330 feet. Brakeman Fleetwood went to Engine with engine 809 to report the occurrence of the accident and on his return he saw Flagman Honeycutt and went back with him to the rear of extra 780 where the flagman showed him a partly burned fusee and the remains of a torpedo. The fusee was about 18 feet back of the caboose while the shell of the torpedo was under the forward truck of the caboose. Brakeman Fleetwood said he did not examine the torpedo shell very closely but that it had the appearance of having been recently exploded. He further stated that he did not hear the explosion of a torpedo prior to the occurrence of the accident, nor did he hear anything to indicate that the engineman of extra 780 shut off steam.

Fireman Mitchell, of extra 780, said his train left Corsicana at 6.45 or 6.46 a.m., and was operated at a speed of 35 or 40 miles an hour en route westward. Approaching the point of accident he visibily seemed to be at its best, and he estimated that his range of vision was from 1,000 to 1,200 feet. When in the vicinity of mile post 237 he saw a flare of something red; he did not know whether it was a red lantern, a red fusee, or from the rear of the train ahead, describing it by saying that it was just a flash and when it was gone. He at once spoke to the engineman and said "that will do", Engineman Johns was standing on the deck of the engine, leaning over with his back toward him and when he spoke to the engineman the latter straightened up, turned his head and said "Huh". Immediately afterwards Fireman Mitchell saw the markers of extra 809 and told the engineman to apply the air brakes in emergency, after which he himself got off his seat box, pulled the tank lever shutting off the supply of fuel oil, turned around and cut off the atomizer, closed the firing valve and put on the injector. Engineman Johns did not make any further reply to Fireman Mitchell nor did he make any movement toward stopping the train but according to Fireman Mitchell he remained standing on the deck

of the engine looking up at the roof of the cab, either wringing his hands or rubbing them together as if wiping them, although the fireman said he did not see anything in the engineman's hands. Fireman Mitchell said he then crossed over to the engineman's side of the engine, told Engineman Johns to jump and got down on the steps on the engineman's side, once more calling to the engineman to jump before he got off himself, just before the accident occurred. At the time he first spoke to Engineman Johns he supposed that the latter would get back on his seat box and tend to the operation of the engine, and after seeing the rear end of extra 780 Fireman Mitchell was then engaged with his own duties and he said he did not have time to take the control of the engine away from the engineman. It further appeared from the statements of Fireman Mitchell that he did not hear the explosion of a torpedo or see Flagman Honeycutt, his only warning of the impending accident being the flash of red previously described, shortly after which the markers on the caboose came within his range of vision. He estimated the speed of his train at that time to have been between 30 and 35 miles an hour and that the caboose was from 1,200 to 1,400 feet distant.

It further appeared from the statements of Fireman Mitchell that he did not like to work with Engineman Johns, although he felt he could consider the engineman as a friend. He said he had fired for Engineman Johns on several occasions, and that there was something about him which made Fireman Mitchell think the engineman's mind was in some way affected. He seemed to be worse on some trips than on others; he would be restless when on the seat box and would do a number of things which seemed to Fireman Mitchell to be out of place while running, such as working with the lubricator, frequently getting off his seat box to get a drink of water, searching in his tool box and putting with the tools. Fireman Mitchell, however, had said nothing to any of the division officials concerning his idea of Engineman Johns' condition. He also said that on the trip on which the accident occurred Engineman Johns had seemed to be very restless and to act queerly and he thought the engineman should have been on his seat box directing his attention to the proper handling of his train.

Engineman Johns said his train left Corsicana at 6.45 a.m. and that he had operated it at a speed of 30 or 35 miles an hour en route westward; approaching the point of accident he did not see the flagman or a fusee, neither did he hear the explosion of a torpedo, and his first knowledge of anything wrong was when he saw the markers on the rear of extra 780. It was at this time that the fireman called to him, apparently having seen the markers at the same time. Engineman Johns said he then applied the air brakes in emergency, opened the sanders and reversed the engine, and then, thinking that

the driving wheels would lock, he put the engine in forward motion, this last movement being just before the accident occurred. He fixed the time of the accident at 7.18 a.m. It also appeared from the statements of Engineman Johns that after passing Alma he got off his seat box to obtain a drink of water, after which he returned to his seat box and did not again leave it, being on it when the engine passed a section house which is located 2,027 feet east of the point of accident, and he also said he was on the seat box when he saw the markers of extra 780 and when the fireman first called him. He further stated that when the fireman told him to apply the air brakes in emergency this had already been done. Rule No. 101 reads as follows:

"Trains must be fully protected against any known condition which interferes with their safe passage at normal speed.

"When conditions are found which may interfere with the safe passage of trains at normal speed and no protection has been provided, such action must be taken as to insure safety."

Engineman Johns said he knew extra 809 had left Corsicana ahead of his own train but he did not know that that train had a switch engine in tow, and when asked if he did not think he had violated rule 101 in operating his train at a speed of 30 or 35 miles an hour, in a dense fog, he said he thought a speed of 30 miles an hour was safe and he also made the remark that he ran into the thickest part of the fog quite suddenly and that it had not been as thick elsewhere as at the point of the accident. In his subsequent statements, however, he said the fog at the various stations en route was so dense that he could not have operated his train at a speed over 5 miles an hour and at the same time been able to observe the indications of the various switch lamps in time to stop had one of the switches been open. Engineman Johns did not feel any personal responsibility for the occurrence of the accident.

Conductor Seelye, of extra 780, said his train left Corsicana at 6.45 a.m., that he was riding on the left side of the cupola of the caboose, that he did not see or hear anything unusual and that his first knowledge of anything wrong was a slight jar followed by a severe shock and a sudden stop. He estimated the speed of his train at the time of the collision to have been about 30 miles an hour, that he had not felt any application of the brakes, and that he heard the exhaust of the

engine up to the time of the impact. He thought the accident occurred at 7.18 a.m. On getting out of the caboose Conductor Seelye saw the flagman of extra 809 at a point about four car-lengths in the rear of the caboose and he noticed that the flagman had red and white lanterns in his hand. He then proceeded to the head end of the train and when later he returned to the rear of his train Flagman Honeycutt and Brakeman Fleetwood were there and Flagman Honeycutt showed him the shell of a torpedo, the metal of which was bright, this shell being near the head end of the caboose. In conversation with Flagman Honeycutt he was told the flagman used a lighted fusee in flagging extra 780 and that he had thrown it at the engine when it passed him. In conversation with Engineman Johns, however, he was told that the engineman did not see any flagman or any signs of a flagman's signals. Conductor Seelye further stated that extra 809 left Corsicana at 6.30 a.m., and that he knew that train was towing switch engine 103 in back motion; he did not, however, consider that this would prevent extra 809 from making time, saying that he thought the time-table restriction of 15 miles an hour when engines were backing up would not apply in the case of an engine being towed in back-up motion. He said, however, that in conversation with Engineman Johns he mentioned the fact that engine 809 was towing the switch engine, although he did not tell Engineman Johns that extra 809 did not finally depart until 6.30 a.m. Conductor Seelye further stated that he had heard different persons say that at times Engineman Johns would talk and act in a peculiar manner but that he handled his train as well as any one, that he had watched Engineman Johns rather closely and had not noticed him doing anything out of the ordinary, although he did think that in conversation he was somewhat peculiar. Conductor Seelye did not, however, feel that there was anything he could say against Engineman Johns so far as the engineman's actions were concerned.

Flagman Thompson, of extra 780, said he was riding on the right side of the caboose cupola. After passing Alma he turned around to attend to the indicator lamps, which were smoking, and at about this time felt the air brakes applied in emergency, at which time the speed was about 30 miles an hour. He was, however, unable to say whether the brakes were applied by the engineman or as a result of the breaking of the train line on account of the accident. On getting out of the caboose he looked at his watch and noted that it was 7.20 a.m. He saw Flagman Honeycutt three or four car-lengths in the rear of the caboose and was told by him that he had placed one torpedo on the rail and had thrown a lighted

fusee at the cab as the engine passed him, but that there had not been any one on the right side of the engine. Flagman Thompson said he thought his range of vision on account of the fog was restricted to about 280 feet, possibly a little more.

Section Foreman McMinn was at the section house about 2,000 feet east of the point of accident when the trains involved passed, and he said that while he could not fix the exact times yet he thought it was approximately 7.15 a.m. when extra 809 passed, moving at a speed of about 20 miles an hour, and about 7.19 or 7.20 a.m., when extra 780 passed, moving at a speed of 30 miles an hour. The section foreman had heard the brakes grinding on extra 809 and supposed that that train had come to a stop, and when he saw extra 780 following so closely it occurred to him that there was danger of an accident and he said he intended to give the engineman of extra 780 a "close together" signal. The engineman, however, was not on the seat box nor did he see him anywhere in the cab, and he therefore gave the signal to the head brakeman who was on the top of the first or second car in the train. Section Foreman McMinn did not hear the explosion of a torpedo and he also said there was nothing to indicate that the brakes on extra 780 were applied or that the engineman shut off steam prior to the occurrence of the accident. With regard to the visibility, Section Foreman McMinn said he did not think a red lantern could have been seen more than 250 feet or a fusee more than 350 feet, although on proceeding toward the scene of the accident he was able to discern the rear end of extra 780 when it was about 400 feet distant.

Night Roundhouse Foreman Jett, located at Hearne, said that he had not noticed anything unusual with Engineman Johns since the latter part of June, when Engineman Johns had an attack of what appeared to be indigestion, and he never had any idea that there was anything the matter with Engineman Johns' mental condition. Day Roundhouse Foreman Badders, also located at Hearne, said he had heard some discussion among the men to the effect that Engineman Johns was mentally affected, and a day or two afterwards, in company with another engineman, he talked with Engineman Johns on various subjects for a period of 35 or 40 minutes. He said he was unable to detect anything wrong either at that time or at any later time, although he had taken care to talk with Engineman Johns on each trip that he made into Hearne. He said he would have considered it his duty to report the matter to the superintendent if in his judgment he thought Engineman Johns was in any way affected but after his talks with him he concluded that the reports he had heard were false and that there was nothing wrong.

Assistant Superintendent Marshall said he reached the scene of the accident at 7.55 a.m. and found nothing to indicate that the air brakes on extra 780 had been applied in emergency prior to the time of the accident. He estimated the distance between the point where the rear end of extra 809 was standing prior to the accident and the rear end of extra 780 as it stood after the accident to have been 887 feet. Flagman Thompson, of extra 780, pointed out to him the spot where he had first seen the flagman of extra 809 and he found this point to have been 126 feet east of the caboose of extra 780, or 1,013 feet from the point of accident. Under the caboose of extra 780 there was a fragment of a torpedo shell which had the appearance of having been recently exploded; there was, however, no indication of the explosion on the rail. He also stated that a gap from a fusee was found under the head end of the car immediately ahead of the caboose.

Traveling Engineer Rentzel reached the scene between 7.40 and 7.45 a.m. and on inspecting engine 780 he found the throttle closed and the reverse lever near the center of the quadrant, in about the position in which it would have been placed with the engine working steam and handling a train of this tonnage over this particular part of the road; he also said that the brake valve was in running position. Mr. Rentzel did not find anything to indicate that sand had been used in bringing extra 780 to a stop and he expressed the opinion that the application of the brakes was due to the breaking of the train line as a result of the accident.

Conclusions

This accident was caused by the failure of Engineer Johns, of extra 780, to maintain a proper lookout and to take prompt measures toward bringing his train to a stop after having been warned of the danger ahead; a contributing cause was the failure of the conductor and flagman of extra 809 to throw off fusees in view of the fact that the weather was foggy and their train running at a speed considerably lower than that allowed under the rules.

The weight of evidence indicates that Engineman Johns was not on his seat box when his train was approaching the point where the rear end of extra 809 was standing, the statements of his fireman on this point being corroborated by the statements of the flagman of the first train and of the section foreman. The evidence also indicates that after he had been warned of the presence of a train ahead Engineman Johns failed to take any steps toward bringing his train to a stop and apparently the accident occurred with his engine working steam and without any application of the air brakes having been made.

There were statements to the effect that Engine-man Johns, who has since committed suicide, had been considered by a few of his fellow employees to have acted and talked in a peculiar manner. Investigation into this phase of the matter did not develop anything definite. In July, 1924, he had been examined as to his vision, color sense and hearing, which were found to be satisfactory, while his general condition at that time, judging from his appearance, was pronounced good. The rules of this company require that employees undergo a thorough physical examination when entering the service, with a re-examination in case they have been on leave of absence for a period of 90 days or more. There is, of course, a provision that when in the judgment of the division officials such an examination is necessary an employee may be called in at any time for a re-examination to ascertain if there is anything which would make him unfit for further service.

The statements as to the time at which the accident occurred varied between 7.05 a.m. and 7.20 a.m.; the conductor and engineman of the first train thought the accident occurred at about 7.13 a.m., while the conductor and engineman of the second train fixed this time as 7.18 a.m. In either event, however, it would appear that after its departure from Corsicana at 6.30 a.m. extra 809 had been operated at considerably less than the maximum rate of speed allowed for freight trains. In view of this fact, together with the foggy weather prevailing, it was incumbent on the conductor of extra 809 to see that protection was furnished through the medium of lighted fuses thrown off at proper intervals.

Had an adequate automatic train stop or train control device been in use on this line, this accident would not have occurred.

Engineman Johns, who was 43 years of age, was first employed as a machinist's helper in 1902; he began firing in the same year and was promoted to engineman in 1912. With the exception of the fireman of the first train all of the employees involved were experienced men. At the time of the accident the crew of extra 809 had been on duty nearly $13\frac{1}{2}$ hours after periods off duty of $8\frac{1}{2}$ hours or longer; the crew of extra 780 had been on duty nearly 7 hours after more than 10 hours off duty.

Respectfully submitted,

W. P. BORLAND,

Director.