

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN
RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED
ON THE FLORIDA EAST COAST RAILWAY AT EAU GALLIE,
FLA., ON OCTOBER 4, 1925.

November 11, 1925.

To the Commission:

On October 4, 1925, there was a rear-end collision between a passenger train and a freight train on the Florida East Coast Railway at Eau Gallie, Fla., which resulted in the death of one person carried under contract and one trespasser, and the injury of two employecs.

Location and method of operation

This accident occurred on that part of the Northern Division extending between New Smyrna and Fort Pierce, Fla., a distance of 117 miles, 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 collision occurred at a point approximately 180 feet south of the north passing-track switch, approaching this point from the north there are 2,727 feet of tangent and a 1° curve to the right 700 feet in length, followed by tangent track to the point of accident, 700 feet distant, and for a considerable distance beyond. The grade for southbound trains is 0.3 per cent descending for a distance of about 2,000 feet, level for 800 feet, and is then 0.3 per cent ascending to the point of accident 300 feet distant.

On account of the curve, and the position occupied by the caboose of the freight train with relation to the head end of another freight train which was standing on the passing track opposite the point of accident, the range of vision of the engineman of the passenger train was limited to a distance of about 800 feet.

The weather was clear at the time of the accident, which occurred at 10.45 p.m.

Description

Southbound freight train extra 153-110 consisted of 53 cars, 1 dead engine, and a coach, the latter being used as a caboose, the train was being hauled by engines 153 and 110, and was in charge of Conductor Brendle and Enginemen Humphreys and Hoover. It arrived at Cocoa, 16.7 miles north of Eau Gallie, at 8.30 p.m., where train order No. 327, Form 19, was received, which provided in part that train first No. 85 would run 1 hour and 30 minutes late from Titusville to Sebastian, this being the territory involved in this accident. After making one other stop, extra 153-110 arrived at Eau Gallie, and headed in on the passing track, it being intended to remain at this point for train first No. 85, after pulling in on the passing track a distance of several car-lengths the train was brought to a stop, on account of the fact that northbound extra 126 was heading in at the south switch, and upon receipt of information that the operator had an order directing extra 153-110 to run ahead of train first No. 85 Eau Gallie to Malabar, extra 153-110 was backed out upon the main track and then pulled southward and stopped with the engines about opposite the station. A car was set out and the crew received a copy of train order No. 332, which provided that

"Extra 153-110 coupled south run ahead of 1/85 Eau Gallie to Malabar unless overtaken."

Extra 153-110 was about to proceed southward, an attempt having been made to start the train, when the rear end was struck by train first No. 85.

Southbound passenger train first No. 85 consisted of two express cars, one mail car, one baggage car, four coaches, one Pullman sleeping car, and one express car, in the order named, all of steel construction, hauled by engine 412, and was in charge of Conductor Tedder and Engineman Gillies. It left New Smyrna at 8.55 p.m., two hours late, with a copy of the run-late order previously referred to, and picked up the flagman of extra 153-110, who had been left between Siwashe and Sharpes, stations 38 and 42.8 miles, respectively, south of New Smyrna. A station stop was made at Cocoa, where train order No. 332 was received; a station stop was also made at Bonaventure, 10.4 miles from Eau Gallie, the train departing from

that
point at 10.30 p.m., 1 hour and 59 minutes late, and
colliding with the rear of extra 153-110 at Eau Gallie
while traveling at a speed estimated to have been about
30 miles an hour.

The wooden coach on the rear of extra 153-110
was demolished, while the dead engine which was being
handled just ahead of the coach sustained heavy damage,
the fourth and fifth cars ahead of this engine were de-
stroyed, and five other cars on the rear of the train
were more or less damaged. Engine 412 sustained heavy
damage to its front end although the engine was not
derailed. None of the cars in train first No. 85 was
derailed or materially damaged. Five cars in the train
of northbound extra 126, which was on the passing track,
were derailed by the wreckage and considerably damaged.
A caretaker in charge of car of poultry, who was riding
in the coach on the rear of extra 153-110 was killed,
and a trespasser who was also riding in this coach, with-
out authority, received injuries from which he after-
wards died.

Summary of evidence.

Conductor Brendle, of extra 153-110, who was
the only man on the train who was familiar with the road,
said he was riding in the engine cab at the time his
train passed Siwashe, and that a stop was made at this
point to pick up a flagman from a work train, as the
train was about to stop the engineman sounded the
whistle signal for Flagman Rogers to go back and pro-
tect the rear of the train, shortly after which the
recall whistle signal was sounded. Conductor Brendle
first stated that no signal was received from the rear
end before the train started, but later changed this
statement, saying that the fireman of engine 153 called
to him that he had seen a proceed signal given from
the rear end of the train. The fireman denied this,
saying that it was at City Point, a station 6.7 miles
from Siwashe and that he had seen the proceed signal.
It developed later, however, that Flagman Rogers was
left at Siwashe. When the train reached Sharpes, 4.8
miles from Siwashe, another work-train flagman was
picked up, this flagman volunteering to go to the rear
end and act as flagman from that point to Cocoa, about
6 miles distant, where the work train had tied up for
the night, in the event that the flagman was not on the
rear end when he arrived there, a pre-arranged signal
being agreed upon by which he was to notify the con-
ductor on the head end if the regular flagman was not
on the caboose. On reaching the rear of the train he
found the flagman was missing and gave the signal
agreed upon. Shortly afterwards Head Brakeman Horne,

of extra 153-110, was sent to the rear end to relieve the work-train flagman, whose tour of duty was known to be approaching the 16-hour limit.

Conductor Brendle said he held orders to meet northbound freight train extra 126 at Eau Gallie, extra 126 to take the passing track, but as he had work to perform at that station he knew his train could not leave that point without being on the time of train first No. 85, and therefore upon arriving at Eau Gallie the train was headed in at the north passing-track switch, at 10.03 p.m. Upon being advised by the engineman of extra 126 that the operator had an order for his train to run ahead of train first No. 85 from Eau Gallie to Malabar, the train was backed out of the passing track and pulled down the main track, stopping with the engines about opposite the station. Conductor Brendle said that before backing out on the main track the engineman twice sounded the whistle signal for the flagman to protect the rear end of the train, a back-up signal was also sounded, and then another signal to go back and flag, after which they waited to give the flagman an opportunity to get back a sufficient distance before starting to back out on the main track. Conductor Brendle said that after the train had been backed out on the main track the engineman sounded the whistle signal for the flagman to return to the train and that he at once went to the engine and told the engineman to signal the flagman again to protect the train. After the train had been brought to a stop with the engines opposite the station, a car was set out, and after receiving the train order directing his train to run ahead of train first No. 85 from Eau Gallie to Malabar he asked the engineman if everything was ready, so that he knew he could move the train, and then told him to call in the flagman; efforts were being made to start the train when the action of the air gauge in the engine indicated that the train line had been broken, and upon investigation it was learned that the rear of the train had been struck by train first No. 85. Conductor Brendle knew his train had been delayed at Eau Gallie long enough to cause it to be occupying the main track on the time of train first No. 85, but thought it safe to call in the flagman when ready to proceed, provided the proper flagging signals were left before the flagman returned to the train. Conductor Brendle further stated that when leaving Cocoa the next work to be performed was at Eau Gallie, and that while he could have gone back to the rear of his train at Cocoa and have given the flagman special instructions as to how to protect against train first No. 85, he felt that it was safe to entrust the duty of protecting the train to any man who had been examined on the rules, and he also said that he had two enginemen who

were not acquainted with the road and that he had to remain at the head end of the train to act as pilot. Conductor Brendle also said that he had had Head Brakeman Horne as a member of his crew on one previous occasion, and at that time had taken occasion to instruct him in the duties of a flagman.

According to Engineman Humphreys, of engine 153, he sounded the whistle signal for the flagman to protect the train when he stopped at the north passing-track switch; after pulling in on the passing track a few car lengths the train was again stopped, and after finding out about the order to run ahead of train first No. 85 to Malabar he sounded a back-up whistle signal, then again sounded the whistle signal for the flagman to protect the train, and after waiting about five minutes he began to back the train out on the main track. After the work at Eau Gallie had been completed and the train was ready to depart, he recalled the flagman; he said he knew approximately where the rear of his train was standing at the time and he also knew that the northbound extra on the passing track had pulled ahead to the north passing-track switch, but he did not think he had violated the provisions of rule 467 in recalling the flagman under these circumstances, with train first No. 85 already overdue on its run-late order. This rule reads as follows

"When a Flagman is recalled, if there is not a clear view for at least one-half mile in the rear of the train, it must be moved ahead a sufficient distance to insure safety while waiting for the Flagman."

Engineman Humphreys further stated that he had had practically four and one-half years' experience as an engineman, he entered the service of the Florida East Coast Railway in December, 1924, and was employed as a hostler from December 22 of that year until September 21, 1925, on which date he was promoted to engineman, this was his second trip on this division.

The statements of Fireman Frazier, of engine 153, and of Engineman Hoover and Fireman Barnes, of engine 110, brought out no additional facts of importance. Fireman Frazier, who was 25 years of age, said he had been firing about 8 years, about one of which had been with the Florida East Coast Railway. Engineman Hoover said he had had 14 years' railroad experience, about five or six of which had been as engineman, and that he entered the service of the Florida East Coast Railway on the day on which this accident occurred, this being his first trip as an engineman, although he said he had made about two round trips for the purpose

of learning the road, once on a passenger train and once on a freight train. Fireman Barnes was also making his first trip on this railroad as a fireman, and had had no previous railroad experience with the exception of about a week spent in learning the duties of a fireman.

Head Brakeman Horne, of extra 153-110, said that upon the arrival of his train at City Point, 3.8 miles from Cocoa, he went back to the rear end of the train and relieved the work-train flagman. When the train stopped at Cocoa he went back to flag, and when recalled the train started without a signal from him, it being necessary for him to run a long distance to overtake the train and avoid being left at that point, and he said he missed the Form 19 train order which the operator at that point delivered to his train, this being the run-late order, and his only information concerning train first No. 85 was that Conductor Brendle told him it was one hour and some minutes late. When his train stopped to head in on the passing track at Eau Gallie he did not hear any signal given to protect the train, but got off the caboose and had gone back about 20 or 25 steps when the train started ahead and he said he dropped a lighted fusee and boarded the caboose. After moving about 10 or 15 car lengths the train again stopped, he heard the whistle but not clearly enough to know what signal was given, and when the train began to back up he decided that the signal was a back-up signal, took his flagging equipment and started back to flag but had not gone more than 15 car lengths before the caboose caught up with him, and he then boarded it and stuck a lighted fusee on the rear end of the caboose. When the train stopped backing up he again got off and started back and after going a few steps he left a fusee, the train starting to move ahead again, and once more he returned to the caboose, saying that he thought he had a right to do so, without being recalled. After the train had pulled ahead until the caboose was south of the north passing-track switch it was again brought to a stop and for the fourth time he got off and started back to flag. The statements of Brakeman Horne indicate that he went back to a point near the northern end of the curve where he had a view of the straight track beyond, remaining at that point until he was recalled, a period of 10 or 12 minutes. He then put down two torpedoes and returned to the caboose, he did not leave a lighted fusee because he was unable to light any of the three fusees which he had with him. Just as he started to step into the caboose he saw the headlight of the engine hauling train first No. 85 and when asked if he started back, or made any effort to flag the approaching train, he said he was going to go back but did not have the time,

that he was going to get another fusee and go back around the curve. He said he gave stop signals to the engine crew of train first No. 85 with his red lantern and stopped across the tracks out of the way. He also stated that he heard the torpedoes exploded by the approaching train.

Head Brakeman Horne further stated that when he started back to flag after his train had finally stopped at the point where the accident afterwards occurred, he passed Engineman Witter, of extra 126, and asked him about train No. 85 and was told that there was an order for his train to run ahead of train No. 85 to Malabar. He then asked this engineman if extra 126 was to meet anything at Eau Gallie, to which the latter replied in the negative. On account of the information thus received he did not think train No. 85 was close to Eau Gallie and then recalled he felt safe in returning, even though he was unable to leave a lighted fusee, and he was of the opinion that if the engineman of extra 126 had said his train was on the passing track for train No. 85 the accident would not have occurred. It further appeared from his statements that while he had a watch he did not have his time-table with him, having left it on the engine, and that he was not acquainted with the time-table schedule of train No. 85 or the time at which it was due at Eau Gallie. Head Brakeman Horne said he had had about nine years' service on various railroads, principally as an operator. He re-entered the service of the Florida East Coast Railway as an operator in December, 1923, and was qualified and transferred as a train man on September 24, 1925, making his first trip on September 26, 1925.

Engineman Gillies, of train first No. 85, said he picked up flagman Rogers near Sawashe and that the flagman told him that he had been left about two and one-half hours previously. Engineman Gillies said he showed the flagman his copy of train order No. 352, received at Cocoa, which directed extra 153-110 to run ahead of train first No. 85 from Eau Gallie to Malabar, and the flagman told him that was his train. Engineman Gillies said he sounded the station whistle signal about the time his train was $\frac{1}{2}$ mile distant from the north passing-track switch at Eau Gallie and shortly afterwards he applied the air brakes in a service application, releasing them about the time he approached the end of the 1^o curve just north of the point of accident, he then saw the flash of a headlight and placed the brake valve in the emergency position, which he thought reduced the speed of his train to about 15 or 20 miles an hour at the time of the collision. Engineman Gillies

said he did not see any flagman or fuses, nor did he hear any torpedoes explode as his train approached the point of accident, the flash of the headlight of the engine standing on the passing track and the sight of the markers on the rear of extra 153-110, at which time his train was only about 800 feet distant, being his first warning and knowledge of the train ahead. Fireman Middleton also stated that he did not hear any torpedoes exploded nor did he see any one protecting the rear end of extra 153-110.

Flagman Rogers, of extra 153-110, stated that when his train stopped at Siwasnee he heard the signal to protect the train and immediately went back to flag, when recalled, however, he was unable to overtake the train before it departed. About two hours later he flagged train first No. 85 and rode on the engine of that train to the point of collision. When approaching Eau Gallie he said he saw a light flashed, apparently a headlight, crossed over to the engineman's side of the cab to look ahead around the curve, and at about this time he saw the markers of the caboose, the collision occurring almost immediately afterwards. He said he saw no fuses nor did he hear any torpedoes explode when approaching the point of accident. Flagman Rogers had had no railroad experience previous to entering the service of the Florida East Coast Railway, he qualified as a trainman on September 22, 1925, and said he had made eight trips as a flagman.

Engineman Witter, of extra 126, stated that Brakeman Horne asked him about train No. 85 and he replied that it was about one and one-half hours late, and then added for the brakeman's information that there were orders at the station directing extra 153-110 to run ahead of train first No. 85 from Eau Gallie to Malabar, and that train No. 85 would soon arrive. The last he saw of the flagman the latter was on his way back to protect his train. He saw no fuses burning in the rear of extra 153-110 at any time, nor did he hear any torpedoes explode. He said the rear of extra 153-110 was about four car lengths south of his engine and knowing that the view of it would be somewhat obstructed on this account, he switched on the headlight when he saw train first No. 85 approaching, as a warning of danger to the engineman of that train. He said Conductor Williams, who was in the engine cab, jumped from the engine and began to give stop signals when train first No. 85 came into view and that the engineman of the approaching train acknowledged these signals by two short blasts on the engine whistle. Conductor Williams corroborated Engineman Witter's statements and added that neither he nor Engineman Witter cautioned Brakeman Horne as to flagging train first No. 85, supposing that the flagman understood his duties.

Conclusions

This accident was caused by the failure of extra 153-110 to be properly protected by flag while occupying the main track on the time of a following superior train, for which Conductor Brendle is primarily responsible

After the work at Eau Gallie had been completed, Conductor Brendle authorized Engineman Humphreys to call in the flagman and the latter returned to the train. Delay was encountered in starting the train, however, and the rear of the train was struck by train first No. 85 at about the time the flagman had returned to the train. Under the rules when recalling the flagman if there is not a clear view in the rear of the train for at least one-half mile the train is required to be moved ahead a sufficient distance to insure safety while waiting for the flagman to return, this rule was not complied with. It is also provided in rule 99 that when the proper signal is given and safety to the train will permit, the flagman may return first leaving two torpedoes and, when conditions require it, leaving a lighted fusee. The order to run ahead of train first No. 85 from Eau Gallie to Malabar did not in any way relieve the crew of extra 153-110 from properly protecting the rear of their train while standing on the main track north of the station at Eau Gallie on the time of train first No. 85, which at the time of the accident was overdue on the run-late order; under these circumstances the flagman should not have been recalled. Not only was Conductor Brendle at fault for authorizing the recall of the flagman, but the flagman should have taken more efficient measures toward providing the proper degree of protection. This flagman, however, was an inexperienced man, and his statements indicated that he did not have a thorough understanding either of the duties of a brakeman or of a flagman; in fact, Conductor Brendle was the only man on the train with the possible exception of the colored fireman of the first engine, who was acquainted with the road. The regular flagman had been left at a previous station and it was on this account that the head brakeman was occupying the position of flagman. He was known by Conductor Brendle to have been an inexperienced man, inasmuch as he had been a member of the conductor's crew on a previous trip, and on that occasion the conductor had given him instructions in the proper performance of his duties. No such instructions were given in this case, however, and while the circumstances were such that Conductor Brendle had duties to perform at the head end of the train, none of these duties was of as much importance as that of knowing that the rear end of his

train was properly protected and that the man assigned for that purpose knew what he was supposed to do. Conductor Brendle left Brockman Home to do as he thought best, and on account of his failure properly to instruct this man, his error in authorizing the recall of the flagman with a following superior train already overdue, and his failure to comply with the rule relative to the moving of the train ahead while awaiting the return of the flagman, Conductor Brendle is responsible for the occurrence of this accident.

The colored fireman of the first engine said he had been employed on this railway for a period of about one year, with this exception Conductor Brendle was the only member of the crew who knew the road, the two enginemen, the fireman of the second engine, the head brakeman and the flagman having been employed in engine or train service on this railway for periods not exceeding two weeks. Under these conditions the responsibility of Conductor Brendle was greatly increased, and it was his duty to take extra precaution for the protection of his train. This he failed to do.

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.

None of the employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.