

Inv-2365

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
ATLANTIC COAST LINE RAILROAD

HAINES CITY, FLA.

JUNE 18, 1939

INVESTIGATION NO. 2365

SUMMARY

Inv-2365

Railroad: Atlantic Coast Line
Date: June 18, 1939
Location: Haines City, Fla.
Kind of accident: Collision
Trains involved: Engine switching cars : Passenger
Train numbers: ---- : 76
Engine numbers 457 : 1501
Consist: 12 cars : 9 cars
Speed: Standing : 15-25 m.p.h.
Operation: Timetable and train orders
Track: Single; 2°45' curve
Weather: Clear
Time: 12:43 a. m.
Casualties: 28 injured
Cause: Failure to provide adequate flag protection
after having failed to clear time of first-
class train

Inv-2365

July 31, 1939.

To the Commission:

On June 18, 1939, there was a collision between an engine engaged in switching and a passenger train on the Atlantic Coast Line Railroad at Haines City, Fla., which resulted in the injury of 23 passengers, 2 Pullman employees, 1 news vendor, and 2 railroad employees.

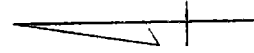
Location and Method of Operation

This accident occurred on that part of the Tampa District of the Southern Division which extends between Port Tampa and Sanford, Fla., a distance of 123.7 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders, no block system being in use. The accident occurred on the main track within yard limits at a point 2,784 feet south of the depot. Approaching this point from the south there is a tangent 6,954 feet in length, followed by a 2°45' curve to the left 3,161 feet in length; the accident occurred on this curve at a point 560 feet from its southern end. At the point of accident the grade is 0.55 percent ascending northward.

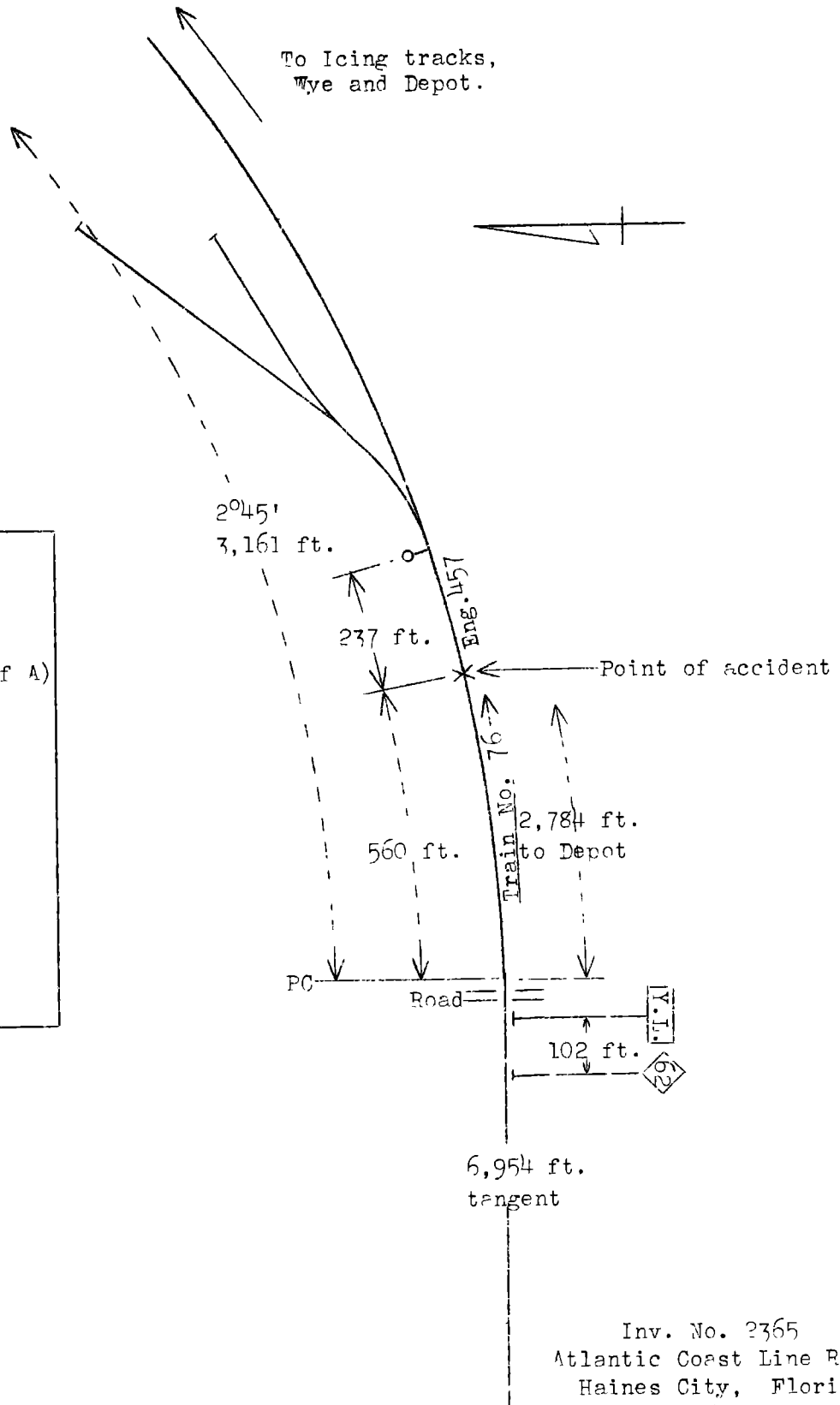
At Haines City there is a wye, the south switch of which is located 1,030 feet north of the depot. Trains arriving from the Haines City Branch and destined for Lakeland and Tampa use the south leg of this wye. Yard tracks parallel the main track; icing tracks are located north of the wye and west of the main track, the switch leading thereto being 1,589 feet north of the depot. At a point 2,547 feet south of the depot an industrial spur-track leads off the main track to the west through a facing-point switch for northward movements. The spur-track, which is equipped with a No. 10 turnout, curves sharply away from the main track and the gradient thereon is about 1 percent descending northward. This switch is provided with a high Ramapo switch stand, which is located on the east side of the track. The collision occurred 237 feet south of the spur-track switch and 682 feet north of the south yard-limit board. Milepost 62 is located 102 feet south of the south yard-limit board. A paved road crosses the main track at grade at a point 37 feet north of the yard-limit board. State highway #17 parallels the track about 100 feet east thereof. Haines City is a register station for all trains.

The maximum authorized speed for passenger trains is 60 miles per hour.

To Icing tracks,
Wye and Depot.



o	Sanford, Fla.
	61.1 mi.
o	Haines City (P of A)
	6.7 mi.
o	Lake Alfred
	14.9 mi.
o	Lakeland
	41.0 mi.
o	Port Tampa, Fla.



Inv. No. 2365
 Atlantic Coast Line R.R.
 Haines City, Florida.
 June 18, 1939

Rules 87, 93, 93 (a), 99 and 725 of the book of operating rules provide as follows:

"87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

"95. Within yard limits the main track may be used, clearing the time of first-class trains five minutes.

"93 (a). Switch engines will run carefully, looking out for approaching trains, and will promptly clear main track upon approach of all trains.

"99. 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 fuses.

The front of the train must be protected in the same way when necessary by the Fireman.

"725. *** At designated points, *** Conductors must register the time of the arrival of their trains, *** and will personally check the train register; if all trains of the same or superior class have arrived or departed, and the train is permitted to proceed under the rules, the Conductor will personally notify the Engineman."

From the fireman's side of a north-bound engine the view of the track at the point of accident was restricted to about 1,468 feet because of track curvature, buildings, and trees, and from the engineman's side to a few feet.

The weather was clear at the time of the accident, which occurred about 12:43 a. m.

Description

Extra 457, in charge of Conductor Hansard and Engineman Cunningham, consisting of 14 freight cars and a caboose, arrived from the branch line at Haines City about 11:50 p. m., June 17. It stopped on the south leg of the wye and the engine was detached and performed switching movements. At the time of the accident the engine was headed southward and stood on the main track just south of the spur-track switch involved with 12 cars coupled behind, several of which extended into the spur.

No. 76, a north-bound passenger train, consisted of three express cars, one mail-baggage car, one passenger-baggage car, two coaches and two Pullman sleeping cars, in the order named, hauled by engine 1501, and was in charge of Conductor McGahagin and Engineman Wallace. The first and third cars were of steel underframe and the remaining cars were of all-steel construction. This train left Lakeland, 21.6 miles south of Haines City, at 12:10 a. m., according to the train sheet, on time, made two stops en route, and when approaching Haines City it collided with engine 457 while moving at a speed estimated to have been between 15 and 25 miles per hour.

Both engines remained upright and on the rails, but their front ends were crushed and they were otherwise damaged. The force of the impact drove engine 457 and the cut of cars backward a distance of 154 feet; the first car was demolished. All the wheels of the tender of engine 1501 were derailed. The tender and the first car were separated a distance of 80 feet and the fourth and fifth cars a distance of 8 feet. Several of the passenger cars were somewhat damaged. The employees injured were the engineman and the fireman of No. 76.

Summary of Evidence

Conductor Hansard, of engine 457, stated that his train arrived at Haines City at 11:49 p. m., June 17, and stopped on the south leg of the wye. The crew had a message concerning the work to be performed and he instructed them that he would check the train register and if it were all right for the engine to come out upon the main track and perform switching he would give a signal, which was done. While in the telegraph office he registered as having arrived at 11:50 p. m. He asked the operator about No. 76 and was informed that it was on time. He then walked southward to the spur-track involved. In the meantime the engine picked up three refrigerator cars from one of the icing tracks and then came to the spur-track to perform switching and backed in there, at which time it was between midnight and 12:05 a. m. No. 76 was due out of Lakeland at 12:10 a. m., Lake Alfred at 12:33 a. m., and Haines City at 12:45 a. m. Lakeland and Lake Alfred are located 21.6 and 6.7 miles, respectively,

south of Haines City. He said that when his engine coupled to the cars on the spur and started out at 12:10 a. m., there were 23 minutes in which to do necessary switching and get into clear at the spur for No. 76. While pulling out of the spur an employee at the packing house asked him to switch a car. He knew that there was not enough time to switch this particular car ahead of No. 76, but thought that there was ample time to do the other switching. Shortly afterwards the flagman told him that No. 76 would not leave Lakeland until 1:15 a. m. He asked the flagman where he got this information and was told that the engineman also had gone into the telegraph office and then informed the rest of the crew that No. 76 would not leave Lakeland until 1:15 a. m. The conductor did not get close enough to talk with the engineman or the front brakeman. No flag was whistled out, but he saw the front brakeman start out at 12:25 a. m. with a white and a red lantern and he thought the engineman had sent him out to protect against No. 76. He watched the front brakeman go around the curve to the tangent track and continue southward until he disappeared from sight, and he thought that full protection would be provided. He then decided to switch the car as requested by the packing-house employee. When a cut of nine cars was coupled to the three already attached to the engine the air brakes on two cars became applied and considerable time was required to release them. Before this was accomplished he heard an engine whistle sounded and torpedoes exploded; then he saw the reflection from the headlight of the approaching train and the lights in the coaches, following which the collision occurred at 12:43 a. m. Seven cars that had been switched out were standing on the main track north of the switch. No train order was received in regard to No. 76. His train was working under yard rules and switching was being done as quickly as possible, as he had previously been criticized for taking too much time. The front brakeman had 18 minutes at his disposal to provide flag protection against No. 76, from the time he left the spur-track switch at 12:25 a. m. until the collision occurred at 12:43 a. m. Rules 93 and 93 (a) had been discussed at recent rules meetings.

Engineman Cunningham, of engine 457, stated that after the three cars were picked up from the icing track the engine started southward to the spur. En route he stopped opposite the telegraph office to ascertain personally about conditions, as he had not talked with the conductor. The operator mentioned something about Nos. 76 and 208, and the engineman understood that No. 76 would leave Lakeland at 1:15 a. m. However, he said he realized afterwards that he must have misunderstood the operator, who no doubt told him that No. 76 was on time and that No. 208 would leave Lakeland at 1:15 a. m., and he therefore disregarded the conversation with the operator. No. 208 was due out of Lakeland at 12:25 a. m. His engine reached the spur-track switch about 12:05 a. m. While switching he instructed the front brakeman to protect against No. 76 and the latter left the engine at 12:25 a. m. and walked southward on the east side of the track. The

engineman last saw the red and the white lanterns carried by the brakeman at a point about 12 car lengths south of the road crossing near the yard-limit board and he thought that proper protection would be provided. At that time No. 76 was not in sight and the front brakeman had not lighted a fusee. The engine was standing while two AB brakes were being pumped off and this required about 70 seconds. The engineman was looking back and the first knowledge he had of anything wrong was when the fireman told him that No. 76 was not going to stop. He turned around and saw the reflection from a fusee held by the front brakeman and the headlight of No. 76; he and the fireman got off and then the collision occurred. The engineman said that the brakes on the freight cars were applied at the time of the accident, that the headlight of his own engine was burning brightly but on account of the track curvature it was directed away from the tangent track and could not have been seen very far by the engine crew of No. 76, and that his engine and cars were in such position as to obscure the red aspect displayed by the spur-track switch-lamp from the view of that crew. Prior to the accident he did not talk with the conductor at Haines City. There was ample time in which to have provided full protection. No order was held on No. 76 and work was being performed within yard limits under rules 93 and 93 (a).

Front Brakeman Page, of engine 457, stated that when the engineman told him to flag No. 76 he also told him that it would not leave Lakeland until 1:15 a. m., but that no order to that effect was held. The brakeman knew that No. 76 was due out of Lake Alfred in 8 minutes and that switching could not be performed on verbal instructions, consequently it would be necessary to provide flag protection. He got off the engine near the spur-track switch at 12:25 a. m. and carried full flagging equipment; he walked southward on the east side of the main track. At a point about 475 or 500 feet south of the yard-limit board he placed two torpedoes on the rail on the engineman's side about 75 or 80 feet apart and remained there about one minute. It was dark but clear and signals could be plainly seen and the track was tangent for more than one mile south of the point where he stood. He heard No. 76 sound the whistle before it rounded the curve to the right south of the tangent track and he lighted a 10-minute fusee. He saw the reflection from the headlight of that engine and when the train reached the tangent track and failed to answer his flagging signals he ran toward it, waving the lighted fusee. However, his signals were not answered until the engine reached a point about 150 feet south of the point where the torpedoes were exploded, at which time the engine was about 3 or 4 car lengths south of him. The train passed him at a speed of about 50 miles per hour, which was reduced to about 25 miles per hour when the collision occurred. When the train stopped it was at least its length past him; he immediately ran northward with the lighted fusee and the red and the white lanterns. When he

arrived near the engine he threw the fusee away as it started to burn his hand. In another statement he said he was about 400 or 500 feet south of the road crossing, or about 2,000 feet south of the spur-track switch, when No. 76 passed. He said that the footing was bad in the rock ballast and that he could have gotten back farther only by running. He fully understood the requirements of rules 93, 93 (a) and 99 and said that his engine was the same as a switch engine working within yard limits. In flagging No. 76 he did not rely upon the verbal information given by the engineman as to the 1:15 a. m. figure; however, he did think that his own engine would finish work and be into clear by that time. In his opinion he was back a sufficient distance to insure full protection.

Fireman Brower, of engine 457, stated that the engineman came out of the telegraph office about 12:02 a. m. and said that No. 76 was leaving Lakeland at 1:15 a. m. The fireman then remarked that 1:15 a. m. was about the time No. 208 had been leaving Lakeland and that evidently some mistake had been made. However, the engineman insisted that No. 76 was leaving there at that time and not No. 208 and added that the 1:15 a. m. figure would be respected. While switching on the spur the fireman suggested that some action should be taken to provide flag protection as it looked like the main track would not be cleared for No. 76. Then the engineman gave instructions to protect accordingly and the front brakeman left the engine about 12:25 a. m. The fireman was on the alert and when he faintly heard a whistle signal sounded he crossed over to the engineman's side. Shortly thereafter he saw the reflection from the headlight as No. 76 rounded the curve south of the tangent involved. It was then 12:41:40 a. m. He saw the front brakeman light the fusee and wave it violently across the track at a point about 1,500 to 1,300 feet south of the spur and he waved it continuously until No. 76 passed the front brakeman. Immediately afterwards the fireman saw fire flying from the brake shoes of No. 76; he called a warning to the engineman and they jumped. He estimated that the speed of No. 76 was about 15 miles per hour at the time of the impact. It was not over two minutes from the time the fusee was lighted until the collision occurred. The 1:15 a. m. figure obtained on No. 76 was not relied upon in any way, otherwise the flag would not have been sent out. He said that the front brakeman did not go out as far as possible in the time available, but he thought the engine crew of No. 76 had more than one mile of tangent track on which to see the lighted fusee, which was sufficient distance. In his opinion the accident was caused by the engineman of No. 76 failing to see the flagging signals in time.

Flagman Cooper, of engine 457, stated that the 1:15 a. m. figure on No. 76 was discussed several times among the engineman, the fireman, the front brakeman, and the flagman. While switching at the spur track the flagman gave this 1:15 a. m. figure to the

conductor, who questioned it and said that the operator had told him that No. 76 was on time. However, when the front brakeman started out at 12:25 a. m. the flagman assumed that proper protection would be provided. They were trying to complete the switching as rapidly as possible. When the engineman verbally instructed the front brakeman to protect, it was an indication to him that they planned to work on the time of No. 76. There was no reason why they could not have cleared for No. 76 at the spur track in accordance with rules 93 and 93 (a), but he was relying on the 1:15 a. m. figure at Lakeland for No. 76.

Engineman Wallace, of No. 76, stated that at Lakeland the air brakes were tested and functioned properly. The proper engine whistle signals were sounded en route, his train was running about on time, and the speed did not exceed 50 miles per hour. The front and the side cab-windows were open. Approaching Haines City he was sitting on the seat-box and maintaining a proper lookout ahead. No torpedoes were exploded south of the yard-limit board and his engine was about four or five car lengths away when he saw the front brakeman light a fusee and wave it violently. He sounded the whistle in answer to the flag; then his engine passed the brakeman who was standing at the crossing close to the south yard-limit board. The engineman immediately applied the air brakes in emergency and opened the sanders; then two torpedoes, placed unusually close together, were exploded north of the brakeman. The speed was about 15 or 18 miles per hour when the collision occurred. He did not see any lighted red or white lanterns. Had the brakeman been on the tangent track he could have seen him for a long distance. His train ran about eight or nine car lengths past the brakeman before the accident occurred. In his opinion the brakeman was not back a sufficient distance to insure full protection.

Fireman Reed, of No. 76, was sitting on his seat-box and maintaining a proper lookout ahead. He saw the brakeman light a fusee immediately in front of the engine and about the same time he also saw the classification lights on engine 457. He called a warning to the engineman and jumped, and when the train stopped he was opposite the express cars and only two or three car lengths behind his engine; the brakeman had flagged with the fusee from a point about 150 feet from the point where he jumped. He thought that the brakeman had been engaged in switching and had run out with the fusee as No. 76 approached.

Conductor McGahagin, of No. 76, was in the sixth car. His first knowledge of anything wrong was when the air brakes were applied in emergency. He glanced out the east windows and saw the reflection of a lighted fusee and then the accident occurred. It was his opinion that the accident was caused by inadequate flag protection.

Flagman De Chiavette, of No. 76, stated that he was in the rear car when the accident occurred. His first intimation of anything wrong was when the air brakes were applied in emergency and shortly afterwards the collision occurred. Within 2 or 3 minutes after the impact he got off the rear end of his train to go back and protect and at that time he saw a trainman walking northward with a lighted fusee about opposite the head end of the rear car. There was no burning fusee south of his train and nobody going northward passed him after the accident.

Baggagemaster Barber and Train Porter Love, of No. 76, saw the front brakeman of engine 457 proceeding toward the engine within a period of not over 5 minutes after the accident.

Operator Morris, at Haines City, stated that he first told the conductor of engine 457 that No. 76 was on time and that No. 208 would leave Lakeland about 1:15 a. m., and later he gave similar information to the engineman. It was not customary for crews performing switching at Haines City to occupy the main track on the time of passenger trains without train-order authority.

Dispatcher Hall, at Lakeland, stated that when first-class trains are late it is the practice to give time to trains working in Haines City yard. He did not expect trains to perform work at any time where the main track is involved without obtaining proper orders on overdue first-class trains, and, to his knowledge, such work was not performed in this manner. When crews switch the sour-track and are unable to complete work in time they get into clear until first-class trains have passed.

Trainmaster Blanc arrived at the scene of the accident about one hour after its occurrence and at that time the air brakes were fully applied on all the equipment.

Superintendent Rush arrived at the scene of the accident about $4\frac{1}{2}$ hours after its occurrence. He found a fresh fusee cap 177 feet north of milepost 62, or 75 feet north of the south yard-limit board. The rail showed that heavy braking on sand had occurred.

H. M. Perry, local resident, stated that when the collision occurred he was driving his automobile southward on highway #17. The only burning fusee he saw was one in the hand of a man who was about opposite the point where the middle of the passenger train stopped after the collision had occurred; the man was walking hurriedly toward the head end of the train. He stopped his automobile at the first crossing south of the point of accident and got out; there was a Pullman car standing over this crossing. He did not see a burning fusee or a brakeman south of the train.

Discussion

According to the evidence Extra 457 arrived from the branch line and stopped on the south leg of the wye at Haines City, where its orders expired. The conductor went to the depot and registered its arrival at 11:50 p. m., June 17, and the operator told him that No. 76 was on time. No. 76 was due to leave Lake Alfred, 6.7 miles south of Haines City and the last point preceding Haines City where time is shown, at 12:33 a. m., and was due to leave Haines City at 12:45 a. m. As usual, the conductor gave a hand signal and the detached engine was moved out upon the main line to perform switching. The conductor walked alone southward to the spur-track, and the engine moved northward to the icing track and picked up three cars. En route from there to the spur track the engineman stopped at the telegraph office and also got information on trains, as he had not personally talked with the conductor. The engineman said that the operator mentioned something about Nos. 76 and 208, and he understood that No. 76 would leave Lakeland at 1:15 a. m., whereas it is scheduled to leave that point at 12:10 a. m. The engineman conveyed this 1:15 a. m. figure on No. 76 to the three other members of the crew, all of whom accompanied the engine. Then the engine proceeded to the spur-track, arriving there about 12:05 a. m. Shortly thereafter the flagman went back and told the conductor about the 1:15 a. m. figure on No. 76 which the engineman had obtained. The conductor questioned it, as he had been told that No. 76 was on time; however, he did not confer with the engineman to verify the figure. He was in a hurry to perform the work as he did not want to be criticized for taking too much time. The engineman said he realized afterwards that he must have misunderstood the operator, who, no doubt, had told him that No. 76 was on time and that No. 208 would leave Lakeland at 1:15 a. m. The freight engine was working within yard limits. All members of this crew stated that at 12:25 a. m. the front brakeman left the engine to protect against No. 76; the engineman and the conductor said that they saw him go out of sight around the curve and they thought that full protection would be provided. The front brakeman said that he took full flagging equipment and reached a point about 475 or 500 feet south of the yard-limit board and placed two torpedoes on the rail, about 75 or 80 feet apart, on the engineman's side, and remained there about one minute; in another statement he said that he was at a point about 2,000 feet south of the spur-track switch. It was dark but clear and his signals could be seen plainly. He said that he lighted a 10-minute fuse before No. 76 rounded the curve south of the tangent track; he waved it and ran toward the train, but his stop signals were not answered until the engine reached a point about 150 feet south of the point where the torpedoes were exploded, at which moment he was between the torpedoes and the engine. The train passed him at a speed of about 50 miles per hour and then the collision occurred. The fireman of the freight engine said that he saw the front brakeman waving the lighted fuse at a point

about 1,500 to 1,800 feet south of the spur-track. On the other hand, members of the crew of No. 76, as well as a resident of Haines City, stated that the front brakeman of the freight engine flagged from within yard limits at a point approximately 600 feet south of his engine; after the accident the superintendent found a fresh fusee cap 75 feet north of the south yard-limit board and the rail showed that heavy braking on sand had occurred. The fact that the brakeman held the fusee in his hand instead of placing it on the track and that the two torpedoes were placed exceptionally close together would indicate that he had not gone out to flag until very shortly before No. 76 approached. The front brakeman had 18 minutes at his disposal from the time he started out to flag at 12:25 a. m. until the accident occurred at 12:43 a. m., which allowed him ample time to go back a sufficient distance to insure full protection. Since No. 76 was due to leave Lake Alfred at 12:35 a. m. and since the spur was south of Haines City, the flagman should have gone out early enough so that he would provide full protection after 12:28 a. m. Had the brakeman gone a short distance south of the point where the preponderance of evidence indicated he was when No. 76 passed him, he would have been on a tangent more than a mile in length and no doubt the engine crew of No. 76 would have seen his signals in ample time to avert the accident.

There was testimony to indicate that the crew of engine 457 expected to work on the time of No. 76 under flag protection without train-order authority. No train order was held against No. 76, and the front brakeman accepted the 1:15 a. m. figure on No. 76, but he said that he did not rely on this verbal information in regard to flagging. All members of the crew of engine 457 seemed to understand the rules governing operation within yard limits and, according to the evidence, their performance in this instance was an exception to their usual practice.

While switching was in progress just prior to the accident two brakes of the AB type became applied and it required about 70 seconds to release them, thereby adding to the delay in attempting to clear the main track. However, it is to be noted that seven cars had been switched out and that they stood on the main track north of the spur-track switch.

Conclusion

This accident was caused by failure to provide adequate flag protection after having failed to clear the time of a first-class train.

Respectfully submitted,

W. J. PATTERSON

Director.