

INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2482

THE TEXAS AND PACIFIC RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT HARMON, LA., ON

FEBRUARY 7, 1941

SUMMARY

Railroad: Texas and Pacific

Date: February 7, 1941

Location: Harmon, La.

Kind of accident: Rear-end collision

Trains involved: Freight : Freight

Train numbers: Extra 331 West : 55

Engine numbers: 331 : 804

Consist: 44 cers and : 44 cars and
caboose caboose

Speed: 8-15 m. p. h. : 40 m. p. h.

Operation: Timetable and train orders

Track: Single; tangent; 0.35 percent
descending grade westward

Weather: Clear

Time: 2:53 p. m.

Casualties: 1 killed; 3 injured

Cause: Accident caused by failure to provide
adequate flag protection for preceding
train and by failure properly to control
speed of following train in accordance
with rule pertaining to movement of train
approaching a station.

Recommendation: That consideration be given to establish-
ment of a suitable block signal system

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2482

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE TEXAS AND PACIFIC RAILWAY COMPANY

April 15, 1941

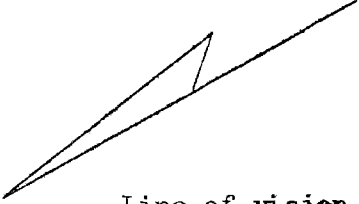
Accident at Harmon, La., on February 7, 1941, caused by failure to provide adequate flag protection for preceding train and by failure properly to control speed of following train in accordance with rule pertaining to movement of train approaching a station.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

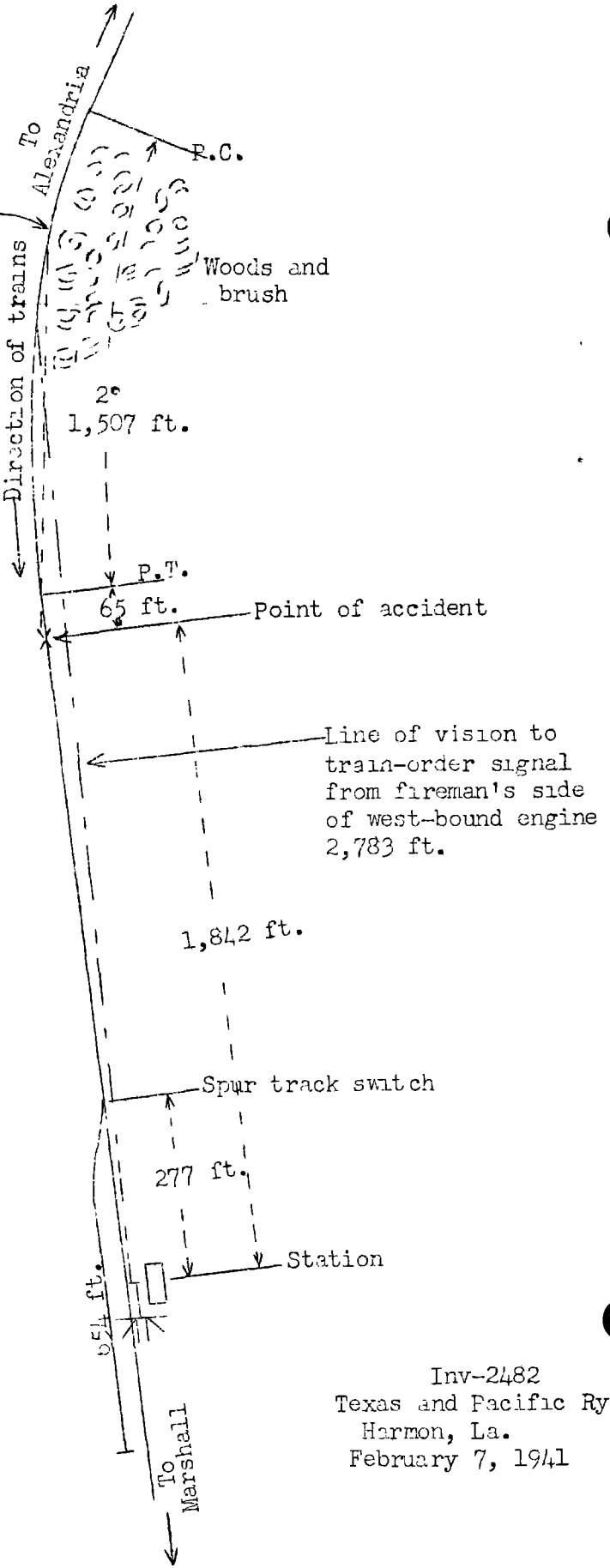
On February 7, 1941, there was a rear-end collision between two freight trains on the Texas and Pacific Railway at Harmon, La., which resulted in the death of one employee and the injury of three employees.

¹Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Line of vision to point of collision from fireman's side of west-bound engine 1,219 ft.

- o Alexandria Yard, La. 2.5 mi.
- o Alexandria 1.2 mi.
- o Texmo Jct. 40.2 mi.
- o Cypress 5.0 mi.
- o Natchez 5.8 mi.
- o Natchitoches 19.2 mi.
- o Lake End 10.0 mi.
- o Gahagan 2.2 mi.
- X Point of accident
- o Harmon, La. 3.0 mi.
- o Grand Bayou 33.7 mi.
- o Cut Off, Jct., La. 29.5 mi.
- o Marshall, Texas.



Inv-2482
Texas and Pacific Ry.
Harmon, La.
February 7, 1941

Location and Method of Operation

This accident occurred on that part of the Shreveport Sub-division, of the Eastern Division, which extends between Alexandria and Cut Off Jct., La., a distance of 120.3 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 form of block system is in use. The accident occurred at a point 1,842 feet east of the station at Harmon. As the point of accident is approached from the east there are, in succession, a tangent 6.24 miles in length, a 2° curve to the left 1,507 feet, and a tangent 65 feet to the point of accident and several miles beyond. The grade is practically level.

A spur track 654 feet in length parallels the main track on the north; the switch is facing-point for westward movements and is located 277 feet east of the station.

Rules of the Transportation Department read in whole or in part as follows:

DEFINITIONS

Station. -- A place designated on the timetable by name.

Reduced Speed. -- Proceed prepared to stop short of train or obstruction.

98 (b). Outside of automatic block system limits, when conditions require or view is obscured, second and inferior class and extra trains and following sections of first-class trains must approach timetable stations, fuel and water stations, at reduced speed.

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. * * *

A sufficient distance to insure full protection requires that the flagman go back at least one-fourth mile from the rear of the train and place one torpedo on the rail on the engineman's side. He must then continue to go back at least one-half mile from the rear of the train and place two torpedoes on the rail on the engineman's side not less than two rail lengths

apart. When conditions require, he must continue back a greater distance, placing two additional torpedoes. He may then return to the point where he placed the first torpedo and remain there until recalled. When recalled and he does not see or hear an approaching train, he will remove the one torpedo and return to the train. * * *

When there is not a clear view of a least one-half mile to the rear of the train, the train must be moved forward a sufficient distance to insure safety before the flagman is recalled.

* * *

When a train is moving under circumstances in which it may be overtaken by another train, 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.

* * *

Conductors and enginemen are responsible for the protection of their trains.

99 (c). When a flagman is recalled before reaching the required distance, he will place two torpedoes on the rail on the engineman's side not less than two rail lengths apart and, in addition, by night, or by day when conditions warrant, leave a burning fusee.

FORMS OF TRAIN ORDERS

B. * * *

(4) Extra 610 West run ahead of No 3 B until overtaken.

The first-named train will run ahead of the second-named train from the designated point until overtaken, and then arrange for the rear train to pass promptly.

In the vicinity of the point of accident the maximum authorized speed for freight trains is 50 miles per hour.

Because of trees on the inside of the curve, the view of the point of accident from the left side of a west-bound engine is restricted to 1,219 feet. The train-order signal at the

station can be seen from the left side of a west-bound engine a distance of 2,783 feet and from the right side a distance of 2,236 feet.

The weather was clear at the time of the accident, which occurred about 2:53 p. m.

Description

Extra 381, a west-bound freight train, with Conductor Blanchard and Engineman Lacaze in charge, consisted at the time of the accident of engine 381, 1 auxiliary water car, 23 loaded and 20 empty cars, and a caboose. At Alexandria Yard, 86.1 miles east of Harmon, the crew received copies of a clearance card and train order No. 45, Form 19; the latter read in part as follows:

Eng 381 run Extra Alexandria Yard to Cut
Off Jct ahead of No 55 Texmo Jct until
overtaken Westward Extra Trains except
Extra 381 West wait at Texmo Jct until
six thirty 630 pm * * *

This train departed from Alexandria Yard at 7:35 a. m., according to the train sheet, and, at Natchitoches, 31.4 miles east of Harmon, the crew received a clearance card together with two train orders, one of which was train order No. 76, Form 31, which read as follows:

Order No 67 is annulled No 55 eng 304
wait at Natchez until one fifty 150 pm
Grand Bayou two fifty 250 pm

This train left Natchitoches at 1:15 p. m. At Lake End, 12.2 miles east of Harmon and the last open office, the crew was informed by the operator that No. 55 had passed Natchez, 37.2 miles east of Harmon, at 1:53 p. m. Extra 381 departed from Lake End at 2:16 p. m. and arrived at Harmon at 2:41 p. m., where the following message was received by the engine crew only:

C&E Extra 381 West
Harmon
No 55 passed Lake End 238 p. m.

After a car from the spur track was added, the train proceeded a distance of 509 feet and, while it was moving at a speed variously estimated from 8 to 15 miles per hour, the rear end was struck by No. 55.

No. 55, a west-bound second-class freight train, with Conductor Stephens and Engineman Cowan in charge, consisted of engine 804, 2 auxiliary water cars, 28 loaded and 14 empty cars, and a caboose. At Alexandria Yard the crew received a clearance card and copies of two train orders, one of which was train order No. 43, Form 19, previously quoted. This train left Alexandria Yard at 12:30 p. m., according to the train sheet, 1 hour 15 minutes late, and passed Cypress, 42.2 miles east of Harmon, at 1:45 p. m., 54 minutes late. At Cypress the crew received copies of a clearance card and train order No. 76, Form 19, previously quoted. No 55 passed Lake End at 2:38 p. m., 37 minutes late, and, while moving at a speed of 40 miles per hour as indicated by the valve-pilot tape with which the engine was equipped, collided with the rear end of Extra 381.

The caboose of Extra 381 was demolished and the wreckage stopped to the right of the track 253 feet beyond the point of collision. The rear two cars stopped on their sides, crosswise of the track, and were badly damaged. Engine 804 and its tender, remaining coupled, stopped on their right sides to the rear of the caboose and parallel to the track; both cylinders, the smokebox, the engine-truck frame and the front deck-casting were broken. The first six cars of No. 55 were derailed and badly damaged, and stopped in various positions on both sides of the track; these cars were bunched within a distance of about 150 feet.

The employee killed was the fireman of No. 55 and the employees injured were the engineman, the front brakeman, and the flagman of No. 55.

Summary of Evidence

Engineman Lacaze, of Extra 381, stated he understood that train order No. 43 authorized his train to proceed westward from Texmo Jct. until it was overtaken by No. 55 and that west-bound extra trains, other than his own train, would wait at Texmo Jct., 82.4 miles east of Harmon, until 6:30 p. m. It was not necessary to furnish flag protection against No. 55 west of Natchez until after 1:50 p. m., which was the time provided by train order No. 76 for No. 55 to wait at Natchez. At Lake End instructions to perform work at Harmon were received. As his train rounded the curve east of Harmon, speed was reduced so that the flagman could alight. As his train was stopping at Harmon the fireman and the front brakeman informed him that the flagman had alighted and was proceeding back to provide flag protection; the engineman did not sound the whistle signal for rear-end protection. The front of the train stopped about 4 car lengths east of the

spur-track switch. About 5 or 6 minutes elapsed while a car was moved from the spur track and added to the train. As the engine was recoupled to the train the operator delivered to the engine crew a message which contained information that No. 55 had passed Lake End at 2:38 p. m. The engineman sounded a proceed whistle signal, received a proceed hand signal from the middle brakeman, and the train started without the flagman having been recalled; the intention was for the flagman to remain and to provide protection. The engineman intended that his train should proceed to Grand Bayou, 2.5 miles west of Harmon, and enter the siding to permit No. 55 to pass. He understood that his train was authorized to proceed ahead of No. 55. As he planned to take a supply of water at Grand Bayou, he intended to clear at that point to avoid delay to No. 55. He thought the train had moved a distance of about 1,040 feet and had attained a speed of about 15 miles per hour at the time of the accident, which occurred at 2:50 p. m. He was last examined on the Transportation Rules in June, 1940. He thought Rule 98 (b) did not require a train to approach Harmon, a time-table station, at reduced speed, because Harmon is neither a fuel station nor a water station, and there is no siding at that point. If a train were standing at Harmon, flag protection should be provided. He had never reduced the speed of any train in his charge as it approached Harmon. He said that the train-order signal can be seen from the left side of the cab a distance sufficient for stopping a train short of the signal from a speed of 50 miles per hour; however, if the rear of a train were 40 or 50 car lengths east of the signal, it could not be seen a distance sufficient for a following train to be stopped short of it.

Fireman Morris, of Extra 381, stated that when his train stopped at Harmon he saw the flagman proceed to the rear to provide flag protection, and so informed the engineman. When his train started to leave Harmon the engineman did not recall the flagman. At this time the fireman did not see either the conductor or the flagman but he saw No. 55 about 15 or 20 car lengths to the rear of his train and warned the engineman. Extra 381 was moving at a speed of about 10 or 12 miles per hour when the accident occurred. He had worked with Engineman Lacaze during 2 or 3 weeks prior to the accident and the engineman had always sounded the whistle signal when it was necessary for a flagman to protect the train. The fireman was last examined on operating rules in 1940. He understood that Rule 98 (b) required No. 55 to approach Harmon at reduced speed. Extra 381 was required to provide flag protection and he thought his train was being protected.

The statement of Front Brakeman Bates, of Extra 381, added nothing of importance.

Middle Brakeman Oberle, of Extra 381, who was on the engine when the train stopped at Harmon, stated that he saw the flagman go back to provide flag protection. Before his train stopped, it had moved a considerable distance at a speed sufficiently low for the flagman to alight. The train was ready to depart at 2:48 or 2:49 p. m. The engineman sounded the whistle signal to proceed and the conductor, who was standing near the caboose, gave a proceed signal. The flagman, who was several car lengths to the rear of the caboose, boarded it just as it started to move. The middle brakeman saw No. 55 approaching before he had time to board his train, which was moving at a speed of about 10 miles per hour. He saw the flagman jump off before the occurrence of the accident, which was at 2:50 p. m. He understood that Extra 381 was required to protect against No. 55 after the expiration of the time specified in order No. 76.

Conductor Blanchard, of Extra 381, stated he understood that his train was required to protect against No. 55 after the expiration of the time specified in order No. 76. At Lake End the operator informed him that No. 55 had passed Natchez at 1:53 p. m., and he so informed the flagman. After the train passed Gahagan, 2.2 miles east of Harmon, the flagman said that he would drop off a lighted 10-minute fusee at milepost 41, about 1 mile east of the point where the accident occurred; it was then 2:38 p. m. Soon afterward the flagman dropped off a lighted 5-minute fusee. As the train was approaching Harmon the speed was reduced sufficiently for the flagman to alight safely about 1/4 mile to the rear of the point where the caboose stopped. Just before the train stopped, the conductor went to the rear platform, observed that the flagman was not providing flag protection and instructed him to proceed immediately to the rear and to protect against No. 55, which was overdue. The flagman had in his possession a red flag to which were attached three torpedoes and he informed the conductor that he had three torpedoes in his pocket. When the flagman had proceeded back a distance of between 15 and 20 car lengths and was on tangent track, the conductor called to him and asked him if he could see or hear No. 55. The flagman answered in the negative and continued to walk eastward. Conductor Blanchard said that he stood beside the left side of the caboose while the work was being performed and when the engineman sounded the whistle signal to proceed he gave a proceed hand signal. As the train began to move he boarded the caboose but he did not see the flagman at that time. It was his intention to leave the flagman at Harmon to ride on No. 55 until it overtook Extra 381 at Grand Bayou

where Extra 381 would enter the siding and permit No. 55 to pass. He was occupied inside the caboose a short time after the train started, then proceeded to the rear platform and saw the flagman run toward the caboose and board the steps just as No. 55 rounded the curve. Both the flagman and the conductor jumped off. Extra 381 was moving at a speed of about 8 miles per hour and No. 55 was moving at a speed between 35 and 40 miles per hour at the time of the accident, which occurred at 2:48 or 2:50 p. m. The engine whistle signal was not sounded either for the flagman to proceed back to provide flag protection or for him to return to the train; however, it is not customary for the engine whistle signal to be sounded unless it is deemed necessary. The conductor did not recall the flagman by voice or by hand signal. The conductor understood that his train was required to be protected properly west of Natchez after 1:50 p. m.; however, at Lake End the flagman stood at the rear of the caboose while Extra 381 was standing at that point. He understood that a conductor was required to see that his train was protected properly. In his opinion the flagman was competent and capable. In one statement the conductor said that his understanding of Rule 98 (b) was that second and following sections of first-class schedules, second-class and extra trains are required to reduce speed when they are approaching train-order stations and to move prepared to stop short of train or obstruction. He understood that the point to be approached under control was the rear of a train standing in the rear of a train-order signal and that the point was variable with respect to the length of the standing train; however, in a later statement, he said that the point involved was the train-order signal itself. It is not customary for a train to approach Harmon prepared to stop short of another train standing east of the train-order signal.

Flagman Massey, of Extra 381, stated he understood that the rules required him to provide flag protection against No. 55 after 1:50 p. m. He knew that his train was to stop at Harmon. As his train approached Harmon he dropped off a 10-minute fusee at a point about 1/2 mile east of the curve east of Harmon and at a point about 600 feet farther west he dropped off a 5-minute fusee. He alighted at a point about 4 or 5 car lengths east of the point where the caboose stopped and he thought the caboose stopped about 5 car lengths east of the west end of the curve. He had in his possession a red flag and three torpedoes. He proceeded to a point where he could see on the tangent track, which was a distance of about 14 car lengths from the rear of his train; he stood there about 7 minutes. Since he could see a distance of about 5 miles, he did not place any torpedo. His engineman sounded a proceed whistle signal about 2:48 p. m., and the conductor, who was standing on the rear platform of the

caboose, called and asked him if he could see No. 55. He replied in the negative and he said the conductor motioned to him to return. He reached the caboose just as it started to move. He then saw No. 55 as it rounded the curve and he waved his red flag, but the engineman of that train did not answer his flagging signal and did not sound any other whistle signal. At the time of the accident his train was moving at a speed of 8 or 10 miles per hour and No. 55 was moving at a speed of about 50 miles per hour. When he first went back to flag he could see the 5-minute fusee burning, but he could not see anything but smoke from the 10-minute fusee, as it had fallen on its side on the ground at the north end of the ties. When he returned to his caboose the 5-minute fusee had burned out. While he was flagging, he did not see his conductor on the ground at any time nor did he see the conductor give a proceed signal to the front end of the train. The conductor was standing on the rear platform of the caboose when he motioned for the flagman to return to the train. Since the train order gave his train authority to run ahead of No. 55, he considered that he had provided sufficient flag protection and that it was not necessary to place torpedoes on tangent track. He understood that under the requirements of Rule 93 (b), No. 55 should have approached at reduced speed, but he also understood that this did not relieve him of providing proper flag protection. He stated that in view of the train orders held, it was not necessary to provide flag protection until after 1:50 p. m. He thought No. 55 should have proceeded in such manner that it could have stopped short of an obstruction 2,250 feet east of the station.

Engineman Cowan, of No. 55, stated that as his train approached Harmon he sounded the whistle signal for both the road crossing and the curve, and then sounded a station whistle signal. As his engine entered the curve he looked at the fireman to see if the fireman was looking ahead but he could not see the fireman's face. As the train proceeded around the curve the fireman warned the engineman concerning conditions ahead. Since the warning did not appear to be given in an alarming manner, the engineman made only a 5-pound brake-pipe reduction. He saw the front brakeman, who had been standing on the deck, lean out the fireman's window and at the same time the fireman hurried to the right side, closed the throttle, and shouted to the engineman to stop the train. The engineman immediately placed the brake valve in emergency position. The brake-pipe exhaust as a result of the service application had not ceased, and he thought an emergency application was obtained. The engineman looked ahead and saw a corner of the caboose about 25 car lengths ahead, and he jumped off when the engine was about 3 or 4 car lengths from the caboose. He estimated the

speed of his train as 42 miles per hour at the time of collision. He saw neither a burning fusee nor the flagman of the preceding train. He said that if torpedoes or a burning fusee had been properly placed on the track he could have reduced the speed of his train sufficiently to prevent the occurrence of the accident. He did not expect to find a train at Harmon without flag protection. It was his understanding that Rule 98 (b) requires a train to round the curve at reduced speed in order to stop short of the train-order signal at Harmon but not short of the rear of a train located east of the signal. He said that if Rule 98 (b) applied to territory east and west of the train-order signal, it would be necessary to establish signs similar to yard-limit signs to define the limits of a station so that train and engine crews could know the extent of the limits covered by the rule. He thought he could stop his train, moving at a speed of 50 miles per hour, within a distance of 2,800 or 3,000 feet by an emergency application of the brakes, and when the train-order signal could be first seen by the fireman, an emergency application would stop the train east of the signal, but a service application would probably stop the train with the engine about 4 car lengths beyond the signal. He stated that the accident occurred about 2:53 p. m.

Front Brakeman Theibaud, of No. 55, stated that his train entered the curve east of Harmon at a speed of about 50 miles per hour. He saw the caboose of the preceding train about 35 car lengths distant. He called a warning to the engineman, and the fireman crossed over and closed the throttle. He saw the flagman of the preceding train on the caboose steps. He did not understand that the rules required his train to reduce speed as it approached the curve but he understood that it should approach the station at Harmon prepared to stop.

Conductor Stephens, of No. 55, stated that his train was moving at a speed of 50 miles per hour when the air brakes became applied in emergency and he thought the speed had been reduced to 25 or 30 miles per hour at the time of accident, which occurred about 2:53 p. m. It was his understanding that Rule 98 (b) requires the speed of a train to be reduced sufficiently for the engine to stop short of the train-order signal but this rule does not relieve the preceding train from complying with Rule 99. He thought Extra 381 should have provided proper flag protection.

Flagman Warwick, of No. 55, stated that after he felt the emergency application of the air brakes the train moved between 10 and 15 car lengths before it stopped. He had last been examined on the transportation rules in June, 1940. It was his understanding that Rule 98 (b) requires a train to approach the station at Harmon prepared to stop at the train-order signal.

Operator Hatard, at Harmon, stated that the accident occurred about 2:53 p. m.

Train Dispatcher Adams stated that he was a member of the committee that formulated the revised transportation rules which became effective September 1, 1939. He conducted rules examinations and was assisted by the trainmasters. He did not recall that any officer or employee had questioned him in regard to the meaning of Rule 98 (b). He considered the rule so clearly worded that it did not require interpretation. According to his understanding of the rule, a west-bound second-class or extra train is required to be prepared to stop short of an obstruction or train standing at any point between the east point of the curve and the station at Harmon.

Chief Dispatcher Kelly stated that he was a member of the committee that revised the book of rules and he assisted the train rules examiner in the examination of train and engine employees after the revision was made. He himself conducted the annual rules examination classes in June and July, 1940. He did not recall that he had discussed Rule 98 (b) with any officer or employee. It was his understanding that the rule was applicable at the train-order signal at Harmon. As the signal could be seen a distance of approximately 3,000 feet from the east, a train would not be required to reduce speed unless there was a train or obstruction observed in the vicinity of the signal; in this case, an emergency application of the air brakes would probably have enabled the engineman to stop the train in time to prevent an accident. He thought the rule was applicable at the station only, since there was no siding at Harmon.

Road Foreman of Engines Allen stated he understood that a second-class or extra train could approach Harmon at maximum speed unless the crew knew that there was a train ahead; in this case, the engineman of the following train would use his own judgment in governing the speed of the train. It had not been the practice for an engineman to reduce the speed of his train as it approached the curve at Harmon.

Assistant Superintendent Grisvold stated that he had had no occasion to interpret Rule 98 (b) but it is his understanding that the rule applies at the train-order signal and that trains are required to be prepared to stop short of an obstruction in the immediate vicinity of the train-order signal, water tanks or fuel stations. It is not his understanding that this rule is to provide protection for the rear end of a long train occupying the main track while the engine is taking fuel or water or doing station work.

Superintendent Brannon stated that he was a member of the rules committee when the rules were revised. He could not recall that there had been any particular discussion of Rule 98 (b). According to his understanding, the rule applies to specified trains approaching the immediate vicinity of the point where passengers are received or discharged, where fixed signals are operated, where trains enter or leave the main track and at fuel and water stations. It had not been the practice to require trains to be prepared to stop short of a train standing at other than the immediate vicinity of what he considered was a station. A train which stops to do station work is required to be protected by flag. Since the occurrence of the accident, he was instructed by his superior officers that Rule 98 (b) does not in any manner relieve the crew of a preceding train from fully protecting their train in accordance with Rule 99 and that second and inferior class and extra trains and second and following sections of first-class schedules must be prepared to stop short of train or obstruction within a distance that a preceding train occupying the main track while doing station work can be seen. In turn, he has so instructed his subordinate officers, and train and engine crews are being instructed accordingly.

Master Mechanic Vinsent arrived at the scene of accident about 9:45 p. m. The valve-pilot tape removed from engine 804 a short time after the accident indicated that at a point about 850 feet east of the point of accident the speed was 49 miles per hour, then the speed decreased to 40 miles per hour within a distance of 660 feet, and from 40 miles per hour to zero in the next 184 feet. When the valve-pilot recording instrument was calibrated with a master machine, the valve pilot showed a speed of 49 miles per hour and the master machine showed a speed of 51 miles per hour.

According to data furnished by the carrier, the average daily movement of trains in the territory involved in the 30-day period prior to the accident was 7.5. A check of the valve-pilot tapes of the engines of No. 55, operated in the territory involved during this 30-day period, indicated that the speed ranged from 35 to 49 miles per hour. The speed of extra trains operated on 8 days during this period ranged from 47 to 50 miles per hour.

According to the timetable, No. 55 was due to leave Cahagan, 2.2 miles east of Harmon and the last station in advance of Harmon where time is shown, at 2:28 p. m., and was due to leave Harmon at 2:27 p. m.

Discussion

According to the evidence, Extra 381 stopped at Harmon at 2:41 p. m., a car was added to its train, and it had proceeded a distance of 509 feet when No. 55, a second-class train, collided with the rear end about 2:53 p. m., at which time the weather was clear. The accident occurred on a 2° curve to the left at a point 1,842 feet east of the train-order signal. The speed of the preceding train was estimated as from 8 to 15 miles per hour and that of the following train as 40 miles per hour at the time of the accident.

The crews of both trains held copies of a train order specifying that all westward extras except Extra 381 would wait at Texmo Jct., 82.4 miles east of Harmon, until 6:30 p. m. and that Extra 381 would run ahead of No. 55 until it was overtaken by No. 55. Since No. 55 was due to leave Gahagan, 2.2 miles east of Harmon and the last station in advance of Harmon where time was shown, at 2:22 p. m., since the time specified for No. 55 to wait at Natchez, 37.2 miles east of Harmon, had expired at 1:50 p. m., and since No. 55 was the only overdue schedule, it follows that Extra 381 was required to protect against only No. 55, which was due to leave Gahagan and Harmon 19 minutes and 14 minutes, respectively, before Extra 381 arrived at Harmon. Under the rules of the carrier, the train order authorizing Extra 381 to run ahead of No. 55 also authorized the extra to ignore the provisions of the rule pertaining to the clearance time furnished by an inferior train for a following superior train; however, Extra 381 was required to furnish flag protection against No. 55.

There was considerable difference between the statements of the conductor and the flagman of the preceding train with respect to the protection furnished against the following train. According to the statement of the flagman, he dropped a 10-minute fusee about 4,000 feet east of the point where the caboose stopped, or about 2,500 feet east of the east end of the curve involved, and dropped a 5-minute fusee about 600 feet west of the 10-minute fusee. Just before the train stopped, he alighted and proceeded to the rear to a point about 600 feet distant, at which point he had a clear view of several miles of tangent track eastward. He had stood at this point about 7 minutes when the engineman sounded a proceed whistle signal, then the conductor called to him and inquired whether he could see No. 55; when he replied in the negative, the conductor motioned for him to return. He had reached his train at the time it started to move and had just boarded the steps when he saw No. 55 rounding the curve. The flagman had seen the 10-minute fusee fall on its side and fail to burn properly and he knew that the 5-minute fusee had burned out before he started to return to his train; however,

he did not place another lighted fusee or any torpedoes because he did not think it necessary to do so on tangent track. According to the statement of the conductor, the flagman continued to walk eastward after the conductor had called to the flagman in regard to No. 55. When the engineman sounded a proceed signal, the conductor gave a hand proceed signal; at this time the flagman had passed around the curve and out of the conductor's sight. The conductor did not motion to the flagman to return to his train, as it was the conductor's intention to leave the flagman at Harmon to ride on No. 55 to the next station where No. 55 would pass the extra train. The conductor entered his caboose as the train began to move and soon afterward he went to the rear platform and saw his flagman running toward the caboose and No. 55 rounding the curve. The rules required the flagman to place one torpedo on the rail at a point at least 1/4 mile to the rear of his train and then place two torpedoes at least 1/2 mile to the rear of his train; if conditions did not require him to go farther to the rear, he was permitted to return to the location of the one torpedo and remain there until recalled. According to the statement of the flagman, he did not place any torpedoes and he reached a point only about 500 feet to the rear of his train. If the flagman had continued to proceed eastward instead of stopping for a period of 7 minutes, and then had flagged in accordance with the rules, undoubtedly this accident would have been averted.

Because of the rule which specified that when the view is obscured a second-class or inferior-class or extra train must approach time-table stations at a speed which will enable it to stop short of train or obstruction, the flagman of the preceding train thought No. 55 should have moved around the curve at a speed that would enable it to stop short of the rear of a train standing at any point between the east end of the curve and the train-order signal. The rules examiner supported the flagman's understanding of this rule but practically all the other witnesses thought the rule applied only to a small portion of the track opposite the train-order signal; however, they did not agree as to any definite length of track on which the rule applied. Officials had never discussed this rule with the employees. The officials did not agree among themselves as to the meaning of the rule. Even though the rule applied only at the train-order signal, the evidence indicates that it is doubtful if an emergency application of the brakes, made on the following train when the engineman or the fireman could first see the rear end of a train standing opposite the train-order signal, would have stopped the train short of the preceding train.

Safety of operation requires that the officials and employees have a common understanding of all operating rules. In order to accomplish this, officials must first have a common understanding among themselves and then it is their duty to take necessary measures to assure themselves that the employees have the same understanding. After the occurrence of this accident, the general officers issued an interpretation of the rule. This interpretation agrees with that of the rules examiner; it agrees also with the understanding had by the flagman of the preceding train but it does not agree with the understanding had by the engineman of the following train. Had there been a common understanding of the rule involved before it became effective, it is probable this accident would have been averted. If some form of block system had been in use on this line, it is probable that the accident would have been averted.

Cause

It is found that this accident was caused by the failure to provide adequate flag protection for the preceding train, and by the failure properly to control the speed of the following train in accordance with the rule pertaining to the movement of a train approaching a station.

Recommendation

It is recommended that consideration be given by the Texas and Pacific Railway Company to the establishment of a suitable block signal system on that part of its Shreveport Sub-division which extends between Alexandria and Cut Off Junction, La.

Dated at Washington, D. C., this fifteenth day of April, 1941.

By the Commission, Commissioner Patterson.

W. F. EARTEL,

Secretary.

(SEAL)