Inv-2256

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

KANSAS CITY SOUTHERN RAILWAY

SPENCER, TEX.

FEBRUARY 23, 1938.

INVESTIGATION NO. 2256

SUMMARY

Inv-2256

Railway:	Kansas City Southern
Date:	February 23, 1938
Location:	Spencer, Tex.
Kind of accident:	Derailment
Train involved:	Passenger
Train number:	15
Engine number:	806
Consist:	5 cars
Speed:	40-55 m.p.h.
Track:	Tangent
Weather:	Clear
Time:	2:40 p.m.
Casualties:	2 killed; 11 injured
Cause:	Failure to comply with speed restriction governing entry to siding.

To the Commission:

On February 23, 1938, there was a derailment of a passenger train on the Kansas City Southern Railway at Spencer, Tex., which resulted in the death of two employees, and the injury of nine passengers and two dining car employees.

Location and method of operation

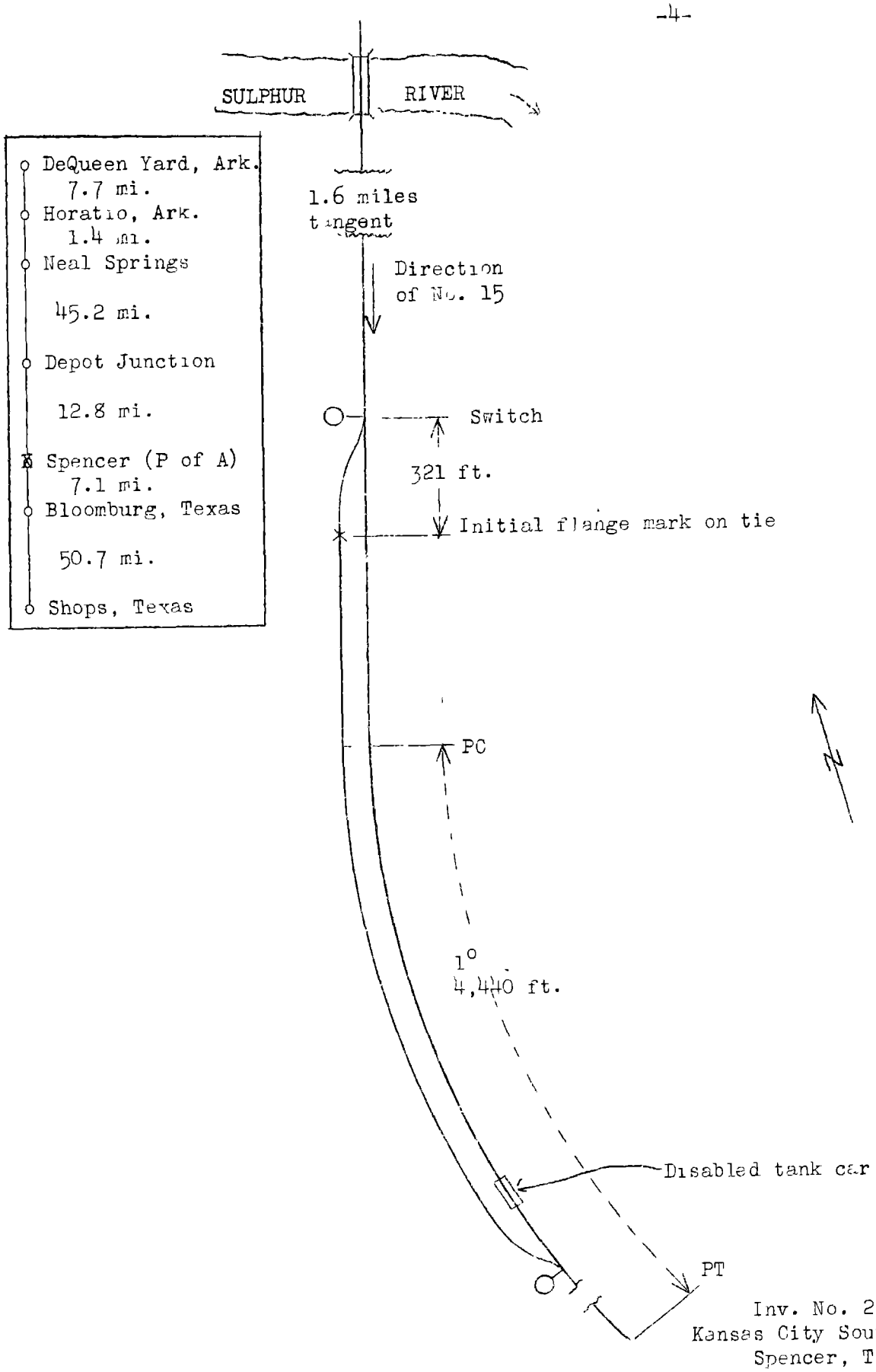
This accident occurred on the Fifth District, Southern Division, which extends between DeQueen Yard, Ark., and Shops, (near North Shreveport) La., a distance of 124.9 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use. The accident occurred at the north switch of the siding at Spencer; from the north the track is tangent for 1.6 miles to the switch and for about ¼ mile south thereof. The grade is slightly undulating, being 0.08 percent ascending southward at the switch.

The siding at Spencer is 3,508 feet in length and parallels the main track on the west. The switch stand of the north switch is located on the west side of the track and is of the Elliot high-mast type. It is located 6 feet 2 inches from the west rail of the main track and the center of the target is 5 feet 6 inches above the head block. The red target is 9 inches wide and 32 inches long, pointed at each end; it is placed diagonally on the mast. A switch lamp is mounted on top of the mast. When the switch is open the red target is displayed, but when the switch is closed no target is visible. Entry to the siding is through a No. 10 turnout.

The main line is laid with 85-pound rail, 33 feet in length, 20 ties to the rail length, fully tie-plated, with 15 inches of gravel ballast under the ties. The siding is also laid with 85-pound rail for a distance of 352 feet at the north end, then 60-pound rail to a point beyond where the wreckage stopped, with 20 ties to the rail length, tie-plated for 200 feet at the north end, with 12 inches of gravel ballast under the ties of the turnout and 8 inches of gravel and cinder ballast under the siding proper.

Rules 101a and 117 of the book of operating rules read in whole or in part as follows:

> 101a. Trains must be fully protected against any known condition which interferes with their safe passage at normal speed.



Inv. No. 2256
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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 will insure safety.

117. Trains entering *** passing tracks *** will not exceed eight (8) miles per hour. ***

The maximum authorized speed of trains handled by Class-H locomotives is 60 miles per hour.

The view of the switch target is unobstructed.

The weather was clear at the time of the accident, which occurred about 2:40 p.m.

Description

No. 15, a south-bound passenger train, consisted of one baggage-express car, one mail-baggage car, one coach, one diner-coach, and one Pullman-sleeping car, in the order named, hauled by Class-H engine 806 of the 4-6-2 type, and was in charge of Conductor Butzer and Engineman Kiene. The cars were of all-steel construction with the exception of the first car, which had a steel-underframe and a steel sheeted wooden upper-structure. At DeQueen Yard the crew received an initial clearance card, Form 213, together with five Form 19 train orders, including order No. A-294 on Slow Order Form 19 reading as follows:

CLCX 1010 load molasses on main track near south switch Spencer with broken arch bar cannot be moved. North and south passing track switches Spencer lined and locked for passing track account damaged car on main track use passing track Spencer as main track

This train left DeQueen Yard at 12:10 p.m., according to the train sheet, 16 minutes late; left Texarkana Depot Junction, the last open office, at 2:26 p.m., 11 minutes late, and while approaching Spencer, 12.8 miles beyond, was derailed when entering the north switch of the siding at a speed estimated to have been between 40 and 55 miles per hour.

Engine 806 and its tender stopped on their right sides west of, and parallel to, the siding, with the front end of the engine 532 feet south of the north switch. The first three cars and the forward truck of the fourth car were derailed; these cars remained coupled and were not overturned, but the first car passed

by the overturned engine and stopped with its south end 53 feet beyond it. The employees killed were the engineman and the fireman.

Summary of evidence

Conductor Drummond, of No. 42, on February 22nd, a northbound freight train, stated that about 5½ miles south of Spencer an arch bar broke on one of the trucks of a car of molasses which was being hauled next to the caboose in his train. After the arch bar failed the column bolts were down so low that it was impossible to move the car into a siding because of inability to raise the column bolts high enough to clear the rails of the main track. Therefore, he made arrangements with the dispatcher to leave the car on the main track between switches at Spencer, and he was advised by the dispatcher that protection would be provided by train order. Before leaving Spencer he lined both switches for the siding and locked them in that position. He thought that the situation had been handled in a safe manner and in compliance with rule 101a. A previous case which occurred about two years ago was handled in a similar manner.

Train Dispatcher Sullivan stated that about 8:40 p.m. on February 22nd, Conductor Drummond of No. 42 communicated to him the information that near mile post 506 an arch bar had broken on one of the cars in his train. He instructed the conductor that in case he was unable to move the car to clear the main track he was to bring it to Spencer if possible. At 9:45 p.m. Conductor Drummond informed him that he had placed the disabled car on the main track just north of the south siding-switch at Spencer and that he would line the switches for the siding at that point and lock them. The dispatcher then instructed the conductor that he need not protect the car by flag as the situation would be handled by train order, as is customary in such cases. The dispatcher thought that the manner in which this situation was handled provided ample safety and was in compliance with rule 101a.

Conductor Butzer, of No. 15, stated that a standing test of the air brakes was made by the train crew at DeQueen and a running test was made shortly after leaving there. In the running test the brakes functioned properly, and this was the case, too, in making various slow downs and stops en route. When the orders were delivered to him at Dequeen the operator called his attention to order A-294. The conductor in turn, directed the attention of Engineman Kiene to this order and was sure that the engineman fully understood it. The fireman was on the engine at the time the engineman read the orders back to the conductor, but the conductor did not know whether the fireman read the orders. The

conductor showed his copy of orders to the brakeman and train porter, and they read them and discussed them with him, and he was satisfied that they fully understood the contents. Although he did not hear any station whistle signal sounded for Spencer station he was aware of the train's position approaching that point. The speed was about 45 miles per hour at that time. The first indication of impending trouble was an emergency application of the brakes which was made very near the north switch of the siding. After the accident he noticed that the switch was lined for the siding and that the target was displaying a red indication. The track was straight for a long distance, the view was unobstructed, and the sun was shining brightly. During the conversation incident to the delivery of orders at DeQueen the engineman appeared to be normal in every respect, and the conductor had heard no complaint from either the engineman or the fireman concerning their physical condition. Engineman Kiene died without making any statement.

Brakeman Lindsay, of No. 15, stated that he made an air brake test at DeQueen, but failed to inspect the head car; the brakes on the remaining cars in the train operated properly. He read the train orders which the conductor received at DeQueen and understood them. Although their train approached Spencer at a speed of 40 or 50 miles per hour he did not feel any apprehension as he was depending upon the engineman to reduce speed sufficiently for safe entry into the siding. He did not hear any station whistle signal sounded approaching Spencer. On his way back to flag after the accident he observed that the north switch was lined and locked for the siding and that the switch target plainly showed red and was visible for a distance of about 300 yards.

Statements of several other persons on the train, including the train porter, passengers, and employees who were deadheading, developed nothing additional of importance. None heard any station whistle signal sounded approaching Spencer; the train was handled properly en route, the air brakes functioned properly and the first intimation they had of anything wrong was when the air brakes were applied in emergency. Estimates of the speed at that time ranged from 40 to 55 miles per hour.

Chief Dispatcher Stuckey stated that the situation was protected in the customary manner for occurrences of this kind, and that previously no trouble had been experienced in handling such cases in this way. In his opinion the train order as issued, in the form of a slow order, constituted full compliance with the requirements of rule 101a.

Master Mechanic Pierce stated that after the accident he found the automatic brake valve in emergency position and the independent brake valve in running position. The throttle quadrant and latch were torn off and the throttle was bent backward in full open position.

Mechanical Foreman Johnson stated that he was at Cass, located about 2¾ or 3 miles south of Spencer, as No. 15 approached the siding at Spencer; he heard a signal sounded on the engine whistle of that train for a road crossing north of Spencer, and less than 4 minutes later the accident occurred.

Superintendent Hooper stated that Engineman Kiene was last examined on December 21, 1937, and was pronounced physically a first-class subject for position as locomotive engineman.

Observations of the Commission's Inspectors

The first flange mark was 13 inches west of the base of the west rail of the siding on a tie located 321 feet south of the switch. Similar marks were found on the next two ties and on the third tie another mark appeared alongside of the first mark. These flange marks continued to where the general destruction of the track occurred. Just south of the switch points 19 feet of the main track was shifted eastward a maximun distance of 2½ inches, and starting at a point 156 feet south of the switch points 29 feet of the siding was shifted westward a maximum distance of 7 inches. From a point 352 feet south of the switch the siding track was torn up for a distance of 179 feet.

Discussion

Train order A-294 was issued on a yellow slow order Form 19; it was typewritten and clearly stated the conditions existing at Spencer. The evidence is to the effect that the train brakes functioned properly during the trip. After the accident the north siding-switch was found lined for entry to the siding and locked in that position, and the switch target was displaying a bright red banner which was visible for a distance of about 300 yards.

Since the enginoman and fireman were killed in the accident, what took place on the engine approaching Spencer could not be learned. The fact that a whistle signal was sounded by the engine of No. 15 about 4 minutes prior to the occurrence of the accident, and the additional fact that the brake valve was found in emergency position after the accident, indicate that the engineman was not incapacitated. Although the engineman was 66

years old, he had recently passed a physical examination and had been pronounced first class for the position of engineman.

Conclusion

This accident was caused by failure to comply with the speed restriction governing entry to a siding.

Respectfully submitted,

W. J. PATTERSON

Director.