

INTERSTATE COMMERCE COMMISSION

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY COVERING INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NEW YORK CENTRAL RAILROAD, LINES WEST, AT DUNKIRK, N Y, ON JULY 1, 1919

SEPTEMBER 2, 1919

To the Commission

On July 1, 1919 there was a rear-end collision between two passenger trains on the New York Central Railroad Lines West at Dunkirk, N Y, which resulted in the death of 8 passengers 3 employees, and 1 trespasser, and the injury of 105 passengers 2 employees 3 Pullman porters, and 1 other person. This accident was investigated in conjunction with the Public Service Commission of New York second district, testimony being taken at a hearing held at Erie Pa on July 2. As a result of the investigation of this accident I have to submit the following report.

The Erie division, on which this accident occurred extends from Bay View N Y 79 miles west of Buffalo, to signal station BR, 10 52 miles east of Cleveland Ohio a distance of 163 1/2 miles. This is a four-track road with the exception of 8 100 feet of three-track road through the city of Dunkirk, within which territory this accident occurred. These tracks are numbered 1, 2 and 4 from north to south. Track 1 is the track used by all westbound movements of the New York Central Railroad, these movements being directed at this point from X tower, about 900 feet east of the point of collision or 1 100 feet east of Dunkirk passenger station. Train movements in general are governed by automatic block signals, the indications at night being red, yellow, and green for stop, caution, and proceed respectively. At Dunkirk there is a mechanical interlocking plant, controlled from X tower operating the cross-overs between the main tracks and from the main tracks to the yards. It also governs movements of Erie Railroad trains between their yards and the running track. All of the signals controlled from this tower are semiautomatic. The home interlocking signal is about 800 feet east of the tower while the distant signal is about 4 000 feet east of the home signal. Beginning at the distant signal, the track is tangent for about 1 600 feet, followed by a 40-minute curve to the right nearly 2 900 feet in length, 600 feet of tangent, another 40-minute curve to

the right nearly 400 feet in length, and then tangent to the point of collision, a distance of nearly 600 feet. The grade is 0.3 per cent descending for westbound trains. At the time of the accident the weather was clear.

Westbound passenger train, second No. 41, consisted of one mail car, two baggage cars, three day coaches, and five sleeping cars, the rear sleeping car having a steel underframe with wooden superstructure. This train was hauled by engine 4811 and was in charge of Conductor Talcott and Engineman Thayer. It left Buffalo, 40 miles east of Dunkirk at 12:40 a. m., 38 minutes late, and arrived at Dunkirk at 1:33 a. m. After doing station work, the train started at 1:43 a. m., and after proceeding about two train lengths, was brought to a stop by the flagman who opened the emergency valve on account of a hot box on the rear car Pullman sleeping car Valhalla. The train backed to the station, reaching there at about 1:50 a. m., and car inspectors had nearly finished changing a brass in the journal box when, at 2:18 a. m., train No. 7 approached and collided with the rear end of train second No. 41.

Westbound passenger train No. 7 consisted of one express car, one coach, four Pullman sleeping cars, one combination car, one coach, and four Pullman sleeping cars in the order named, the first car being of wooden construction while all the rest were of steel construction. This train was hauled by engine 4808 and was in charge of Conductor Loomis and Engineman Clifford. This train does not run into the main station of Buffalo but runs around what is known as the 'compromise' leading from the tracks of the Lines East to those of the Lines West and making a station stop at Clinton Street station. It left that point at 1:24 a. m., four minutes late, and proceeded westward colliding with the rear end of train second No. 41 while traveling at a speed estimated to have been about 40 miles an hour.

Train second No. 41 was driven forward a distance of about 175 feet. The boiler of engine 4808 apparently overrode the steel center sills of the rear sleeping car and was sheared from its frame telescoping the wooden superstructure of the sleeping car about two-thirds of its length. This car was turned over into the street paralleling the roadway and practically demolished. The steel sleeping car immediately ahead of it was also overturned but the damage was confined to the vestibules and the breaking of windows. None of the other cars of train second No. 41 was derailed although all of them were slightly damaged. The first car in train No. 7, the wooden express car, was caught between the tender ahead of it and the steel day coach behind it and demolished. The forward end of this day coach was telescoped a distance of about 15 feet by the tender and the wreckage of the express car. None of the other cars

in train No. 7 was derailed or materially damaged. The employees killed were the engineman, fireman, and express baggageman of train No. 7.

Flagman Frawley of train second No. 41 stated that he had noticed the hot box before the train reached Dunkirk, and while standing at the station gave a stop signal to the other members of the crew, but they did not notice it. After the train started he sounded the air whistle signal twice, but as the engineman did not stop, he went inside and opened the emergency valve. He then went back about a train length, lighted a fusee, and from that point gave a back-up signal and the train backed to the station. He then went back to X tower and remained there five or seven minutes, explaining about the delay. He was told by the towerman that train No. 7 had left Buffalo 15 or 20 minutes previously, and he then began to walk back. He went as far as Roberts Road crossing, which was about 1,400 feet from the rear of his train. He could see train No. 7 approaching and knowing that the engineman could see him better, he crossed over to the eastbound freight track and began giving stop signals. He heard the engineman sound the whistle in the vicinity of Middle Road crossing, about 2,600 feet east of Roberts Road crossing, as well as several times before reaching it, sounding one blast about every two seconds. He did not hear him acknowledge the stop signals, and continued giving stop signals with a fusee. As the train approached he crossed over to the center of track 1 and stood there until the train was within 30 feet of him, when he jumped clear of the track on the engineman's side and threw his lanterns at the engine. As the engine passed him, the engineman was calling for brakes, sounding one short blast on the whistle every two or three seconds. He did not notice whether or not there was fire flying from the engine brakes, but said there was none flying from the train brakes. He estimated the speed of the train at this time to have been about 35 or 40 miles an hour. Flagman Frawley further stated that he did not go back beyond the home signal, consequently he did not know whether or not the signal lamps were burning, but he said the blades were in the horizontal or stop position.

Conductor Talcott of train second No. 41 stated that after the train had backed to the station at Dunkirk, he saw that the hot journal required a new brass and sent for a car inspector. While the work was being done, train No. 7 approached and seeing that it was not going to stop, he called to the men around him to get out of the way, at the same time giving a proceed signal in the hope that his engineman might be able to start the train ahead. He said that before he saw the headlight of train No. 7, he saw Flagman Frawley swinging his red and white lanterns from a point near Roberts Road.

crossing and he also heard the enginem in sound four short blasts of the whistle. He did not see any fusee being used by the flagman at this time. Brakeman Nichols also stated that he saw Flagman Frawley giving stop signals with his lanterns.

Enginemman Thayer of train second No. 41 stated that after proceeding a few car lengths leaving Dunkirk, the brakes were applied, and he received a back-up signal. He backed up to the station, got off the engine and was standing in the street when he heard the engine whistle and in about a minute saw the headlight of train No. 7 coming around the curve apparently moving very rapidly. He thought the force of the collision moved his train ahead about two car lengths.

Towerman Siefert, on duty at X tower at the time of the accident, stated that train second No. 41 passed that point at 1:33 a. m. after which he restored lever No. 2 governing the home signal on track 1 to its normal position, thus leaving the home signal at stop. After making the station stop the train started, but was stopped and backed to the station and the flagman came back, going a short distance east of the tower, while he himself notified the car inspector to attend to the hot box. When the annunciator indicated the approach of train No. 7, he told Flagman Frawley, who was on the ground just east of the tower and the latter started east swinging his lanterns. At this time the indicators in the tower showed the home and distant signals to be stop and caution respectively. His attention was then attracted to train No. 7 which he saw was not going to stop at the home signal and by the enginemman whistling for brakes, sounding one short blast of the whistle every three or four car lengths. When the train passed the tower at 2:18 a. m. traveling at a speed estimated by him to have been about 40 or 45 miles an hour, there was flying from the driving and tender wheels, but none from the cars.

Enginemman Smith of westbound freight train extra 4734 whose engine was standing about 800 feet east of the distant signal when train No. 7 passed, said that at this time the enginemman of that train was not working steam. The distant signal indication was yellow, or caution when train No. 7 passed it. After the train had passed, he heard a whistle sounded but did not hear what signal was being given as his own engine was blowing off steam. He thought he heard three or four short blasts of the whistle. After the accident he handled the rear portion of train No. 7 from Dunkirk to Erie and experienced no trouble with the air brakes. Head Brakeman Sargent of extra 4734 was opposite the tender of his engine when train No. 7 passed. He heard about seven blasts of the whistle calling for brakes when the engine of train No. 7 was at Middle Road crossing.

Conductor Eggleston of extra 4734 said he was standing near the rear of his 74-car train when train No 7 passed him. At this time the engineman was not working steam. He heard the whistle signal for brakes sounded five or six times and thought the train was about at Middle Road crossing when the whistle signals were given. After the accident the engine was cut off from his train and pulled the rear of train No 7 away from the wreckage. The air brakes worked all right when bringing this portion of the train to a stop.

Flagman Hopp of extra 4734 stated that the engineman of train No 7 stopped working steam when about opposite the caboose the train at the time traveling at a speed of 45 or 50 miles an hour. When the train was about at Middle Road crossing or just west of that point he heard seven blasts of the whistle. Brakeman Madden of the same train said he heard train No 7 whistle for brakes four times. He was in about the middle of his train, and said the engine of train No 7 was working steam when it passed him.

E. M. Retzer, a patrolman employed by the railroad, was on duty at Dunkirk station when the collision occurred and thought that at that time the engine was being operated in reverse motion. He had heard the engineman of train No 7 sound several short blasts of the whistle when within a few car lengths of train second No 41, but did not know what signals they were. He assisted in removing Engineman Clifford from the wreckage at which time the engineman was conscious and said, 'It isn't my fault, the air wouldn't work.' Patrolman Burke, who was also on duty at Dunkirk station, stated that he heard whistling, and on looking eastward saw a red fusee but paid no further attention to it. After the accident he assisted in removing Engineman Clifford and he also heard him say that it was not his fault that the brakes did not work.

Flagman Galbraith of train No 7 stated that the brakes were tested before leaving Clinton Street Station in Buffalo and that they were applied when slow-downs were made at the Delaware Lackawanna & Western crossing and at Buffalo Creek, which is near an Erie Railroad crossing. He noticed only a slight reduction in speed at Silver Creek water pan. Approaching Dunkirk he heard more whistling than usual, the first whistles coming when in the vicinity of Middle Road crossing. These whistles consisted of several short blasts and he thought it was a warning for some one to get off the track.

Conductor Loomis of train No 7 stated that after leaving Clinton Street Station two stops were made in Buffalo and for crossings of the Erie Railroad and an application of the brakes was also made at Silver Creek water pan. When the collision occurred, he was riding in the seventh car from the head end. He did not notice any reduction in speed and did not feel the brakes being applied, neither did he notice any whistle signals being sounded.

C S Tift, second conductor on train No 7, was riding in the same car with Conductor Loomis. He also testified to the train stopping twice in Buffalo yard and slowing down at the water pan, although not positive that a brake application was made at the latter point. Approaching Dunkirk he did not hear any whistle signal until in the vicinity of the road crossing immediately east of X tower, when he heard four blasts sounded in close succession. Brakeman Colmoigan said something to him about it, but he did not pay any attention to it. Brakeman Colmoigan said he did not feel the brakes applied after leaving Clinton Street Station except at the two crossings of the Erie Railroad. He was in the same car with the two conductors when he heard three long blasts of the whistle and asked the conductors what they meant. The collision occurred immediately afterwards.

Baggagemaster Wilson stated that the brakes were tested before leaving Clinton Street and that the train stopped or slowed down twice in Buffalo yard. The brakes were also applied at the Silver Creek water pan. He did not hear the whistle signals sounded just prior to the accident, which occurred while the train was traveling at a speed estimated by him to have been about 50 miles an hour.

Clarence Abel, a former engineman, was a passenger on train No 7, and made a written statement to the effect that when leaving Buffalo he felt the engineman make a running test of the brakes.

Road Foreman of Engines Aske stated that he examined the brake shoes on engine 4808 immediately after the accident and found evidence of them having been applied hard enough and long enough to have become hot while two of the shoes from the engine truck were blue from heat. Assistant Car Foreman Kelly and Car Inspectors Drury Polanowsky, Dambach and O'Neill testified to inspecting and testing the air brakes of train No 7 at Buffalo, and that they were in good condition, with none having more than 8 inches piston travel. Inspector Drury in addition testified to coupling the engine to the train and to opening both angle cocks. The angle cock on the rear of the tender was of the self-locking type. He did not notice any strangers near the head of the train at the time.

Wreckmaster Schack stated that shortly after his arrival at the scene of the accident, at 5 30 a. m. he found the angle cock closed on the rear of the tender but he said it might have been one of the results of the collision. He also found the body of a man on the right side of the tender, crushed between the tender and wreckage of the express car and the head end of the day coach.

The body of the man found at the rear of the tender was identified as that of Charles Schiller, a resident of Dunkirk. J F Helfeldt, a chauffeur, stated that he was at the station on the previous evening with Schiller and the latter asked him to go with him to Buffalo and

there take a fast train to Chicago. He refused to go and left Schiller, who started toward the head end of train No. 44, which was then standing at the station. He did not see him board that train, which is due to leave Dunkirk at 7:52 p. m. neither did he see him again between that time and the time he identified his body a few hours after the occurrence of the accident.

The evidence indicates that the brakes on train No. 7 were working satisfactorily when tested at Clinton Street station, and that they worked when making two stops in Buffalo yard, and also when reducing speed over the Silver Creek water pan about 4 miles east of Dunkirk. On the other hand the evidence also indicates that when Engineman Clifford attempted to bring his train under control approaching Dunkirk he was unable to do so on account of the fact that the angle cock at the rear of the tender had been closed, thus rendering the train brakes inoperative. It is apparent that he shut off steam and applied the brakes in sufficient time to have enabled him to bring his train to a stop had the train brakes been in operation, and that when he realized that something was wrong with the air he began to sound the whistle signal calling for brakes. The angle cock was of the self-locking type, having notches into which the handle fitted when it was placed in the open or closed position. How this angle cock became closed is more or less a matter of conjecture, but it is supposed that after passing over the water pan Schiller, having become thoroughly wet on account of the flying water, decided to give up his idea of riding to Chicago, and knowing that the train he was on did not stop at Dunkirk thought that by turning the angle cock, he could apply the brakes and bring the train to a stop, thus enabling him to get off in safety.

This accident was caused by the closing of the angle cock in the train line at the rear end of the tender thus preventing the train brakes from being applied when the engineman attempted to bring his train to a stop.

Some question arose as to the reason why this hot box developed and it became necessary to change a brass only 40 miles from the Buffalo terminal. An investigation of this matter was made, and the records of the Pullman Co. show that sleeping car Valdivia had been recently overhauled, having been turned out of the Buffalo shops on June 25, 1919. The trucks had been given a thorough overhauling, and 6 pairs of new wheels and 12 new journal brasses were installed. This car arrived in Buffalo on June 30 in train No. 60, which is due there at 12:45 p. m. it was given the usual inspection by the oilers at Buffalo both upon arrival and before departure in train second No. 41 on July 1, and nothing wrong with the journal was discovered at that time. At Dunkirk when the brass was taken out of the hot box it was found that the lining had melted out and was in

the bottom of the journal box necessitating the application of a new brass. On the New York Central Lines the current practice is to overhaul journal bearings every six months. new bearings are also applied when wheels are changed for any cause or when worn or defective brases are discovered.

All the employees involved in this accident were experienced men with good records and none had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted

W. P. BORLAND,
Chief Bureau of Safety

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