# INTERSTATE COMMERCE COMMISSION

## REPORT OF THE CHIEF INSPECTOR OF SAFETY APPLIANCES COVERING HIS INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LONG ISLAND RAILROAD NEAR COLLEGE POINT, LONG ISLAND, ON SEPTEMBER 22, 1913

OCTOBER 30, 1913

TO THE COMMISSION

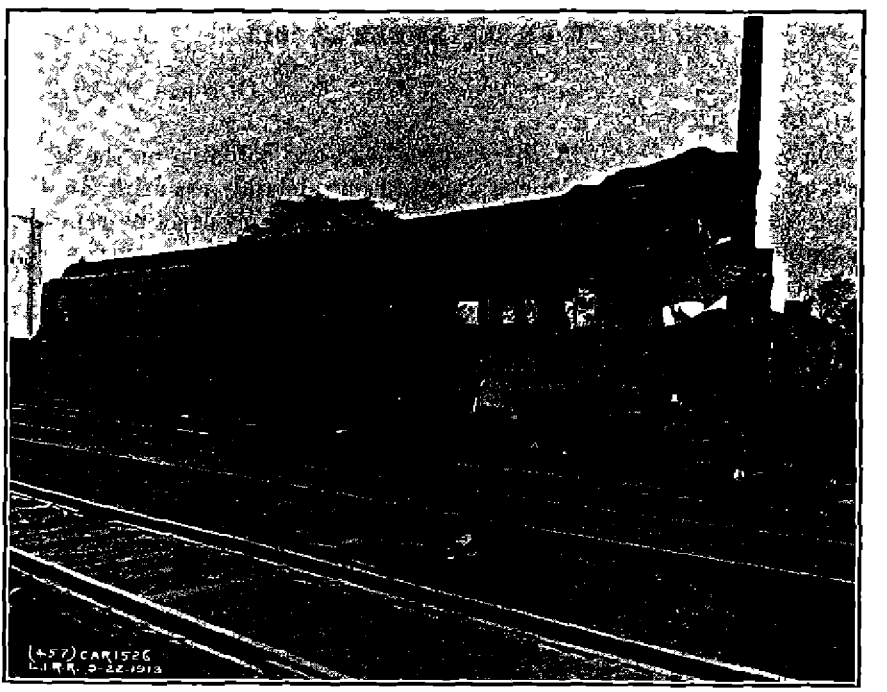
On September 22, 1913, there was a head-end collision on the Long Island Railroad near College Point, Long Island, resulting in the death of 3 employees and 1 passenger, and the injury of 44 passengers, 6 employees on duty, and 4 employees off duty As a result of the investigation of this accident I beg to submit the following report

West-bound train No 311 consisted of one motor passenger car and one motor combination baggage and passenger car, each of steel construction, in charge of Conductor Cordon and Motorman Hohlein, and was en route from Whitestone Landing, Long Island, to the Pennsylvania Station in New York City, a distance of 13½ miles This train left Whitestone Landing at 6 39 a m , 23 minutes late, and had nearly reached College Point, which is 2 4 miles from Whitestone Landing, when it collided with east-bound train No 308 while running at a speed estimated to have been about 35 miles per hour

East-bound train No 308 consisted of one motor combination baggage and passenger car and four motor passenger cars, all of steel construction, in charge of Conductor Bellis and Motorman Loder and was en route from New York to Whitestone Landing Train No 308 left New York at 6 15 a m , on time, and passed JC tower, 3 1 miles west of College Point, at 6 38 a m , 3 minutes late Stops were then made at Bridge Street, 1 4 miles west of College Point, and at College Point After leaving College Point the train had proceeded about 800 feet when it collided with train No 311 while running at a speed of about 15 miles per hour

The forward end of car No 1526, the leading car in train No 311, was crushed, the side sills being buckled inward and the center sills buckled upward Illustrations Nos 1 and 2 are side and end views, respectively, of this car and show the extent to which it was damaged Illustration No 3 gives an idea of the extent to

which the interior of the car was damaged by the shock of the collision The forward trucks of car No 1371, the leading car in train No 308, were forced backward under the body of the car for nearly half the length of the same, and were followed by the forward trucks of car No 1526 of train No 311 The forward end of car No 1371 was damaged to some extent, as shown by illustration No 4 The sills remained true, but the floor was forced upward in the center of the car by the dynamo and auxiliary reservoir being caught between the floor and the forward trucks when the latter were driven backward Illustration No 5 shows the




No 1.—First car of westbound train No 311, side view

interior of the forward end of car No 1371 All the other cars involved in this collision were practically undamaged

The Whitestone Branch of the Long Island Railroad is a single-track line extending from Whitestone Landing to JC tower, a distance of 4 6 miles At JC tower this branch connects with the double-track line of the North Shore division Proceeding easterly from College Point station there is about 500 feet of straight track, followed by an easement curve to the right of 2° 42′ about 300 feet in length, then there is a curve to the right of 9° 20′ about 700 feet in length, which in turn is followed by another easement curve to the right of 3° 30′ 152 feet in length The track is then straight

for about 1 mile At a point about 600 feet east of College Point station there is an overhead highway bridge, the approaches and abutments of which materially obscure the view in either direction This condition is shown in illustration No 6, which is a view looking


No 2—First car of westbound train No 311 end view

easterly toward the point of collision, which occurred about 200 feet east of the bridge Approaching this bridge from the opposite direction the view is obscured by trees located on property adjoining the right of way At the point of collision and approaching the same from the east there is an ascending grade of 1 15 per cent

The speed of trains while rounding these curves is limited by slow boards and time-table rule to 20 miles per hour Trains on this branch are operated by electricity No block-signal system was in use, trains being run on time-table rights and by train orders transmitted by telephone

According to time-table rule No 1, on single track westbound trains are superior to eastbound trains of the same class between midnight and noon, while between noon and midnight the reverse is true As the accident occurred at about 6 42 a m , westbound train No 311 was the superior train


No 5.—First car of westbound train No. 311; interior view.

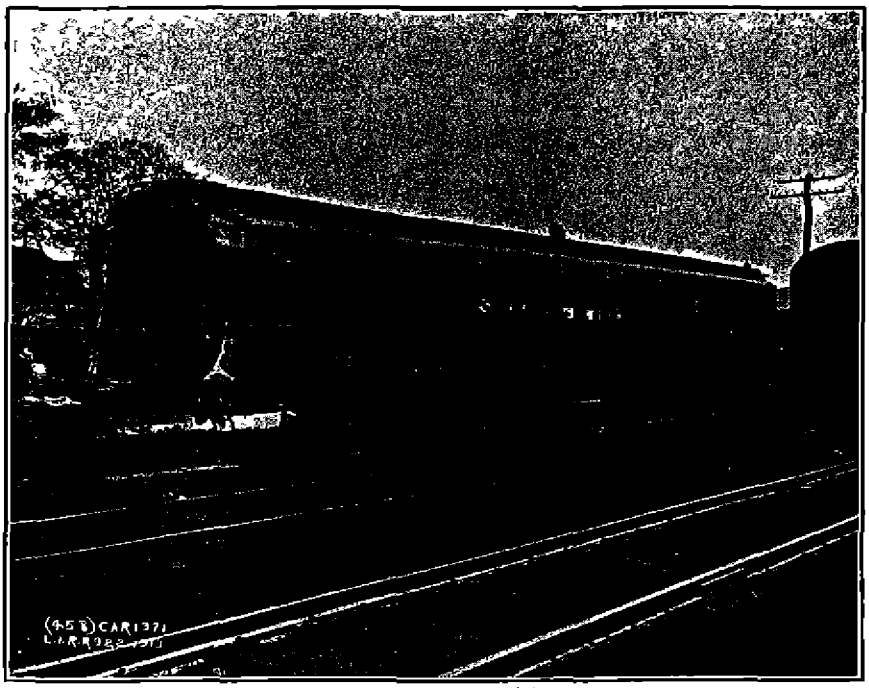
Rule No 93 of the operating rules of the Long Island Railroad provides as follows:

(Single track ) A train must not leave its initial station on any division, or a junction, or pass from double to single track until it has been ascertained whether all trains due which are superior or of the same class have arrived or left

Time-table rule No 5, however, reads in part as follows

At ends of double track, when signal men are on duty, signals will not be given trains to enter single track until all superior overdue trains have arrived or orders given permitting the inferior train to proceed

Superintendent Austin stated that the company considered this provision of time-table rule No 5 to supersede rule No 83 of the operating rules, thus placing upon the towerman the full responsibility for knowing that opposing trains had arrived No train register was maintained at JC tower, as would have been necessary had rule No 83 been enforced properly, and it had long been the practice and understanding, even before the promulgation of time-card rule No 5, that when an eastbound inferior train secured a clear signal from JC tower it indicated that all superior westbound trains due or overdue had arrived, the crew of the eastbound train being relieved

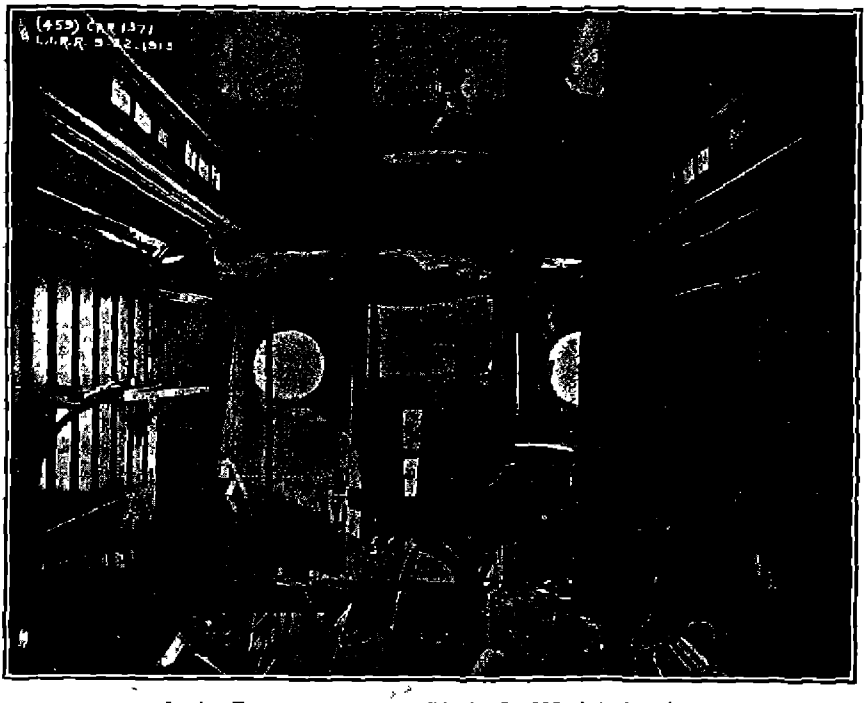


No 4.—First car of eastbound train No 308, exterior view

of all responsibility for knowing whether or not such trains had arrived

Towerman Maize, located at JC tower, stated that when train No 308 approached he examined the block sheet and saw that train No 311, already 11 minutes overdue, had not arrived, but inasmuch as nothing had been said to him by the dispatcher about train No 308, he supposed that at some station west of JC tower the dispatcher had given that train help on train No 311, since it was the custom for the dispatcher to notify him to hold trains for orders if they had not received them before reaching JC tower He therefore cleared the signal and allowed train No 308 to proceed, the train

passing his tower at 6.38 a m Shortly afterwards, at about 6 41 a m , he tried to report trains to the dispatcher, but was told by the latter to wait a minute, as he was busy The first knowledge Towerman Maize had of anything wrong was when he heard the towerman at College Point report the accident to the dispatcher by telegraph Further examination of Towerman Maize brought out the information that he had made movements similar to this on several previous occasions and considered them to be nothing unusual He particularly remembered a movement of this kind within a week or 10 days prior to the date of this accident, but from examina-

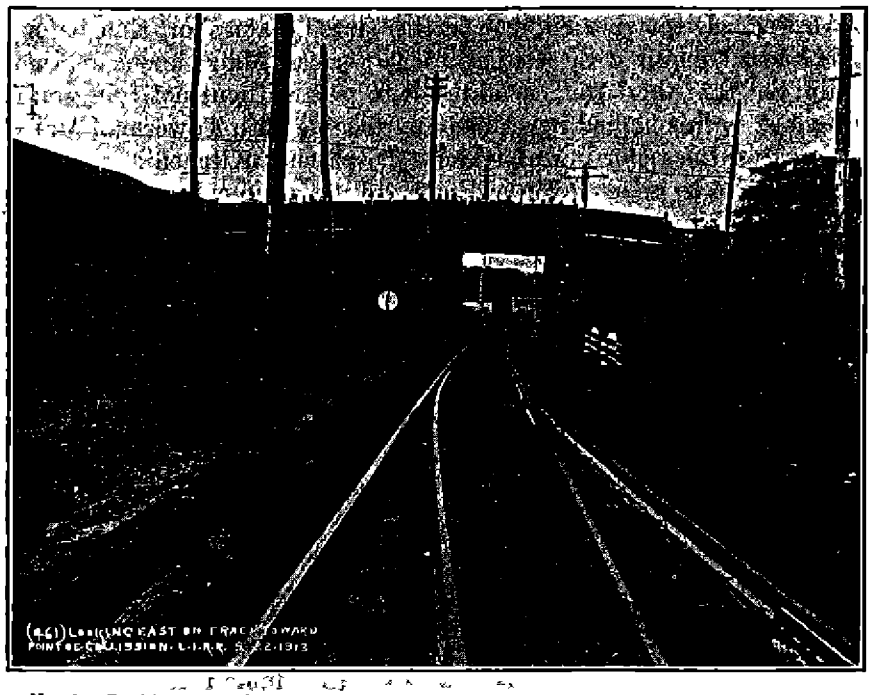


No 5 —First car of eastbound train No 308 , interior view

tion of the block sheet it appeared that no accident resulted because of the fact that instead of the train in question not having arrived, it had already passed the tower, but the operator had failed to enter its passing time on the block sheet Further than that, the eastbound train he had allowed to pass was superior to the train which he thought had not arrived, and the westbound train therefore would have had to protect against the eastbound train A check was made of the dispatcher's train-order books from June 20, 1913, to the date of the accident, but not one instance was disclosed of an eastbound inferior train having received help against an opposing superior train at any station prior to its arrival at JC tower Towerman Maize

further stated that if the dispatcher had intended to issue orders to train No 308 at JC tower he would have been notified by the dispatcher prior to the arrival of the train In the absence of any such notification he thought train No 308 had received orders at some point west, and that it was all right for it to proceed Towerman Maize stated that he had been examined on the operating rules, but not on the time-table rules He was familiar with time-table rule No 5, but its importance and its particular application at JC tower had never been explained to him

Towerman Tucker, who relieved Towerman Maize shortly after the accident, had been employed at JC tower for about eight years He



No 6 —Looking easterly toward point of collision, which occurred east of the bridge

stated that it had always been his understanding that when an inferior eastbound train received a clear signal at JC tower it relieved the train crew of all responsibility concerning overdue opposing superior trains During his employment at this point it had been the practice upon the approach of an inferior eastbound train to examine the block sheet and ascertain whether or not all opposing superior trains had arrived When it was ascertained that they had arrived the signal was cleared and the eastbound train allowed to proceed He had never known of a case similar to the one here under investigation, neither did he know of any narrow escapes from collisions in previous years due to the use of this system of operation

Dispatcher Kitchen stated that it was his intention to issue an order to train No 308 at JC tower giving it help on train No 311, but as train No. 308 was likely to be delayed by a freight train near Corona, 1 3 miles west of JC tower, he wanted to find out the extent of the delay before issuing the order He stated that with this idea in mind he called Towerman Maize about five minutes before train No 308 was expected to reach JC tower and told him, "Say when 308 is coming" These instructions were answered, and he supposed that the towerman would advise him before allowing the train to go The towerman, however, failed to notify him of the approach of train No 308, but instead gave that train a clear signal, and the dispatcher was advised of the collision before he knew that the train had passed JC tower Dispatcher Kitchen further stated that a short time before this he had inquired three times of Towerman Maize about another train, but that the latter permitted it to pass without notifying him Previous to this he had never had any trouble with Towerman Maize concerning the reporting of trains Dispatcher Kitchen stated that when he had to issue a train order he did not often call the towerman and notify him in advance, but usually issued the order prior to the arrival of the train to which it was addressed. Under certain conditions, however, such a method obviously could not be followed In the past year he had not issued a single order to an inferior eastbound train at a point prior to its arrival at JC tower giving it help over an opposing superior train He further stated that it had never been the custom for the dispatcher to say anything to the towerman at JC tower when it was necessary for an inferior eastbound train to wait at JC tower pending the arrival of a superior westbound train, as the towerman would hold it under time-table rule No 5, and he was sure that cases had arisen where an eastbound train requiring help over a westbound train had stopped at JC tower before the orders were issued

Chief Signalman O'Laughlin stated that he examined Towerman Maize on the general rules, as well as the time-table rules, at the time of his employment, and stated that the towerman passed a satisfactory examination

Superintendent Austin stated that had a train register been maintained at JC tower, and the requirements of rule No 83 enforced as on nearly all other roads, the method of operation undoubtedly would have been safer When he first became connected with the Long Island Railroad in 1904 as engineer of maintenance of way one of the first things which came to his attention was the fact that inferior trains were not stopping as required under rule No 83 to check train registers either at JC tower or at Floral Park, which is another station located at the end of double track Upon inquiry he found that

at these two points trains were accepting clear signals given by the towerman as indicating that all overdue superior trains had arrived, and that the practice had extended back for an indefinite period without bad results This practice continued while he was engineer of maintenance of way About six months after he was made superintendent, seeing that the practice was working out so well at these two points, he extended it to cover towermen at all ends of double track, as shown by that part of time-table rule No 5 quoted above This was done after consultation with the general superintendent and general manager

Both motormen were killed in the collision, while the statements of the two conductors, who were quite seriously injured, failed to shed any additional light upon the accident.

This accident was caused directly by the failure of Towerman Maize to hold train No 308 at JC tower until the arrival of train No 311, which was already overdue and which was superior by direction, but behind this error upon the part of the towerman was a dangerous method of train operation for which the operating officials of this railroad were responsible

It will be noted that Dispatcher Kitchen claims that he asked Towerman Maize to let him know when train No 308 was coming, while the towerman denies that the dispatcher said anything whatever to him about that train An attempt was made to corroborate the statements of the dispatcher about asking Towerman Maize to notify him of the approach of train No 308, but none of the towermen who could have been cut in on that particular dispatching circuit knew anything about this request having been made Dispatcher Duncan, working in the same office with Dispatcher Kitchen, stated that although he did not hear the instructions given by the latter, he understood in a general way from some of Dispatcher Kitchen's remarks that he was expecting a report from JC tower concerning the movements of train No 308 Owing to this conflict between the statements of Dispatcher Kitchen and Towerman Maize, and the absence of any proof, it is impossible to say definitely whether or not the dispatcher asked Towerman Maize to advise him as to the approach of train No 308 On the other hand, however, the dispatcher denied that it was the custom to issue an order to an inferior eastbound train at a point prior to its arrival at JC tower, giving it help over an opposing train, and the explanation of his error offered by Towerman Maize, viz, that he thought train No 308 had received orders at some point before reaching his station, as this was a common occurrence, conflicts with the dispatcher's statements, and is not borne out by the statements of any of the other employees or by the examination made of the dispatcher's train-order book

On this point, therefore, the towerman appears to be in the wrong, and in the absence of any rule or custom under which Towerman Maize could have been authorized to give train No 308 a clear signal, the conclusion is reached that in checking his train sheet the towerman overlooked train No 311 entirely and allowed train No 308 to proceed Although he claimed that he had not been examined on the time-table rules, the fact remains that Towerman Maize had been employed in signaling work for many years, at least six months of which had been at JC tower, and it is very improbable that he did not understand and fully appreciate the meaning and requirements of time-table rule No 5

Towerman Maize had been employed as such by the Long Island Railroad since November 14, 1912, six or seven months of which had been spent at JC tower He had also been employed an aggregate of about six years by the Illinois Central, Lake Shore & Michigan Southern, Chicago & Western Indiana, and Chicago, Rock Island & Pacific Railways With the exception of about six months as a brakeman, all of his previous experience had been as towerman and operator His record throughout was satisfactory

So far as any bulletins or instructions were concerned, both time-table rule No 5 and operating rule No 83 were in force, notwithstanding the fact that their requirements were conflicting The only way employees had of knowing which rule was to be obeyed was the apparent understanding upon the part of officials and employees alike that time-table rule No 5 was to be followed Such a condition is undesirable, to say the least Had rule No 83 been properly enforced and had a train register been maintained in connection therewith, as is the general custom on other railroads, it is probable that this accident would not have occurred, Superintendent Austin himself stating that had a train register been maintained at JC tower the existing operating situation would have been much safer

In July, 1913, Superintendent Austin recommended that a block system be installed on the Whitestone branch, and General Superintendent Thornton stated that on account of construction work then in progress it was deemed advisable not to install the system at that time The matter was discussed again about September 14, and on September 16 Mr Thornton wrote to General Manager McCrea asking for authority to install a manual block system on this branch The authority desired was granted on September 18 and received by Mr Thornton on September 19 At noon September 24, two days after this accident occurred, such a block system was placed in operation

The Commission has investigated a number of accidents in which a portion of the equipment involved was of steel construction, but this is the first head-end collision where all of the cars of both trains

were constructed of steel It is therefore particularly interesting to note the condition of the cars involved in this accident, as shown by the illustrations contained in this report. All of these cars were built within the past five years, they were all 64 feet 5¼ inches in length from coupler to coupler, and weighed from 104,200 to 111,000 pounds The seating capacity varied from 51 to 72 persons

Respectfully submitted

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*Chief Inspector of Safety Appliances*

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WASHINGTON GOVERNMENT PRINTING OFFICE 1913