

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE NEW ORLEANS GREAT NORTHERN RAILROAD NEAR
BOGALUSA, LA., ON JUNE 15, 1929.

August 2, 1929.

To the Commission:

On June 15, 1929, there was a derailment of a freight train on the New Orleans Great Northern Railroad near Bogalusa, La., the derailed equipment colliding with a passenger train standing on a spur track and resulting in the death of one employee and the injury of five passengers and one employee.

Location and method of operation

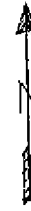
This accident occurred on the New Orleans district, extending between Slidell and Bogalusa, a distance of 36.7 miles. This is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The point of accident was at a switch located 2,962 feet inside of the south yard-limit board and slightly more than 2 miles south of the station at Bogalusa. Approaching this point from the south, the track is tangent for a distance of 6.6 miles, while the grade at the point of accident is slightly ascending for northbound trains.

The track is laid with 80-pound rails, 33 feet in length, with an average of 20 treated gum and pine ties to the rail-length, single-spiked and ballasted with about 18 inches of gravel. The switch involved in this accident is a facing-point switch for northbound trains and leads off the main track to the right or east to some industrial concerns located on that side of the track. The switch stand is also located on the east side of the track and is of the Ramapo automatic safety type, style 17, constructed so that when in normal operating condition the operating lever can not be latched and locked until the switch is fully thrown either to the open or the closed position. Daylight indications are a green disk when the switch is closed and a red arrow when the switch is open.

The weather was clear at the time of the accident, which occurred at about 9.31 a.m.

Freight Train Yard

To Bogalusa



South Yard

G.S L.Co

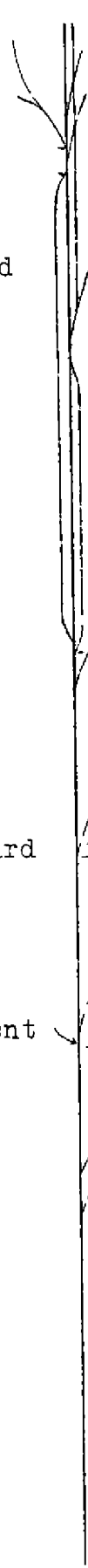
1,155 ft.

Point of Accident

2,962 ft

Inv. 1530
New Orleans Great
Northern R R
Bogalusa, La.
June 15, 1939.

Yard Limit



Description

Northbound freight train second 182 consisted of 13 cars and a caboose, hauled by engine 72, and was in charge of Conductor Connerly and Engineman Crawford. At Slidell the crew in charge received among others a copy of train order No. 14, Form 31, providing for a meet with train No. 111 at South Yard, which is located 1.9 miles south of Bogalusa, train No. 111 to pull by and back in. Train second No. 182 departed from Slidell at 8.35 a.m., passed Rio, 4.9 miles from South Yard and the last open office, at 9.20 a.m., and was approaching South Yard when it was derailed at the industrial switch previously mentioned while traveling at a speed estimated to have been between 25 and 35 miles per hour.

Southbound passenger train No. 111 consisted of a gasoline motor car, in charge of Conductor Calhoun and Engineman Cutrer. At the station at Bogalusa the crew of this train received among others a copy of train order No. 14, Form 31, previously mentioned, and departed at 9.15 a.m. The train passed South Yard and proceeded to the industrial track, an additional distance of 1,200 feet, at which latter point it backed into clear, and it was standing on this track when train second No. 182 approached and was derailed at the switch.

The engine and tender of train second No. 182 passed over the switch, broke away from the train, and came to a stop 933 feet north of the switch. The first nine cars were derailed and came to rest between the main track and the industrial track. The head end of the tenth car was also derailed, while the rear truck of this car, the eleventh and twelfth cars, and the forward truck of the thirteenth car, came to rest on the rails of the industrial track, only the rear truck of the thirteenth car and the caboose remaining on the main track. Some of the derailed cars struck the gasoline motor car, turned it over on its left side, and practically demolished it. The employee killed was the baggage and express messenger on train No. 111 and the employee injured was the engineman of that train.

Summary of evidence

Engineman Crawford, of train second No. 182, stated that his train was traveling at a speed of 25 or 30 miles per hour as it approached the switch, after making a 10-pound brake-pipe reduction, and that the brakes were still applied when his engine passed over the switch. The switch target and points were in normal position and he did not feel anything unusual as his engine passed them

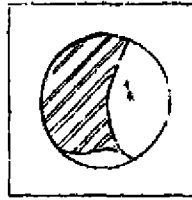
but immediately afterwards he felt the air applied in emergency and on looking back he saw the third car from the engine as it turned over. He then opened the throttle and continued a short distance before the engine was brought to a stop. Conductor Connerly, of train second No. 182, said he examined the switch immediately after the accident and found it lined and locked for the industrial track but was unable to determine what had caused the accident. The statements of Fireman Browder, Head Brakeman Richardson and Flagman Boler, all of train second No. 182, brought out no additional facts of importance.

Engineman Cutrer, who was questioned very briefly at his residence, stated that he was sitting on the driver's seat on the left side of the motor car and could see that the switch was closed, although he could not see the position of the operating lever, which was on the opposite side of the stand. Engineman Cutrer said he thought train second No. 182 was running at a speed of about 35 miles per hour and that he did not know which part of the train was the first to be derailed.

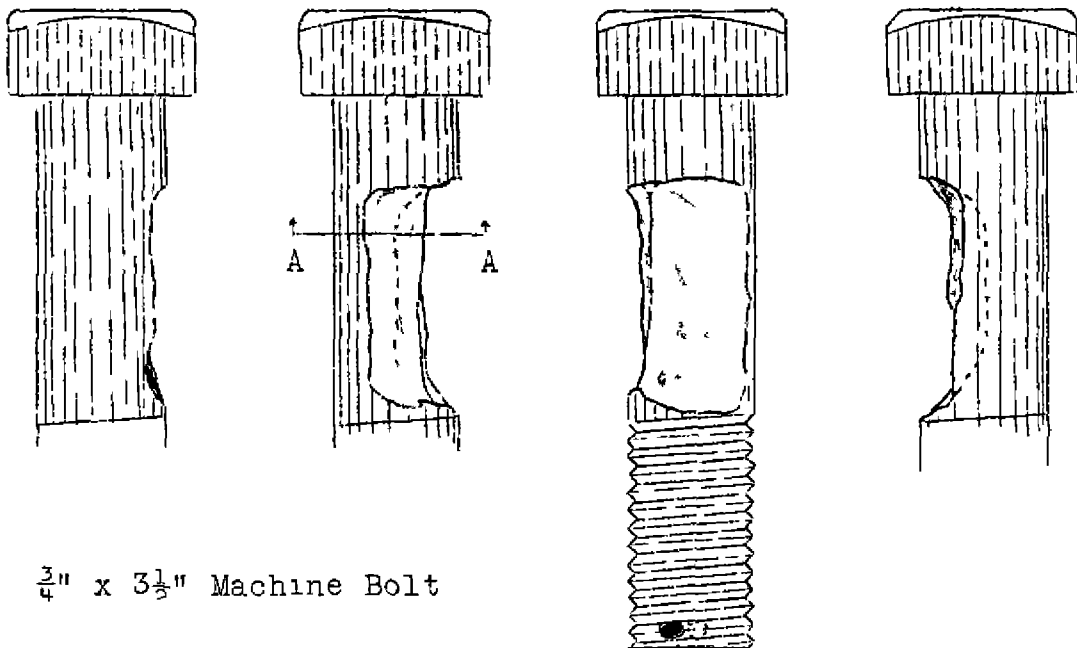
Conductor Calhoun, of train No. 111, said that he handled the switch when his train pulled by and backed in on the industrial track. After the movement had been completed he closed and locked the switch and he said that the points fitted properly at that time. When train second No. 182 approached, moving at a speed he estimated to have been about 25 miles per hour, there was no unusual swaying or rocking of the cars, nor did he observe anything dragging, and the first thing which attracted his attention was a peculiar noise, a "slapping" sound, as the cars started to pass over the switch. He thought the derailment began with the third car of the train and thought it might have been the rear truck of that car, although he was not absolutely certain on this point. After the accident he found the switch lined for the industrial track, and on examining the switch he saw a mark on the east switch point which indicated that it had been struck by some object; he did not examine the west switch point.

Trainmaster Lipscomb, who was riding in the caboose of train second No. 182, said that from his examination of the switch immediately after the accident he was unable to observe anything wrong in its operation, while Section Foreman Earles, who reached the scene of the accident about 20 minutes after its occurrence, said that at that time the switch was locked, with the points slightly away from the rails, although the switch was so constructed that it could not have been locked

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Section A - A



$\frac{3}{4}$ " x $3\frac{1}{2}$ " Machine Bolt

Cotter key hole

Bolt which anchors
spindle to inner sleeve
in Ramapo Automatic Safety Switch Stand

Inv 1530
New Orleans Great Northern Railroad
Bogalusa, La.
June 15, 1929

unless fully opened or fully closed. He again examined the switch as soon as the cars on the rear end of the train had been moved back but he did not find anything wrong with its operation and the points then seemed to fit properly. The section foreman did not know how long this particular switch stand had been installed at this point.

Roadmaster Smith said the switch seemed to be in perfect condition when he examined it several hours after the occurrence of the accident, but when tests were conducted subsequently it was found that the switch lever could be pushed down in place and locked without having the switch mechanism properly seated. This defect was concealed to such an extent that it would not have been noticed by the usual inspection given by the section foreman. When the switch stand had been removed and dismantled, under the roadmaster's supervision, it was found that the bolt which goes through the inner sleeve and holds the spindle in position was in a defective condition, being worn to a considerable extent where it came in contact with the spindle. The square bottom of the sliding sleeve was also worn to some extent, as well as the square socket in the top of the star block, but Roadmaster Smith did not think that the worn bolt by itself, or the worn sliding sleeve and star block by themselves, would have been sufficient to enable the switch to be locked without the mechanism being properly seated. Assistant Roadmaster Corban also expressed the opinion that the opening of the switch under train second No. 182 was due to the worn spindle bolt coupled with the wear on the bottom of the sliding sleeve and the top of the star block. Master Mechanic Peters said he examined the engine of train second No. 182, as well as the derailed equipment, but found no defective condition which could have caused the accident. Mr. Peters was present when the switch stand was dismantled and expressed the opinion that the worn conditions described by the roadmaster were the result of natural mechanical wear, coupled with some rust.

South Yard is shown in the time-table as a station located 1.9 miles from Bogalusa, and at this point is located what is known as the G.S.L. lead, while the freight train yard is located between South Yard and Bogalusa. Proceeding southward from South Yard there is the industrial track at which this accident occurred, and then still farther south there are two other industrial tracks, the last of which is located about 1,800 feet inside of the south yard-limit board. Relief Dispatcher Bullock said his understanding of train order No. 14 was that train No. 111 would take siding at the G.S.L. lead at South Yard station, that being the point

where time applied, and he said the order did not say what track was to be used by train No. 111 in pulling by and backing in because he did not know what track the train would be able to use. It was his expectation, however, that train No. 111 would back in on some track between the station at Bogalusa and the G.S.L. lead, and not proceed beyond the latter point. He thought it would have been impracticable to designate a particular track, however, for if he had designated the G.S.L. lead, for example, it is possible that on arrival at that point the crew of train No. 111 might have found a G.S.L. train occupying the lead. With respect to train second No. 182, Relief Dispatcher Bullock said that it could not proceed north of the G.S.L. lead under the terms of the order, and it was his opinion that the crew of train No. 111 had no right beyond that lead and that in going to the industrial switch at which point the accident occurred, they were over-running their meeting point.

Dispatcher Carter said he would not have instructed the crew of train No. 111 to proceed beyond the G.S.L. lead unless he knew that that particular track was blocked, in which event he would have specified some other track as the meeting point, and it was not his understanding of the operating rules that when a meeting point is fixed at a certain point within yard limits, the train so restricted can proceed beyond that point under the protection of rule 93, which requires that second and third-class and extra trains move within yard limits prepared to stop unless the main track is seen or known to be clear.

Superintendent Gould, who was riding in the caboose of train second No. 182 at the time of the accident, said the speed of the train was about 40 miles per hour as it approached the yard-limit board and that the speed was then reduced and was about 30 miles per hour when the accident occurred. On examining the switch he found it properly locked, with the east switch point wide open and the west switch point fitting tightly against the west rail. He then went under the car which was standing over the switch and found what appeared to be a flange mark on the east switch point; this mark was about one-half inch long and was about 2 inches from the receiving end of the switch point. At a point 6 inches from the receiving end, there was another flange mark which was about 5 inches long. There was also an indentation on the switch point resulting either from a flange mark or from the tread of a wheel. All of the various exterior parts of the switch seemed to be in good operating condition.

With respect to the question of how train No. 111 was able to proceed beyond the G.S.L. lead at South Yard, in view of the meet order held by the crew of that train,

Superintendent Gould said that for operating purposes there are two time-table stations, Bogalusa and South Yard, both located within the same yard limits. There is a board placed at South Yard near the intersection of the G.S.L. lead and special instructions in the time-table provide that the time of passenger trains at South Yard applies at this particular point. According to his statement, however, rule 93 required train second No. 182 to be under control within yard limits, unless the main track was seen or known to be clear, and there was no violation of the rules by the crew of train No. 111 in proceeding beyond South Yard inasmuch as the track on which they were to clear train second No. 182 was not designated in the train order, and the superintendent further stated that rule 93 is well recognized as ample protection within yard limits against second and third-class and extra trains.

The statements of the various members of the crews of the two trains involved indicated that they were of the opinion that the meet order could be fulfilled at any point inside of the yard-limit boards. The engineman of train second No. 182, however, said that he expected to meet train No. 111 at the G.S.L. lead at South Yard, although they could have gone in on some other track.

Conclusions

This accident was caused by a defective switch.

The evidence indicated that train No. 111 pulled by and backed in on the industrial track and that Conductor Calhoun then closed and locked the switch. As train second No. 182 approached that point, the engine passed over the switch in safety and possibly the first one or two of the cars in the train also passed over the switch before being pulled off by the following cars. These other cars, however, were derailed and when the train finally came to a stop the switch was found lined for the industrial track and still was properly locked. On being dismantled, it was found that the bolt which goes through the inner sleeve and holds the spindle in position was in a defective condition, due to excessive wear, and it was also found that the square bottom of the sliding sleeve and the socket in the top of the star block were showing signs of considerable wear. Apparently the result of this combination was that when Conductor Calhoun closed and locked the switch the slackness in the different operating parts of the mechanism resulted in the switch not being properly seated, thus allowing the points to open under the passing train.

While in no way responsible for the occurrence of the accident it is to be noted that train No. 111 had a meet with train second No. 182 at South Yard, but proceeded an additional distance of nearly 1,200 feet before clearing the main track at the switch where the accident subsequently occurred. Special instructions in the current time-table provide that the time of passenger trains at South Yard applies at the board at the G.S.L. lead, and the train dispatchers seemed to be of the opinion that neither of the trains named in the meet order had a right under the train-order rules to proceed beyond that point. The majority of the employees on the trains involved thought they could meet at any point within the yard-limit boards and a somewhat similar position was taken by the superintendent, who seemed to consider that rule 93, which on this railroad requires second and inferior class trains to run prepared to stop within yard limits, was ample protection for the action of the crew of train No. 111 in proceeding beyond the point known as South Yard. There would seem to be little doubt, however, that the point designated as South Yard in the time-table and referred to in the special time-table instructions is the point beyond which neither of these trains could proceed except under flag protection, for it is not believed that rule 93 can be accepted as sufficient protection for passing a meeting point.

As previously indicated, the views of the various witnesses did not agree as to what constitute "South Yard" from the standpoint of meeting opposing trains. Obviously a railroad can establish such rules governing the operation of its trains as may be required by any particular locality, but there should be an absolutely uniform understanding of those rules by every one coming in contact with them, and in this particular case it is recommended that steps be taken immediately to insure that all concerned have a uniform understanding as to just how far a train can move without exceeding its train-order authority.

All of the employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.