

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT NO. 3512  
MISSOURI PACIFIC RAILROAD COMPANY  
IN RE ACCIDENT  
NEAR HALSEY, ILL., ON  
APRIL 1, 1953

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SUMMARY

Date: April 1, 1953

Railroad: Missouri Pacific

Location: Halsey, Ill.

Kind of accident: Head-end collision

Equipment involved: Track motor-car : Freight train  
C-2150

Train number: : Extra SSW 919  
North

Engine number: : Diesel-electric  
units 919A,  
912B, and  
903A

Consist: : 92 cars, caboose

Estimated speeds: Standing : 30 m. p. h.

Operation: Signal indications

Track: Single; tangent; 0.08 percent  
ascending grade northward

Weather: Cloudy

Time: 1:28 p. m.

Casualties: 1 killed

Cause: Failure to provide adequate protection  
for movement of track motor-car

Recommendation: That the Missouri Pacific Railroad  
Company provide adequate protection  
for movement of track motor-cars on  
its line

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3512

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

MISSOURI PACIFIC RAILROAD COMPANY

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May 6, 1953

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Accident near Halsey, Ill., on April 1, 1953, caused by  
failure to provide adequate protection for the movement  
of a track motor-car.

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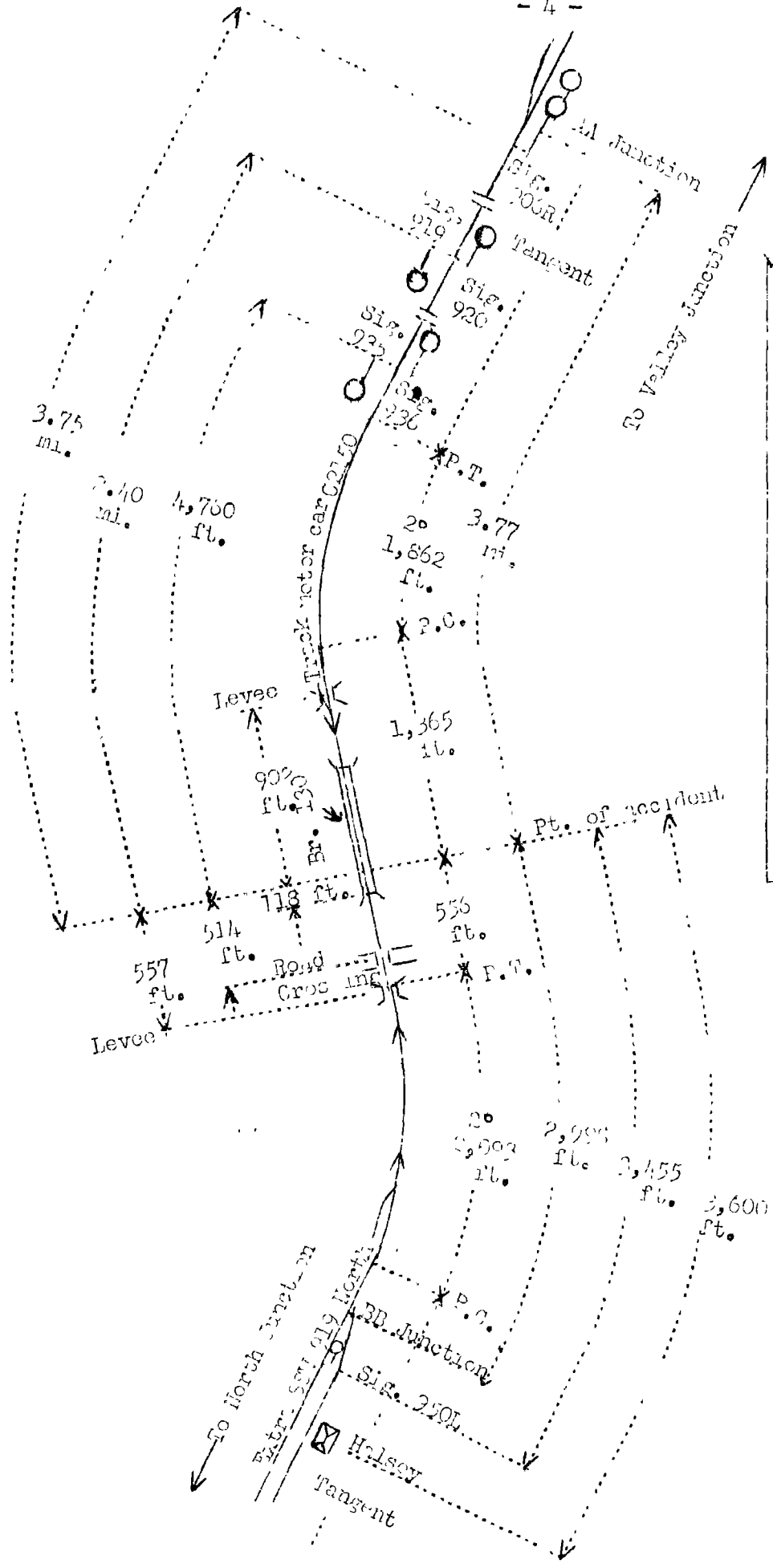
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REPORT OF THE COMMISSION

PATTERSON, Commissioner:

On April 1, 1953, there was a head-end collision between a track motor-car and a freight train on the Missouri Pacific Railroad near Halsey, Ill., which resulted in the death of one maintenance-of-way employee. This accident was investigated in conjunction with a representative of the Illinois Commerce Commission.

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Under 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.



- Valley Junction 40.17 mi.
- Flinton 12.39 mi.
- Chester 14.83 mi.
- Raddle Junction 7.82 mi.
- Gorham 6.41 mi.
- AA Junction 3.77 mi.
- ( Point of accident ) 0.57 mi.
- BR Junction 0.11 mi.
- Halsey 20.53 mi.
- JJ 1.93 mi.
- Gale 1.30 mi.
- North Junction

Report No. 3512  
 Missouri Pacific Railroad  
 Halsey, Ill.  
 April 1, 1953

Location of Accident and Method of Operation

This accident occurred on that part of the Illinois Division extending between Valley Junction and North Junction, Ill., 119.55 miles. Trains of the St. Louis Southwestern Railway regularly operate over this portion of the Missouri Pacific. Raddle Junction, AA Junction, BB Junction, and JJ are located, respectively, 76.39 miles, 90.62 miles, 94.96 miles, and 115.60 miles south of Valley Junction. Between Raddle Junction and AA Junction and between BB Junction and JJ this is a two-track line, over which trains are operated in either direction on either track by signal indications. Between AA Junction and BB Junction it is a single-track line, over which trains are operated by signal indications. The accident occurred on the single-track line between AA Junction and BB Junction at a point 94.39 miles south of Valley Junction and 5,600 feet north of the station at Halsey. From the north there are, in succession, a 2° curve to the left 1,862 feet in length, and a tangent 1,365 feet to the point of accident and 556 feet southward. From the south there are, in succession, a 2° curve to the left 2,093 feet in length, and the tangent on which the accident occurred. The grade is 0.08 percent ascending northward at the point of accident.

North of Halsey, the railroad crosses Big Muddy River on Bridge 130. The south end of the bridge is 3,482 feet north of the station. From north to south this bridge consists of a 13-panel open deck trestle 150 feet in length, a 230-foot through truss span, and a 7-panel open deck trestle 80 feet in length. The accident occurred at a point 38 feet north of the south end of the through truss span. The horizontal distance between opposite truss members of this span is 15 feet 5 inches. There is no walkway on the bridge. On each side of the bridge the track is laid in a cut through the top of a levee. The levees are located 902 feet north and 557 feet south of the point of accident. The walls of each cut rise to a height of approximately 13 feet above the level of the tops of the rails.

Automatic signals 919 and 935, governing south-bound movements, are located, respectively, 2.40 miles and 4,760 feet north of the point of accident. Semi-automatic signal 950L, governing north-bound movements from the west track to the single track at BB Junction, automatic signals 936 and 920, governing north-bound movements on the single track, and semi-automatic signal 906R, governing north-bound movements from the single track to the east track at AA Junction, are located, respectively, 3,455 feet south, 4,760 feet north, 2.40 miles

north, and 3.75 miles north of the point of accident. These signals are of the color-light type. They form part of a traffic-control system, which extends between Flinton, 49.17 miles south of Valley Junction, and JJ. The control machine is located at Chester, 61.56 miles south of Valley Junction; the operator is under the jurisdiction of a train dispatcher. The control circuits are so arranged that when the route is lined for movement from signal 950L to the east track at AA Junction, northward signals 950L to 906R, inclusive, each indicate Proceed, and southward signals 919 and 935 each indicate Stop and Proceed.

This carrier's rules and regulations for the maintenance of way and structures read in part as follows:

144. Protection against Trains and Other Cars.--

(a) Care and Caution.--In the operation of cars, foremen and others must move at all times with care and caution necessary for safety, expecting trains at any time without notice and protecting when necessary, using prescribed signals. Care must be exercised to avoid collision with trains or other cars. Alertness and full use of eyes and ears are important.

(b) Operation in Fog, Storm, or at Night.--When necessary to operate car \* \* \* where the view is obstructed in any way, or when the car cannot be quickly removed from track because of weight, insufficient side clearance, \* \* \* or any other condition making it unusually difficult to handle the car, special care must be used, and if conditions require, must proceed only under flag protection.

(c-1) Approximate Train Information.--As often as necessary foreman and other operators of cars shall, when practicable, secure in writing, information showing the approximate arrival time of trains.

This information is for use in planning work in such a way as to minimize delays to traffic, and not as authority to occupy the main track. Main track may be occupied by track cars only by full compliance with all rules.

(c-3) Track and Time Limits in so-called C.T.C. Territory.--In territory authorized by special instructions issued by Superintendent between specified absolute signals protection against trains and engines will be afforded track cars operated by Maintenance of Way Foremen, in going to and returning from work in territory where both opposing and following movements of trains and engines by block signals are authorized by timetable and special instructions.

(c-5) Scope of Information and Protection.--Only line-ups designated by prefix "PX" and issued as prescribed by Rule 144 (c-3) will be used for the movement of track cars. All other information on trains, including approximate line-ups as prescribed by Rule 144 (c-1), will be used only for planning of work to avoid delay to trains and not as authority to occupy the main track.

\* \* \*

156. Insulation.--Only insulated cars must be used within track circuit limits.

The maximum authorized speeds are 45 miles per hour for freight trains and 25 miles per hour for light inspection track motor-cars.

#### Description of Accident

Track motor-car C-2150, occupied by a bridge and building foreman and a track motor-car operator, departed south-bound from Gorham, 84.21 miles south of Valley Junction, on the east track about 1:05 p. m. It entered the single track at AA Junction and stopped about 1:28 p. m. at a point 38 feet north of the south end of the through truss span of Bridge 130. Several seconds later it was struck by Extra SSW 919 North.

Extra SSW 919 North, a north-bound St. Louis Southwestern freight train, consisted of Diesel-electric units 919A, 912B, and 903A, coupled in multiple-unit control, 92 cars, and a caboose. This train departed from Illmo, Mo., on the SSW, 4.68 miles south of North Junction, at 12:20 p. m., passed Gale, 1.80 miles north of North Junction and the first open office on the line of the Missouri Pacific, at 12:52 p. m., passed signal 950L, which indicated Proceed, and while moving at an estimated speed of 30 miles per hour it struck track motor-car C-2150.

Extra SSW 919 North stopped with the front of the locomotive 953 feet north of the point of accident. The rear wheels of the track motor-car remained on the rails, and the car was moved northward to the point at which the locomotive of Extra SSW 919 North stopped. The track motor-car was badly damaged.

The bridge and building foreman was killed.

The weather was cloudy at the time of the accident, which occurred at 1:28 p. m.

Track motor-car C-2150 was of the belt-drive type. It was powered by a one-cylinder, five to eight horsepower gasoline engine, and was equipped with four-wheel brakes. It weighed 600 pounds and had seating capacity for four persons. It was insulated to prevent the shunting of track circuits.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 31.07 trains.

#### Discussion

On the day of the accident a bridge and building foreman at Gorham loaded track motor-car C-2840 and a trailer with tools and material to be used at Bridge 130. About 12:20 p. m. the foreman entered the station and requested a line-up for movement of a track motor-car to Bridge 130. The train dispatcher told the operator that there were no north-bound trains between Gale and Gorham, that Extra 1424 South, a south-bound freight train, had stopped on the west track a short distance north of Gorham, and that a work train which was at Gorham would work on the west track between Gorham and AA Junction after Extra 1424 South passed. The operator repeated this information to the foreman. The foreman told the operator that he would use the east track from Gorham to AA Junction and follow Extra 1424 South from that point. Both Extra 1424 South and the work train were visible from the station, and for this reason the operator did not provide the foreman with a written line-up. The foreman returned to the track motor-car and told the assistant foreman that there were no north-bound trains between Gale and Gorham and that he would proceed to Bridge 130 on track motor-car C-2150 and provide flag protection until track motor-car C-2840 arrived at the bridge and the material was unloaded. He did not mention the line-up to the track motor-car operator who was to accompany him on track motor-car C-2150.



After the foreman returned from the station he found that the track to be used by the track motor-cars was obstructed by the work train. Extra 1424 South passed at 12:50 p. m., the work train followed Extra 1424 South, and the track motor-cars departed about 1:05 p. m. The track motor-car operator who accompanied the foreman said that after the car passed signal 903R he observed that the indication of this signal changed from Stop to Proceed and that signals 910 and 955 each indicated Stop and Proceed. Because he thought that these aspects were displayed only when a north-bound train was approaching, he called them to the attention of the foreman, who was operating the track motor-car. The foreman replied that he had received a line-up of train movements. He did not reduce the speed of the track motor-car. After the track motor-car passed signal 920, the track motor-car operator observed that the signal indicated Proceed. He called this indication to the attention of the foreman. The foreman replied that there were no north-bound trains north of Gale and that apparently members of the signal department were operating the signals. After the track motor-car passed signal 933, which indicated Proceed, the motor-car operator again warned the foreman and suggested that the track motor-car be stopped while he proceeded across the bridge to provide flag protection. The foreman assured the operator that he had received a line-up and that no north-bound train was approaching. The track motor-car approached Bridge 130 at a speed of about 20 miles per hour. When the car was in the immediate vicinity of the north end of the through truss span the occupants saw the top of the locomotive of Extra SSW 919 North beyond the levee south of the bridge. The foreman immediately applied the brake. When the car stopped, the motor-car operator ran toward the approaching train and gave stop signals. The foreman remained with the car for several seconds, apparently in an attempt to reverse the motor and start the car in backward motion, then stepped to the side of the bridge immediately before the collision occurred. He fell from the bridge after the front of the train passed.

As Extra SSW 919 North was approaching the point where the accident occurred the speed was between 40 and 45 miles per hour. The enginemen and the front brakeman were maintaining a lookout ahead from the control compartment at the front of the locomotive. These employees had received no information that the track ahead was occupied by a track motor-car. The grade-crossing whistle signal was sounded for a rail-highway grade crossing located 514 feet south of the south end of Bridge 130. Because of curvature of the track and the wall of the cut through the levee, the employees on the locomotive

were unable to see the track motor-car until the locomotive was about 1,200 feet south of the end of the bridge. When the track motor-car became visible to these employees the engineer immediately made an emergency application of the brakes. The speed had been reduced to about 30 miles per hour when the collision occurred.

The rules of this carrier provide that the operators of track motor-cars must exercise care to avoid collisions with trains or other track motor-cars. They must expect trains to run at any time without notice and are required to operate track motor-cars with the same degree of caution when they have a line-up as when they do not have one. In the instant case the foreman received information from the train dispatcher that there were no north-bound trains between Gale and Gorham. He relied on this information as assurance that he would not meet an opposing train between Gorham and Bridge 130, and apparently did not realize that between the time he received the information and the time he reached the bridge sufficient time had elapsed for a train to move from Gale to the bridge. According to the rules, the foreman was not permitted to use information regarding train movements as protection for the movement of the track motor-car. However, the rules do not prescribe any other method for protection, except protection by flag man, and the foreman was required to depend upon his ability to see or hear an approaching train in time to avert a collision. This method of operation does not provide adequate protection for the movement of track motor-cars. The carrier's rules and regulations for the maintenance of way and structures contains rules which provide that in traffic-control territory the superintendent may designate districts in which protection against trains and engines will be afforded to track motor-cars used by maintenance-of-way employees in going to and returning from work. Such protection was not provided in the territory in which this accident occurred.

Since January 1, 1944, the Commission has investigated 43 collisions, including the present case, which were caused by failure to provide adequate protection for the movement of track motor-cars. These accidents resulted in the death of 79 persons and the injury of 131 persons. In the reports covering the investigations of these accidents, the Commission repeatedly has recommended that the carrier involved take measures to provide adequate protection for the movement of track motor-cars on its line.

Cause

It is found that this accident was caused by failure to provide adequate protection for the movement of a track motor-car.

Recommendation

It is recommended that the Missouri Pacific Railroad Company provide adequate protection for the movement of track motor-cars on its line.

Dated at Washington, D. C., this sixth day of May, 1953.

By the Commission, Commissioner Patterson.

(SEAL)

GEORGE W. LAIRD,  
Acting Secretary.