

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3672

THE WESTERN PACIFIC RAILROAD COMPANY

IN RE ACCIDENT

AT SOUTH SACRAMENTO, CALIF., ON

JANUARY 4, 1956

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SUMMARY

Date: January 4, 1956

Railroad: Western Pacific

Location: South Sacramento, Calif.

Kind of accident: Collision

Equipment involved: Locomotive with cars · Locomotive unit

Locomotive numbers: Diesel-electric unit 502 : Diesel-electric unit 921-C

Consist: 3 cars :

Estimated speeds: 5-10 m. p. h. · Undetermined

Operation: Operating rules

Track: Yard track; tangent; 0.30 percent descending grade eastward

Weather: Raining intermittently

Time: 6:40 p. m.

Casualties: 1 killed; 4 injured

Cause: Diesel-electric locomotive unit moving out of control as a result of improper preparation of the unit for operation

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3672

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

THE WESTERN PACIFIC RAILROAD COMPANY

February 17, 1956

Accident at South Sacramento, Calif., on January 4, 1956,
caused by a Diesel-electric locomotive unit moving out
of control as a result of improper preparation of the
unit for operation.

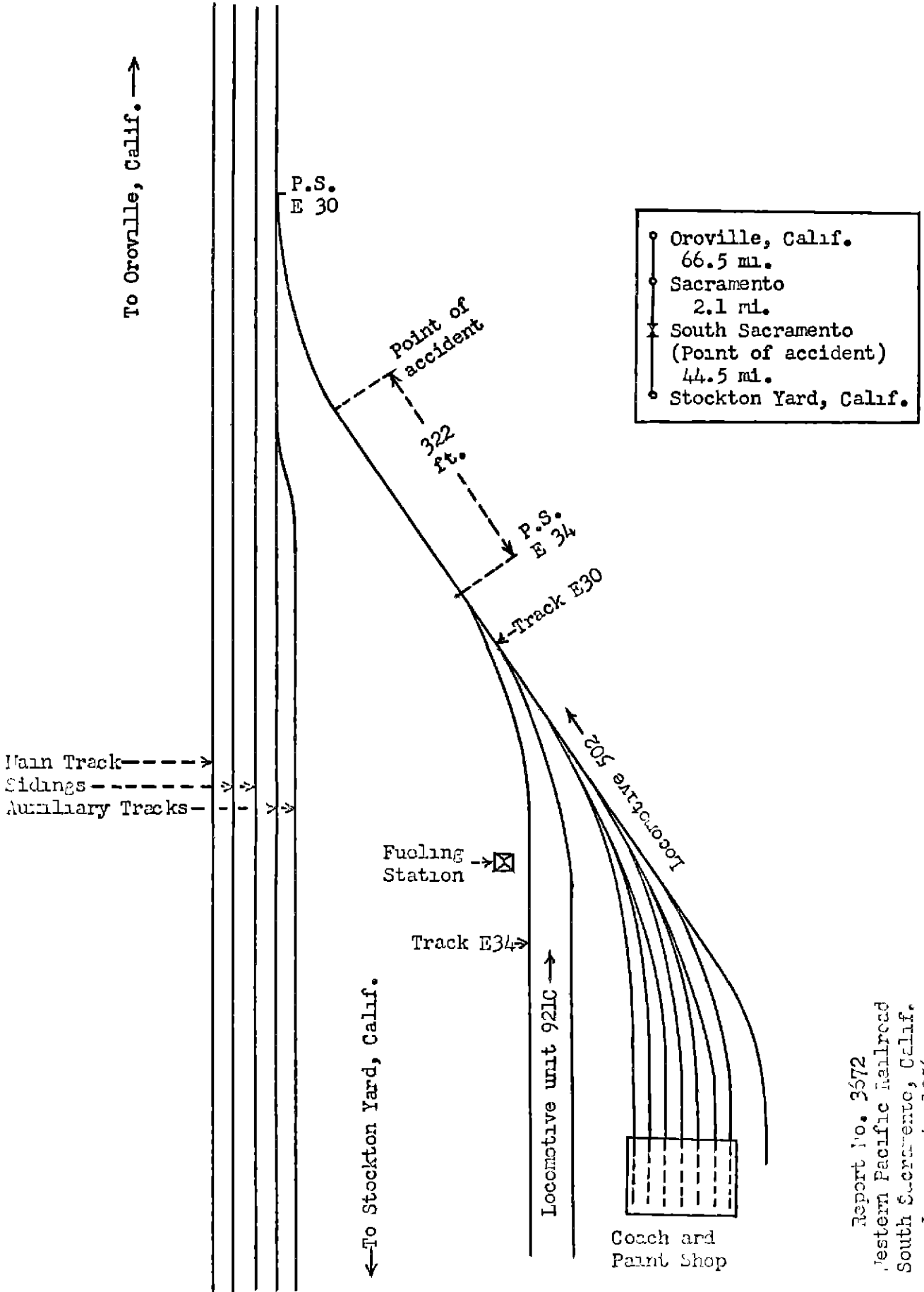
REPORT OF THE COMMISSION¹

CLARKE, Commissioner:

On January 4, 1956, there was a collision between a locomotive with cars and a Diesel-electric locomotive unit moving out of control on the Western Pacific Railroad at South Sacramento, Calif., which resulted in the death of one train-service employee, and the injury of three train-service employees and one mechanical department employee. This accident was investigated in conjunction with representatives of the Public Utilities Commission of California.

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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 Clarke for consideration and disposition.



Report No. 3572
 Western Pacific Railroad
 South Sacramento, Calif.
 January 4, 1956.

Location of Accident and Method of Operation

This accident occurred on that part of the Western Division extending between Stockton Yard and Oroville, Calif., 113.1 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by signal indications. At South Sacramento, 44.5 miles east of Stockton Yard, two sidings and two auxiliary tracks, which are used for the storage of cars and other purposes, parallel the main track on the south. Extensive shop facilities for the maintenance and repair of locomotives and cars are located south of these auxiliary tracks and approximately 2.1 miles west of the station at Sacramento. These facilities are designated as Sacramento Shops. A coach and paint shop, which is served by seven stub end tracks, is located in the shop area 600 feet south of the main track and parallel to it. A lead track in the shop yard designated as track E-30 connects the east ends of the tracks at the coach and paint shop and several adjacent shop tracks, and extends eastward approximately 1,500 feet to a connection with the auxiliary storage and switching tracks. A shop track designated as track E-34, on which locomotive fueling facilities are provided, is located immediately north of shop structures which extend parallel to the coach and paint shop on the north. This track is approximately 950 feet long and converges with the lead track at a switch, which is trailing-point for east-bound movements, located 860 feet east of the coach and paint shop building. The accident occurred on track E-30 at a point 322 feet east of this switch. The lead track is tangent throughout a distance of more than 600 feet immediately west of the point of accident. Track E-34 is tangent west of the turnout of the lead track switch. The grade for east-bound movements on the lead track varies between 0.30 percent ascending and 0.50 percent descending, and it is 0.30 percent descending at the point of accident.

This carrier's operating rules read in part as follows:

DEFINITIONS

Yard Speed: A speed, according to conditions, prepared to stop within one-half the range of vision and short of * * * cars, misplaced switch * * * or other obstruction * * *

105. Unless otherwise provided, trains and engines using siding or other inside track not protected by signals must proceed at yard speed.

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The general and safety rules of the mechanical department of the carrier road in part as follows:

B. Employees must have a proper understanding and working knowledge of and must obey all rules and instructions applicable to or affecting their duties. If in doubt as to their meaning they must consult their supervisor for an explanation.

Description of Accident

Diesel-electric locomotive 502, a switcher type unit, was assigned to switching service at Sacramento. A few minutes before 6:40 p. m. this locomotive, moving in backward motion and pulling a cut of three cars, departed eastbound from the vicinity of the coach and paint shop. While it was moving eastward on track E-30 at a speed variously estimated as from 5 to 10 miles per hour the west car of the cut was struck by Diesel-electric unit 921-C at a point 322 feet east of the switch at which track E-34 converges with the lead track.

Diesel-electric unit 921-C, a booster type freight locomotive unit, was placed on track E-34 at a point approximately 450 feet west of the fueling station and 850 feet west of the lead track switch by a Diesel foreman of the shop force about 3 p. m. Several hours afterward, while this unit was being operated by an engine watchman who intended to refuel and service the unit at the fueling station, it proceeded eastward out of control, trailed through the lead track switch, which was lined for movement on the lead track, and while moving on that track at an undetermined rate of speed it collided with the west end of the cut of cars which was being moved eastward by locomotive 502.

The truck at the west end of the car which was struck was derailed to the north. The cut stopped with the west end of the derailed car 225 feet east of the point of collision and several feet north of the center-line of the track. No other equipment was derailed. The west car and the car adjacent to it in the cut were somewhat damaged, and locomotive 502 was slightly damaged. Diesel-electric unit 921-C stopped with the front end against the corner of the derailed car. The front end of this unit was slightly damaged.

The yard conductor of locomotive 502 was killed. The engineer, the fireman, and one yard brakeman of locomotive 502, and the engine watchman who was operating Diesel-electric unit 921-C were injured.

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It was dark and rain was falling intermittently at the time of the accident, which occurred about 6:40 p. m.

Diesel-electric unit 521-C is of the booster type. It weighs 247,770 pounds and is mounted on two four-wheel trucks. The length over the couplers is 50 feet. It is provided with 24-RL type brake equipment and hostler's controls for independent movement. These controls are located adjacent to a circular window on the right side of the unit and consist of a controller handle, with eight power positions, a reverser mounted on the control box, and an independent brake valve of the SA-2 type. Two cutout cocks are located immediately below the independent brake valve and are so arranged that when they are in closed position the independent brake valve is inoperative. An air gauge, and an emergency brake valve by means of which brake-pipe pressure can be vented to make an emergency application of the brakes, are provided at the control station. A geared hand brake which operates on one pair of wheels of the front truck of the unit is located to the rear of the control station. Cab and gauge lights are provided, and the unit is equipped with a headlight at the rear end. At the time of the accident the front end of this unit was toward the east.

Discussion

Before the accident occurred locomotive 502 was coupled to the east end of a cut of three empty box cars on a track of the coach and paint shop in the shop yard at Sacramento. The fireman was operating the locomotive under the supervision of the engineer. Shortly before 6:40 p. m. the locomotive, moving in backward motion and pulling these cars, departed from the vicinity of the coach and paint shop to perform switching service at another location. Members of the crew estimated that as the locomotive with cars proceeded eastward on track E-30 the speed was 5 to 10 miles per hour. The engineers were maintaining a lookout in the direction of movement from their respective positions in the control compartment at the rear of the locomotive. The yard conductor and two yard brakemen were on the west end of the locomotive. One yard brakeman alighted from the locomotive at a point several hundred feet east of the switch of track E-34. He said that immediately after he alighted the rear car of the cut was struck by the following Diesel-electric locomotive unit. As the switching locomotive lurched from the force of the impact the yard conductor and the other yard brakeman fell from locomotive. A second impact then occurred. When the collision occurred the fireman immediately applied the independent brake. Apparently after the impact of the

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first collision the following unit was separated from the rear car of the cut and collided with it a second time before it stopped.

The engine watchman was the only mechanical department employee on duty at Sacramento Shops at the time of the accident. He said that shortly before he went on duty, at 3:30 p. m., the Diesel foreman instructed him to service Diesel-electric units 921-C, 921-D, 714, and 712 and that he understood this to mean he was to move these units as necessary to supply them with fuel, water, sand, and other supplies. Diesel-electric unit 921-C previously had been placed on track E-34 at a point approximately 450 feet west of the fueling station and the engine had been left running. The other units had not arrived. The engine watchman said that before the foreman went off duty, at 5 p. m., he repeated these instructions and asked to be notified at his home when the servicing was completed. Before the other units arrived the engine watchman boarded Diesel-electric unit 921-C to move it to the fueling station. This unit was to be assembled with Diesel-electric unit 712 into a two-unit locomotive, and the engine watchman said that he intended to service it before the latter unit arrived. He said that there was an exhaust from the independent brake valve when he moved the handle, and he assumed that the valve was operative. He did not observe the air gauge. He said that he released the hand brake and placed the controller in No. 2 position. The unit then moved slowly eastward, and as it approached the fueling station the engine watchman returned the controller to idle position and placed the independent brake valve in application position. He said that there was no reduction in speed, and that he then applied the hand brake and jumped off the unit. He was unable to estimate the speed of the unit. He said that he fell when he alighted and that he then ran after the unit intending to warn other persons in the vicinity. He was unable to overtake the unit before the collision occurred.

The Diesel foreman who issued the instructions to the engine watchman said that he instructed the watchman to notify him when the other Diesel-electric units arrived and that he would then return to the shop to supervise the coupling of the units. The engine watchman was not qualified to operate Diesel-electric units of the type of unit 921-C, and the foreman said that he intended to operate this unit and any other unit which the engine watchman was not qualified to operate.

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Examination of Diesel-electric unit 921-C at the scene of the accident disclosed that all control buttons had been pulled out. The cutout cocks under the independent brake valve were in closed position. Under these circumstances the independent brake valve was inoperative, and it would have been necessary to open the emergency brake valve or otherwise deplete brake-pipe pressure to effect an application of the brakes. A locomotive fireman who boarded the locomotive unit several minutes after the accident occurred said that when he entered the unit the engine watchman was endeavoring to stop the Diesel engine. The fireman immediately applied the hand brake and then pulled the safety control on the governor to stop the Diesel engine. He did not observe the air gauge. The brakes were tested before this locomotive unit was removed from the scene of the accident, and they functioned properly. The unit afterward was inspected and the control and brake apparatus were tested. No defective condition was found.

The investigation disclosed that when Diesel-electric unit 921-C was placed on track E-34 by a Diesel foreman the independent brake was not applied and the cutout cocks of the brake valve were in closed position. The shop superintendent said that it was a regular practice to leave units of this type with the cutout cocks in this position.

At Sacramento Shops Diesel-electric locomotive units are operated in shop movements by Diesel foremen and engine watchmen. Mechanical department employees have been instructed not to operate any equipment unless they have been instructed and qualified in its operation. The engine watchman involved had been employed by the carrier as acetylene plant attendant and stationary engineer from June 15, 1950, until July 18, 1955, and was assigned as engine watchman on the latter date. He had been qualified for duty as an engine watchman after working two days with another engine watchman and receiving further verbal instructions from a foreman. He was not familiar with the location or function of the cutout cocks adjacent to the brake valve. He previously had operated only Diesel-electric units of the switcher type, which were regularly serviced at this point, and he had not been qualified in the operation of other types of Diesel-electric motive power. The carrier should take steps to insure that employees who may be required to move locomotive units are thoroughly instructed in the operation of the controls of any equipment which may be placed in their charge.

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Cause

This accident was caused by a Diesel-electric locomotive unit moving out of control as a result of improper preparation of the unit for operation.

Dated at Washington, D. C., this seventeenth day of February, 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY

Secretary.