

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2652
THE NORTHERN PACIFIC RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT ROCKY POINT, WASH., ON
NOVEMBER 20, 1942

SUMMARY

Railroad: Northern Pacific

Date: November 20, 1942

Location: Rocky Point, Wash.

Kind of accident: Collision with automobile and
derailment of train

Equipment involved: Freight train : Automobile

Train number: Extra U. P. 2166 East :

Engine numbers: 2166-2155 :

Consist: 44 cars, caboose :

Speed: 40 m. p. h. : Standing

Operation: Timetable, train orders and
automatic block-signal system

Track: Double; 2° curve; 0.07 percent
descending grade eastward

Highway: Tangent; crosses tracks at angle
of 39°30'; 10 percent ascending
grade southward

Weather: Misty

Time: About 7:05 p. m.

Casualties: 1 killed; 2 injured

Cause: Accident caused by a freight train
striking an automobile which had
stalled on a highway grade crossing

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2652

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

THE NORTHERN PACIFIC RAILWAY COMPANY

January 4, 1943.

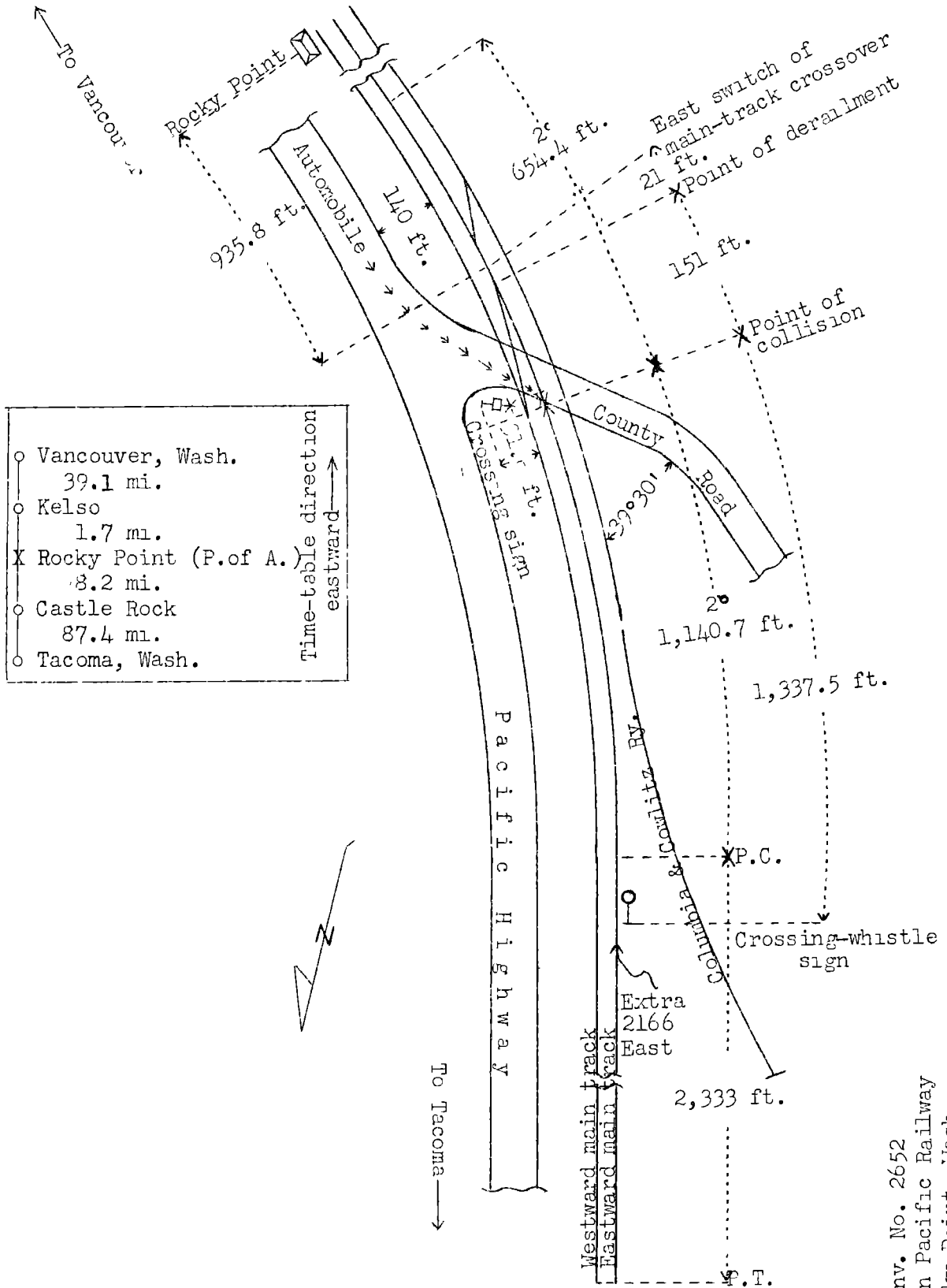
Accident at Rocky Point, Wash., on November 20, 1942, caused
by a freight train striking an automobile which had
stalled on a highway grade crossing.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On November 20, 1942, there was a derailment of a Union Pacific Railroad freight train, on the line of the Northern Pacific Railway Company, after it had struck an automobile at a highway grade crossing at Rocky Point, Wash. The accident resulted in the death of one employee and the injury of two employees. This accident was investigated in conjunction with a representative of the Department of Labor and Industries of the State of Washington.

¹Under 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.



○	Vancouver, Wash.	
	39.1 mi.	Time-table direction eastward →
○	Kelso	
	1.7 mi.	
X	Rocky Point (P. of A.)	
	8.2 mi.	
○	Castle Rock	
	87.4 mi.	
○	Tacoma, Wash.	

Inv. No. 2652
 Northern Pacific Railway
 Rocky Point, Wash.
 November 20, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Tacoma Division designated as the Third Sub-division and extending between Tacoma and Vancouver, Wash., a distance of 136.4 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by timetable, train orders and an automatic block-signal system. Trains of the Union Pacific Railroad, manned by employees of that railroad, are operated over this line. The collision occurred at a highway grade crossing located 1,086 feet west of the station at Rocky Point, and the derailment occurred on the eastward main track 935.8 feet west of the station. In the vicinity of the point of accident a connection track to the Columbia & Cowlitz Railway parallels the main tracks on the south. A trailing-point crossover for movements with the current of traffic is 204 feet in length and connects the main tracks. Its east switch is 144 feet east of the center of the crossing involved. A facing-point crossover connects the eastward main track and the connection track, and its west switch is 10 feet east of the east switch of the main-track crossover. The derailment occurred at a point 21 feet west of the east switch of the first-mentioned crossover. Approaching from the west on the railroad there is a tangent 2,333 feet in length, which is followed by a 2° curve to the left 1,140 feet to the point of collision and 655 feet beyond. At the point of collision the grade for east-bound trains is 0.07 percent descending.

At the crossing involved a county road crosses the three tracks at an angle of 39°30'. In the immediate vicinity of the point of accident, Pacific Highway parallels the railroad on the north. At a point 150 feet east of the point of collision the county road diverges from Pacific Highway at an angle of about 39° and extends to the crossing involved and a considerable distance beyond. As the crossing is approached from the north on the highway, the county road is tangent a distance of 140 feet to the crossing, then it curves slightly to the left at the crossing. Throughout a distance of 60 feet immediately north of the tracks the grade for south-bound vehicles is 10 percent ascending. The county road is surfaced with macadam, and is about 30 feet wide. The crossing is of plank construction and is 32 feet wide. The planking extends about 20 inches beyond the outside rails at the crossing. The planks are 10 inches wide and 4 inches thick. Flangeways about 2 inches wide are provided inside each rail.

A standard cross-buck highway-crossing sign is located to the right of the direction of south-bound traffic on the county road and in the northwest angle of the crossing at a point 31.6 feet north of the center-line of the westward main track. This sign bears the words "RAILROAD CROSSING" in black letters on a white background. Beneath the cross-buck sign a metal plate bears the words "THREE TRACKS." A crossing-whistle sign for east-bound trains is located 1,337.5 feet west of the point where the accident occurred.

Operating rules read in part as follows:

12h. Any object waved violently by anyone on or near the track is a signal to stop.

14. ENGINE WHISTLE SIGNALS.

Note.- The signals prescribed are illustrated by "o" for short sounds; "___" for longer sounds. * * *

Sound. Indication.

* * *

(1) ___ ___ o ___ Approaching public crossings at grade. To be prolonged or repeated until the engine has passed over the crossing.

30. The engine bell must be rung * * * while approaching and passing public crossings at grade, * * *.

The maximum authorized speed for freight trains hauled by the class of engine involved is 40 miles per hour.

Description of Accident

After a terminal air-brake test was made, Extra 2166 East, an east-bound Union Pacific Railroad freight train, departed from Argo, Wash., 132.5 miles west of Rocky Point. At Chehalis, 17.7 miles west of Rocky Point, 5 cars were added to the train, the brakes were tested and they functioned properly. This train, consisting of engines 2166 and 2155, coupled, 36 loaded and 8 empty cars and a caboose, departed from Chehalis at 6:01 p. m., according to the dispatcher's record of movement of trains, passed Castle Rock, 8.2 miles west of Rocky Point and the last open office, at 6:55 p. m., and while moving at an estimated speed of 40 miles per hour it struck an automobile at a highway grade crossing and was derailed.

The automobile involved was a 1939 Plymouth sedan bearing Oregon license plates 124766, and was owned and being driven by a man, sole occupant, who held operator's license 5R183529. The automobile had moved southward on the county road, entered upon the crossing, passed over the westward main track and was passing over the eastward main track when the right front wheel slipped off the west edge of the crossing planks and caught against the south rail, and the automobile stalled. While efforts were being made to get the wheel back on the crossing, the other front wheel slipped off the crossing. About 20 minutes later the automobile was struck by Extra 2166 East.

Because of track curvature, a view of the crossing can be had from the left side of an east-bound engine a distance of only about 1,000 feet, and from the right side, about 200 feet.

The automobile was demolished and three planks were torn from the crossing. The wreckage and the planks lodged under the engine-truck wheels of the first engine. The first marks of derailment were flange marks inside the left rail at a point 21 feet west of the east switch of the trailing-point crossover between the main tracks. Marks appeared outside the right rail at a point 18 feet farther east. The switch stand of the west switch of the facing-point crossover was broken, the latch was broken off, and the left switch rail and the left stock rail were overturned. From this switch to the point of general derailment, wheel marks appeared on the ties. The first engine stopped on its right side, badly damaged, south of the connection track and parallel to it, at a point 578 feet east of the crossing. The tender was torn loose and stopped at the rear of the engine and at right angles to it. The second engine and its tender were derailed and stopped, badly damaged, on their right sides across the tracks, with the cabs of both engines against each other. The first 14 cars were derailed and stopped, badly damaged, in various positions on the tracks. The wreckage was confined within a distance of about 400 feet.

It was misty at the time of the accident, which occurred about 7:05 p. m.

The employee killed was the engineer of the second engine. The employees injured were the fireman of the first engine and the front brakeman.

Data

During the 30-day period preceding the day of the accident, there was a daily average of 50.66 trains over the crossing involved. During the 24-hour period beginning at 12:01 p. m., November 26, 1942, 34 trucks, 332 automobiles and 9 other vehicles passed over this crossing.

Discussion

The automobile involved had been obstructing the eastward main track at the grade crossing involved about 20 or 25 minutes prior to the approach of Extra 2166 East. The driver tried to back the automobile so that all wheels would be on the planking of the crossing, but he was unable to do so. He then proceeded in another automobile to Kelso, about 2 miles east of Rocky Point, to hire a towing car. At that time the automobile was standing almost parallel to the tracks and the headlights, which

were lighted brightly, were pointed toward the west. After some delay, the owner of the towing car telephoned the railroad's operator at Kelso about 7 p. m., and informed him that an automobile was stalled on the crossing at Rocky Point; however, at that time Extra 2166 East had passed the last open office west of Rocky Point. The towing car then proceeded to Rocky Point, but before the towing cable could be attached to the stalled automobile the driver of the towing car observed the headlight of Extra 2166 approaching at a distance of about 3,000 feet west of the crossing. When the train was about 600 feet west of the crossing he gave signals with a lighted flashlight but the distance was not sufficient for the train to stop short of the crossing. The driver of the towing car said the train brakes appeared to be applied for some distance before the train collided with the automobile. A deputy sheriff, who had been notified by radio, arrived at the crossing too late to place lighted flares on the tracks.

As Extra 2166 was approaching Rocky Point, the speed was about 40 miles per hour, the headlight was lighted, the bell was ringing, the throttle was open sufficiently to maintain a pressure of 100 pounds in the valve chambers, and the members of the crew on the engines were maintaining a lookout ahead. A misting rain somewhat restricted visibility. Because of track curvature the fireman's view was restricted to about 1,000 feet, and the engineer's view to 200 feet. As the train was moving on the curve to the left, the engineer of the first engine was sounding the road-crossing whistle signal for the crossing involved. The engineer said that when the engine was about 150 feet west of the crossing he observed that the headlights of an automobile appeared to be pointing parallel to the track. At that time the fireman called a warning and the engineer moved the brake valve to emergency position but the distance was not sufficient to avert the collision. The fireman of the first engine and the front brakeman observed at a distance of about 500 feet the warning flashlight signals given by the driver of the towing car. The fireman crossed to the right side of the engine to warn the engineer but, because of the noise of the whistle, could not attract the engineer's attention immediately; however, only a short interval elapsed before the emergency application of the brakes occurred. As a result of the wreckage of the automobile and several crossing planks being lodged under the engine-truck wheels, the engine truck was derailed about 150 feet east of the crossing, then at a facing-point switch about 20 feet farther east, the engines were diverted to a turnout to the right and both were overturned. The brakes of this train had been tested and had functioned properly en route. There was no condition of the engines to

distract attention or to obscure the view.

The driver of the automobile was an experienced driver and was familiar with the crossing. He said that because of the ascending grade north of the tracks the beam of the headlight was projected upward and the fact that the crossing curves to the left he drove too near the right edge of the planking of the crossing, and the right front wheel dropped off the ends of the planks. He said that on account of turning from the Pacific Highway the speed of his automobile at the crossing was low. He did not provide flag protection because he had nothing in his possession with which he could flag trains.

Cause

It is found that this accident was caused by a freight train striking an automobile which had stalled on a highway grade crossing.

Dated at Washington, D. C., this fourth day of January, 1943.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.