

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3265
UNION PACIFIC RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT MONTEBELLO, CALIF., ON
JULY 21, 1949

SUMMARY

Date: July 21, 1949

Railroad: Union Pacific

Location: Montebello, Calif.

Kind of accident: Collision

Equipment involved: Passenger train : Motor-truck

Train number: 103 :

Engine numbers: Diesel-electric :
units 929, 990B
and 904B

Consists: 13 cars :

Estimated speeds: 50 m. p. h. : 2 m. p. h.

Operation: Signal indications

Track: Single; tangent; level

Highway: Tangent; crosses track
at angle of 69°44';
5.4 percent ascending
grade northward

Weather: Clear

Time: 11:10 a. m.

Casualties: 2 killed; 1 injured

Cause: Motor-truck occupying rail-highway
grade-crossing immediately in
front of approaching train

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3265

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

UNION PACIFIC RAILROAD COMPANY

September 26, 1949

Accident at Montebello, Calif., on July 21, 1949, caused
by a motor-truck occupying a rail-highway grade-
crossing immediately in front of an approaching train.

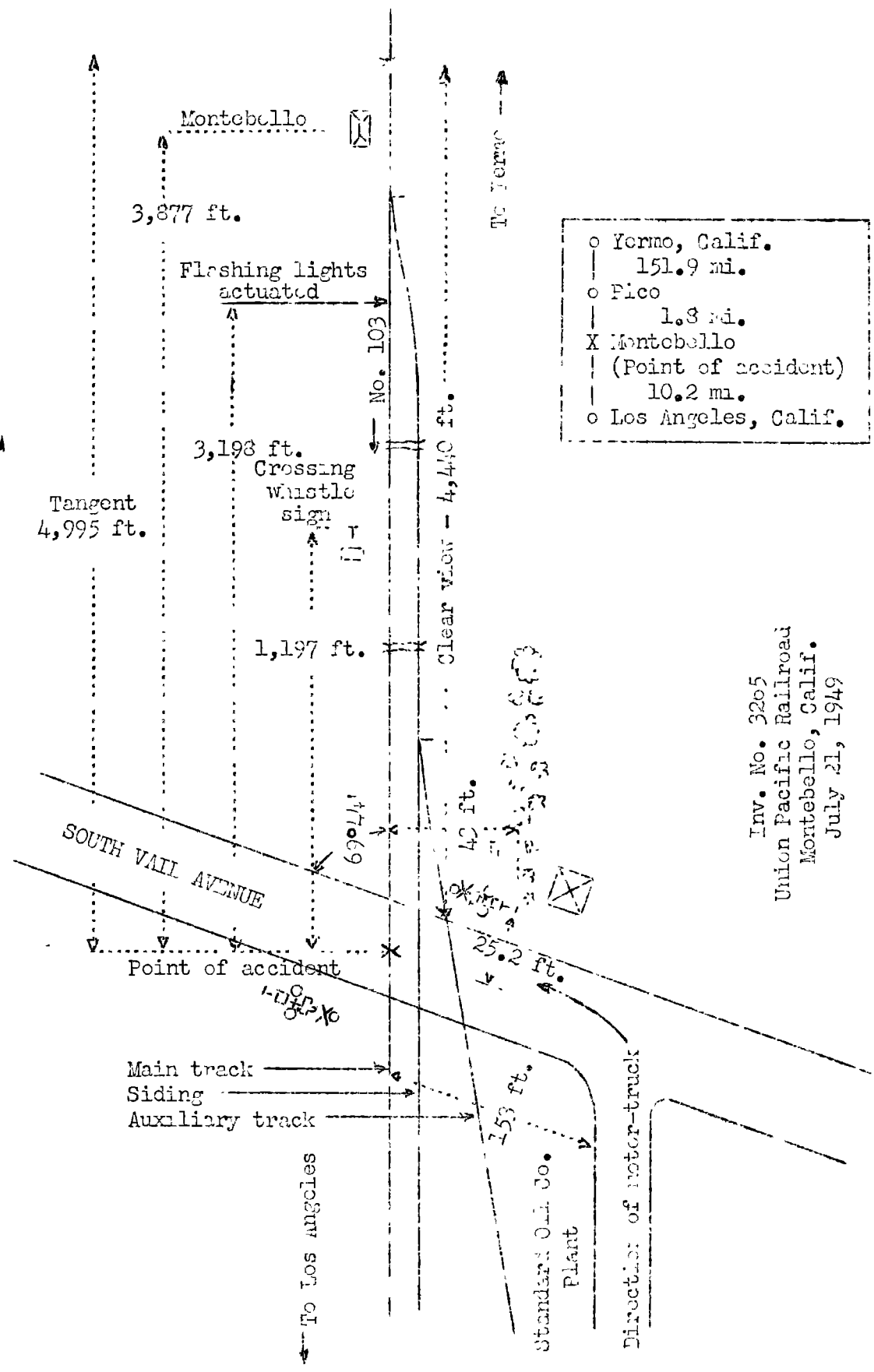
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On July 21, 1949, there was a collision between a passenger train on the Union Pacific Railroad and a motor-truck at a rail-highway grade-crossing at Montebello, Calif., which resulted in the death of the driver of the motor-truck and one train-service employee, and the injury of one train-service employee. This accident was investigated in conjunction with a representative of the Public Utilities Commission of California.

1

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.



- o Yermo, Calif. 151.9 mi.
- o Pico 1.8 mi.
- X Montebello (Point of accident) 10.2 mi.
- o Los Angeles, Calif.

Inv. No. 3265
 Union Pacific Railroad
 Montebello, Calif.
 July 21, 1949

Montebello
 3,877 ft.

Flashing lights actuated

No. 103

3,198 ft.
 Crossing whistle sign

Tangent 4,995 ft.

1,197 ft.

Clear view - 4,440 ft.

SOUTH VAIL AVENUE

Point of accident

Main track
 Siding
 Auxiliary track

To Los Angeles

Standards Oil Co. Plant

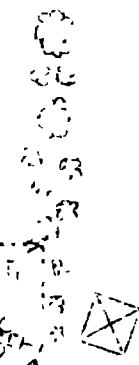
Director of motor-truck

40 ft.

25.2 ft.

153 ft.

690 ft.



Location of Accident and Method of Operation

This accident occurred on that part of the California Division extending between Yermo and Los Angeles, Calif., 163.9 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by signal indications. The accident occurred on the main track at a point 154.4 miles west of Yermo, and 3,877 feet west of the station at Montebello, where the railroad is crossed at grade by South Vail Avenue. At this point a siding parallels the main track on the south, and an auxiliary track is located south of the siding. The main track is tangent throughout a distance of 4,995 feet east of the crossing and a considerable distance westward. The grade for west-bound trains is 0.70 percent descending a distance of 2,610 feet and then is level 873 feet to the crossing. South Vail Avenue intersects the main track at an angle of 69°44', and is tangent a considerable distance on either side of the tracks. The crossing is 30 feet in width and is surfaced with asphalt-concrete to the level of the tops of the rails. Flangeways 2-1/2 inches in width are provided. The grade for north-bound vehicles is 5.4 percent ascending throughout a distance of approximately 140 feet immediately south of the center-line of the auxiliary track, 1.2 percent ascending 30 feet to the center-line of the main track, and 3 percent descending a considerable distance north of the main track. A distributing center of the Standard Oil Company is located in the southwest angle of the intersection. A driveway into this center diverges from South Vail Avenue at a point 153 feet south of the center-line of the main track.

A standard cross-buck railroad-crossing sign is located 43 feet south of the center-line of the main track and 25.2 feet east of the center-line of the highway, and bears the words "RAILROAD CROSSING" in reflectorized letters. This sign is mounted on a mast 11 feet 6 inches above the level of the highway. A sign bearing the reflectorized numeral "3" over the word "TRACKS," in reflectorized letters, is mounted immediately below the cross-buck sign. A horizontal bar 2 feet 6 inches in length is mounted on the mast 8 feet above the level of the highway. Two hooded red lights are attached back-to-back to each end of this bar. The lights for one direction are arranged to be illuminated alternately. The lights governing north-bound traffic are aligned slightly to the right to provide an indication to the driver of a vehicle entering South Vail Avenue from the Standard Oil

Company driveway. A sign bearing the words "STOP ON RED SIGNAL" is mounted on the mast below the lights. A warning bell also is mounted on the mast. A similar railroad-crossing sign is located in the northwest angle of the intersection and each flashing-light signal and the warning bell are arranged for automatic operation when a west-bound train occupies any portion of the main track throughout a distance of 3,198 feet immediately east of the crossing. A crossing-whistle sign for west-bound trains is located 1,197 feet east of the crossing.

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

ENGINE WHISTLE SIGNALS

14.

Note. * * *

The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. * * *

In sounding Signal 14 (1) for public crossings, the first of the long sounds must be started at such a point that the signal will be completed by ending the last sound on the crossing, * * *.

* * *

SOUND

INDICATION

* * *

(1) — — o —

Approaching public crossing at grade, * * *

* * *

17 (C). On * * * Diesel-powered trains, when full power headlight is not required it must be burning dim during daylight hours, * * *

30. Engine bell must be rung when an engine is * * * approaching and passing public crossings at grade * * *

Section 576 of Chapter 12 of the Vehicle Code, State of California, reads in part as follows:

576. Certain Vehicles Must Stop At All Railway Grade Crossings:- (a) The driver * * * of any motor truck carrying * * * inflammable liquids * * * as a cargo or part of a cargo, before crossing at grade any track or tracks of a steam railway, * * * shall stop such vehicle not less than 10, nor more than 50, feet from the nearest rail of such track and, while so stopped, shall listen and look in both directions along such track for any approaching railway train, * * * or * * * other vehicle using such rails before traversing such crossing, * * *

The maximum authorized speed for the train involved was 90 miles per hour.

Description of Accident

No. 103, a west-bound first-class passenger train, consisted of Diesel-electric units 999, 990B, and 904B, coupled in multiple-unit control, one baggage car, three coaches, two dining cars, one lounge car, five sleeping cars, and one observation car, in the order named. All cars were of light-weight construction. This train passed Pico, the last open office, 1.8 miles east of Montebello, at 11:08 a. m., 2 hours 39 minutes late, and while moving at an estimated speed of 50 miles per hour it struck a motor-truck on a rail-highway grade-crossing 3,877 feet west of the station at Montebello.

The vehicle involved was a motor-truck and trailer owned by the Signal Oil Company, Los Angeles, Calif. The driver, who was the sole occupant, held California chauffeur's license No. 673789. The truck was a 1936 International, and bore California license No. AD 4357. It was powered by a Cummins HB 600 Diesel engine which developed 150 H.P. at 1,800 R.P.M. It was equipped with a single axle and single wheels at the front, twin axles and dual wheels at the rear, a Brownlite No. 7441 four-speed main transmission, and an Autocar A-3 three-speed auxiliary transmission. It was provided with an enclosed steel cab. The trailer bore California license No. 206076. It was equipped with dual wheels, a single axle at the front and twin axles at the rear. All wheels of the truck and of the trailer were equipped with Westinghouse air brakes. The total length

of the truck and trailer, coupled, was 58 feet 8 inches. A steel tank having a capacity of 2,775 gallons was mounted on the truck and a steel tank having a capacity of 3,600 gallons was mounted on the trailer. At the time of the accident the cargo of the truck and trailer consisted of 6,375 gallons of gasoline, weighing 41,300 pounds. It was loaded at the distributing center of the Standard Oil Company at Montebello and was en route to Burbank, Calif. The total weight of the truck, trailer, and cargo was 72,800 pounds. This vehicle was moving north on South Vail Avenue, at a speed of about 2 miles per hour when the trailer was struck by No. 103.

No. 103 stopped with the front of the first Diesel-electric unit 1,326 feet west of the center-line of South Vail Avenue, and the rear of the last car 204 feet west of the crossing. The front end of the first Diesel-electric unit was considerably damaged as a result of the collision, and the control compartment was practically destroyed by fire.

The tank of the trailer was torn loose from its frame, and it stopped 56 feet west of the highway and 43 feet north of the center-line of the main track. The truck and the trailer-frame remained coupled, and were badly damaged. The tank of the trailer was punctured and escaping gasoline became ignited. The Diesel-electric units were enveloped by fire. Buildings adjacent to the intersection, all communication lines of the railroad, and overhead wires of local utilities were damaged by the fire.

The engineer of No. 103 was fatally injured, and the fireman was injured.

The weather was clear at the time of the accident, which occurred at 11:10 a. m.

During the 30-day period preceding the day of the accident, the average daily movement over the crossing was 19.8 trains. During the 24-hour period beginning at 5 p. m., July 26, 1949, 4,248 automobiles, 505 trucks, and 97 other vehicles passed over the crossing.

Discussion

As No. 103 was approaching the point where the accident occurred the speed was about 70 miles per hour. The oscillating signal light provided on the first Diesel-electric unit was lighted brightly. The enginemen were maintaining

a lookout ahead from their respective positions in the control compartment of the first Diesel-electric unit, and the members of the train crew were in various locations throughout the train. The brakes of the train had been tested and had functioned properly when used en route. The engine bell was ringing, and the grade crossing-whistle signal was sounded on the pneumatic horn for each of several grade crossings between the station at Montebello and South Vail Avenue. The fireman said that when the train reached a point about 2,600 feet east of South Vail Avenue the enginemen observed the motor-truck standing at the crossing south of the track. It immediately entered the crossing, and the engineer made a light service application of the brakes. When the train was approximately 1,800 feet east of the crossing, the truck apparently stopped momentarily on the main track and then moved ahead slowly. When it became apparent that the truck would not clear the track in time to avert a collision, the engineer made a full-service application of the brakes. The speed of the train was reduced to about 50 miles per hour at the time of the collision.

The view of an approaching west-bound train from a north-bound vehicle on South Vail Avenue is obscured by shrubbery and several small structures until the vehicle reaches a point about 40 feet south of the main track. From this point the driver of the vehicle has an unobstructed view of the track east of the crossing throughout a distance of 4,440 feet. The driver of the motor-truck, who died about 10 hours after the accident occurred, said that after the truck entered South Vail Avenue he stopped it south of the crossing. He did not see a train approaching from either direction and drove the truck upon the crossing. When the truck reached the main track, the driving mechanism became defective. The driver thought that the momentum of the truck would carry it across the track before the train reached the crossing, but the rear end of the trailer was struck on the crossing.

An examination of the truck after the accident disclosed that the rear axle was broken 9 inches from the right end.

Cause

It is found that this accident was caused by a motor-truck occupying a rail-highway grade-crossing immediately in front of an approaching train.

Dated at Washington, D. C., this twenty-sixth day of September, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL

Secretary.