# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3732

THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

IN RE ACCIDENT

AT DELPHOS, N. MEX., ON

JANUARY 9, 1957

# SUMMARY

January 9, 1957

Date:

Railroad:	Atchison, Topeka and Santa Fe	
Location:	Delphos, N. Mex.	
Kind of accident:	Side collision	
Trains involved:	Freight	: Freight
Train numbers:	Extra 271 West	: Extra 276C East
Locomotive numbers:	Diesel-clectric units 271, 271A, 271B, and 271C	: Diesel-electric units 276C, 276B, 276A, and 276
Consists:	63 cars, caboose	: 99 cars, caboose
Speeds:	Standing	: 47 m. p. h.
Operation:	Timetable and train orders	
Track:	Single; tangent; 0.18 percent descending grade westward	
Weather:	Clear	
Time:	10:40 p. m.	
Casualties:	l killed; 2 injured	
Cause:	Train fouling main front of opposing	track immediately in train

#### INTERSTATE COMMERCE COMMISSION

### REPORT NO. 3732

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

THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

## February 27, 1957

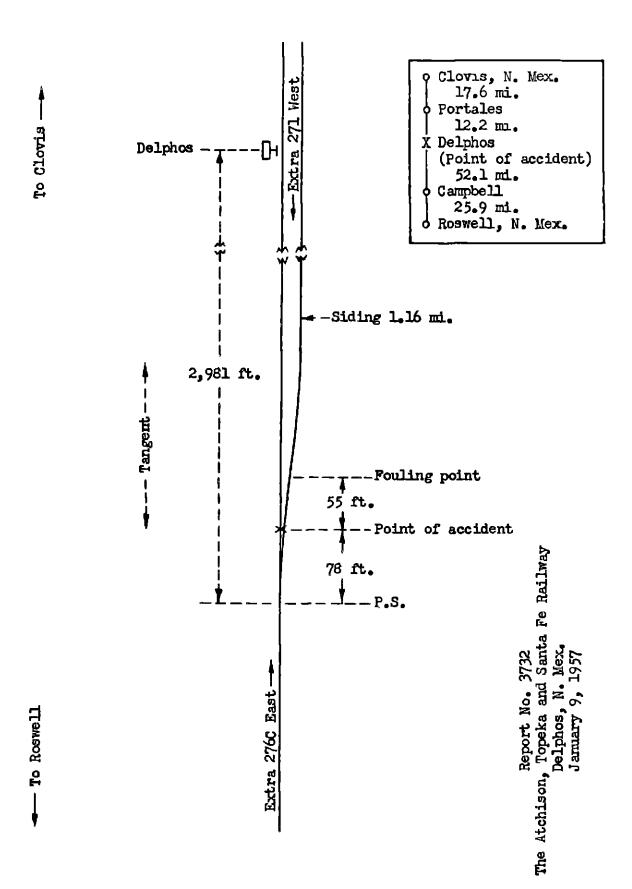
Accident at Delphos, N. Mex., on January 9, 1957, caused by a train fouling the main track immediately in front of an opposing train.

# REPORT OF THE COMMISSION1

# TUGGLE, Commissioner:

On January 9, 1957, there was a side collision between two freight trains on the Atchison, Topeka and Santa Fe Railway at Delphos, N. Mex., which resulted in the death of one train-service employee, and the injury of two train-service employees.

Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Tuggle for consideration and disposition.



# Location of Accident and Method of Operation

This accident occurred on that part of the Pecos Division extending between Clovis and Roswell, N. Mex., 107.8 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Delphos, 29.8 miles west of Clovis, a siding 1.16 miles in length parallels the main track on the south. The west siding-switch is 2,981 feet west of the station sign. The accident occurred 55 feet west of the fouling point between the west end of the siding and the main track, and 78 feet east of the point-of-switch at the west end of the siding. The main track is tangent throughout a considerable distance on each side of the point of accident. The grade between the siding switches varies between 0.24 percent and 0.65 percent descending westward, and it averages 0.39 percent descending. From the west the grade is, successively, an average of 0.33 percent descending a distance of 4,000 feet and an average of 0.18 percent ascending 1,100 feet to the point of accident.

The switch stands at the siding switches at Delphos are equipped with reflector lenses and are not equipped with switch lamps.

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

17. The headlight will be displayed to the front of every train by day and night. It must be extinguished when a train turns out to meet another train and has stopped clear of main track.

\* \* \*

S-88. At meeting points between extras, the train in the inferior time table direction must take the siding, unless otherwise provided.

\* \* \*

#### FORMS OF TRAIN ORDERS

S-A

Fixing Meeting Points for Opposing Trains.

(1) \* \* \* Extra 652 East meet Extra 231 West at B. \* \* \*

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

Timetable special instructions provide that east-bound trains are superior to west-bound trains of the same class.

The maximum authorized speed for freight trains in the vicinity of the point of accident is 45 miles per hour.

# Description of Accident

Extra 271 West, a west-bound freight train, consisted of Diesel-electric units 271, 271A, 271B, and 271C, coupled in multiple-unit control, 63 empty box cars, and a caboose. At Clovis the crew received, among others, copies of train order No. 680 reading as follows:

Extra 276C East meet Extra 271 West at Delphos

This train departed from Clovis at 9:30 p. m. and passed Portales, 17.6 miles west of Clovis, the last open office, at 10:12 p. m. It entered the siding at Delphos and stopped with the front of the locomotive 55 feet west of the fouling point between the west end of the siding and the main track. Immediately afterward the front of the train was struck by Extra 276C East.

Extra 276C East, an east-bound freight train, consisted of Diesel-electric units 276C, 276B, 276A, and 276, coupled in multiple-unit control, 99 cars, and a caboose. At Campbell, 52.1 miles west of Delphos, the last open office, the crew received copies of train order No. 680. The train passed Campbell at 8:15 p. m., and while moving at a speed of approximately 47 miles per hour, as indicated by the tape of the speed-recording device, it struck Extra 271 West.

The locomotives of both trains, the first two cars of Extra 271 West, and the first thirty-eight cars of Extra 276C East were derailed. The first Diesel-electric unit of Extra 271 West stopped with the front end 35 feet south of the siding and the rear end on the track structure of the siding. The second unit stopped in line with the siding. The front end of the third unit and the rear end of the fourth unit stopped on the track structure of the siding, and the opposite ends of these units stopped 25 feet south of the siding. The first Diesel-electric unit of Extra 276C East turned end for end and stopped on its top at a point 225 feet east of the point of accident and 30 feet north of the main track. The

second, third, and fourth units stopped upright in various positions across or north of the track structure of the main track. The derailed cars stopped in various positions on or near the tracks. Inflammable material in the wreckage became ignited, and the first and second Diesel-electric units of Extra 271 West, the first Diesel-electric unit of Extra 276C East, and 10 of the derailed cars, which had been damaged in the collision, were further damaged by fire. The first Diesel-electric unit of each train was badly damaged. The second, third, and fourth units of Extra 271 West, and the second, third, and fourth units of Extra 276C East were considerably damaged. Three of the derailed cars were not damaged, five were badly damaged, and the others were destroyed.

The engineer of Extra 271 West was killed. The engineer and the fireman of Extra 2760 East were injured.

The weather was clear at the time of the accident, which occurred at 10:40 p. m.

#### Discussion

The crews of both trains held copies of train order No. 680. Under the provisions of this order Extra 271 West was required to enter the siding at Delphos and to remain clear of the main track until Extra 2760 East had passed. The members of the crews of both trains so understood.

As Extra 271 West was approaching Delphos the enginemen and the front brakeman were in the control compartment at the front of the locomotive. The conductor and the flagman were in the caboose. The brakes of the train had been tested at Clovis but had not been used after the train departed from that point. The fireman and the front brakeman were of the opinion that the engineer used the dynamic brake to control the speed as the train approached the east siding-switch at Delphos. The conductor and the flagman thought that the speed was reduced at this point by use of the automatic brake. The fireman and the front brakeman said that after the train entered the siding the engineer called the engineer of Extra 2760 East on the radio and told him that the train was clear of the main track. At approximately the same time the engineer either dimmed or extinguished the headlight. They said that there was sufficient light for them to see the track ahead and that the train moved through the siding at a speed of 4 or 5 miles per hour. They said that as the train approached the west end of the siding they were bothered by the headlight of Extra 276C East, and they did not realize that the locomotive was closely approaching the switch until

they felt the locomotive turn toward the main track. Until this occurred they had not been concerned because of the speed or the manner in which the train was being handled. They said that the engineer had been controlling the speed by use of the independent brake, and the fireman said he was positive that the engineer had made no attempt to stop the train. When they became aware that the locomotive was closely approaching the switch they called a warning to the engineer. Both of them alighted immediately, and they did not know what action was taken by the engineer. The conductor and the flagman said that the train made what they thought was a normal stop at the west end of the siding. The conductor said he thought that the train was stopped by the use of the automatic brake, and he said that after the train stopped the brakes became applied in emergency. From this it appears that the train had stopped before the collision occurred. The conductor said that at approximately the time the train stopped he heard his engineer call the engineer of Extra 276C East on the radio and tell him to make an emergency application of of the brakes.

As Extra 276C East was approaching Delphos the enginemen and the front brakeman were in the control compartment at the front of the locomotive. The conductor and the flagman were in the caboose. The headlight was lighted brightly. The brakes of the train had been tested and had functioned properly when used en route. The employees on the locomotive said that while their train was a considerable distance west of the west siding-switch at Delphos they saw the headlight of Extra 271 West. The engineer asked the engineer of Extra 271 West on the radio whether that train would soon be clear of the main track, and the engineer of Extra 271 West replied that the rear of the train was entering the siding. Several seconds later the engineer of Extra 271 West extinguished the headlight and reported that his train was clear of the main track. The engineer of Extra 276C East said that when his locomotive reached a point which he thought was about 1,200 feet west of the west siding-switch the engineer of Extra 271 West called him and told him to make an emergency application of the brakes. He did so immediately. The collision occurred several seconds later and before the speed of the train had been appreciably reduced.

#### Cause

This accident was caused by a train fouling the main track immediately in front of an opposing train.

Dated at Washington, D. C., this twenty-seventh day of February, 1957.

By the Commission, Commissioner Tuggle.

(SEAL)

HAROLD D. McCOY,

Secretary.