# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2944

SOUTHERN RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT HURT, VA., ON

NOVEMBER 8, 1945

# SUMMARY

Railroad:

Southern

Date:

November 8, 1945

Location:

Hurt, Va.

Kind of accident:

Side collision

Trains involved:

Engine with cars : Freight

Train number:

: 52

Engine numbers:

Diesel-electric : 4862

units 4107-4106

and 4118

Consist:

16 cars

: 66 cars, caboose

Estimated speed:

10 m. p. h.

; 30 m. p. h.

Operation:

Timetable, train orders and automatic block-signal system;

yard limits

Track:

Double; tangent; 0.35 percent descending grade northward

Weather:

Clear

Time:

10:30 p. m.

Casualties:

1 killed: 2 injured

Cause:

Failure properly to control speed of train moving within yard limits

# INTERSTATE COMMERCE COMMISSION

### INVESTIGATION NO. 2944

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

# SOUTHERN RAILWAY COMPANY

December 10, 1945.

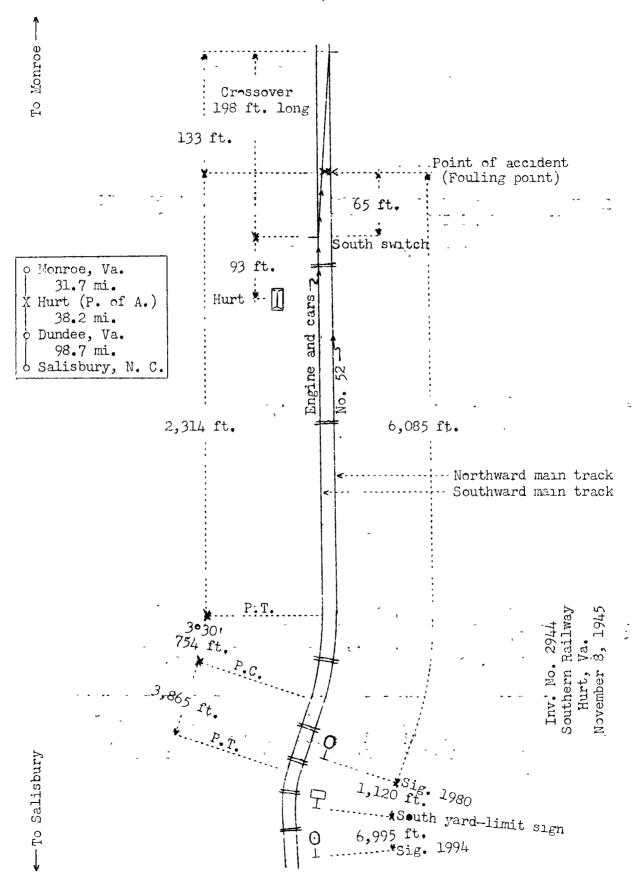
Accident at Hurt, Va., on November 8, 1945, caused by failure properly to control the speed of a train moving within yard limits.

# REPORT OF THE COMMISSION

# PATTERSON, Commissioner:

On November 8, 1945, there was a side collision between a freight train and an engine with cars on the Southern Railway at Hurt, Va., which resulted in the death of one employee, and the injury of two employees.

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.



- 5 **-** 2944

# Location of Accident and Method of Operation

This accident occurred on that part of the Danville Division extending between Salisbury, N. C., and Monroe, Va., 168.6 miles, a double-track line in the vicinity of the point of accident, over which trains moving with the current of traffic are operated by timetable, train orders and an automatic block-signal system. Within yard limits at Hurt, 136.9 miles north of Salisbury, the south switch of a trailing-point crossover 198 feet long, which connects the main tracks, is 93 feet north of the station. The accident occurred at the fouling point of the northward main track and the crossover, at a point 65 feet north of the south switch and 1.36 miles north of the south yard-limit sign. From the south there are, in succession, a tangent 3,865 feet in length, a 3030' curve to the left 754 feet and a tangent 2,314 feet to the point of accident and 133 feet northward. Inroughout a distance of more than 2 miles immediately south of the point of accident the grade varies between 0.35 and 1.01 percent descending northward, and is 0.35 percent at the point of accident.

Automatic signals 1994 and 1980, governing north-bound movements on the northward main track, are, respectively, 2.69 miles and 1.15 miles south of the point of accident. These signals are of the color-light type and are continuously lighted. The aspects and corresponding indications and names of these signals are as follows:

Aspect	<u>Indication</u>	Name
Red	Stop; then proceed at restricted speed	Stop and Proceed · Signal
Yellow	Proceed, preparing to stop at next signal.	Approach Signal
Green	Proceed	Clear Signal

The controlling circuits of these signals are so arranged that when either switch of the crossover involved is lined for movement through the crossover, signal 1994 will display proceed-preparing-to-stop-at-next-signal and signal 1980 will display stop-then-proceed.

Operating rules read in part as follows:

#### DEFINITIONS

\* \* \*

Yard Speed -- A speed that will permit stopping within one-half the range of vision.

\* \* \*

2944

Restricted Speed. -- Proceed prepared to stop snort of train, obstruction, or switch not properly lined and look out for broken rail.

93. Within yard limits the main track may be used without protecting against second and inferior class, extra trains and engines.

Second and inferior class, extra trains and engines must move within yard limits at yard speed.

\* \* \*

Note--A Proceed or Approach indication displayed by a fixed signal or by a hand, flag or lamp signal within yard limits, does not relieve train or enginemen of responsibility for observance of Rule 93. \* \* \*

517. Within automatic block signal territory, unless otherwise provided, before a train or engine enters on or fouls a main track, or crosses over from one main track to another, trainmen will operate all switches involved, and in addition to other precautions, trains and engines will wait three minutes before the movement is made. \* \* \*

\* \* \*

# Description of Accident

About 10:30 p. m., during switching operations, Diesel-electric engine 4107, of the 3-unit type, was pulling a cut of 16 freight cars from the southward main track to the north-ward main track through the crossover at Hurt and was moving at an estimated speed of 10 miles per hour when the third car was struck by No. 52.

No. 52, a north-bound second-class freight train, consisting of engine 4862, 66 cars and a caboose, departed from Dundee, the last open office, 38.2 miles south of Hurt, at 9:05 p. m., 5 hours 35 minutes late, passed signal 1994, which displayed proceed, passed the south yard-limit sign at Hurt, passed signal 1980, which displayed proceed, and while moving on the northward main track at an estimated speed of 30 miles per hour it struck the third car of the cut of cars being pulle by engine 4107.

The engine and the first 20 cars of No. 52 and the third to the thirteenth cars, inclusive, of the cut of cars being pulled by engine 4107 were derailed and damaged.

**-** 7 **-** 2944

The weather was clear at the time of the accident, which occurred about 10:30 p.m.

The engineer of No. 52 was killed, and the fireman and the front brakeman were injured.

### Discussion

During switching operations at Hurt, engine 4107 was moving from the southward to the northward main track through the crossover, pulling a cut of 16 cars, when the third car was struck by No. 52, a north-bound second-class freight train, at a point 1.36 miles north of the south yard-limit sign.

When the accident occurred the enginemen of engine 4107 were in the control compartment of the rear unit, the conductor was in the vicinity of the south crossover-suiten, one brakeman was on the fifth car and the other brakeman was checking cars that were to be picked up from an auxiliary track located to the east of the main tracks. These employees were not aware of anything being wrong until immediately prior to the collision. They understood that in automatic block-signal territory the rules require that an interval of at least 3 minutes must elapse after the switches of a crossover have been opened before a movement through the crossover may be made. The conductor operated the switches of the crossover involved. The conductor and the other members of the crew said they did not consult their watches, but they thought the switches were operated at least 3 minutes prior to the time their engine entered the crossover.

As No. 52 was approaching the point where the accident occurred the headlight was lighted brightly, and the enginemen were maintaining a lookout ahead. The front brakeman was in the brakeman's booth on the tender. The brakes of this train had been tested and had functioned properly en route. fireman said that signal 1994, located 6,995 feet south of the south yard-limit sign, displayed proceed. When the engine was in the vicinity of the south yard-limit sign the engineer made a service brake-pipe reduction and a speed of about 30 miles per hour was maintained until the engine was in the vicinity of `signal 1980, located 6,085 feet south of the point where the accident occurred. This signal displayed proceed, and when the engine passed the signal the engineer released the brakes. From this point northward a speed of about 35 miles per hour was maintained until the engine reached a point about 800 feet south of the point where the accident occurred. Then the enginemen saw the cars occupying the trossover, and the engineer moved the brake valve to emergency position, but the collision occurred before the train could be stopped. The engineer was killed in the accident. The members of the train crew were not aware of anything being wrong until the brakes were applied in emergency.

The evidence indicates that signal 1980 was displaying a proceed indication when the engine of No. 52 passed this signal, and a speed of about 35 miles per hour was maintained throughout a distance of approximately 1 mile to the point where the enginemen first saw the cars occupying the crossover. Based on an average speed of 35 miles per hour, an interval of approximately 1 minute 40 seconds elapsed between the time No. 52 passed signal 1980 and the time the accident occurred. Therefore, it is evident that after the switches were operated engined 1980 entered the crossover before the required interval of 3 minutes had elapsed. However, under the rules governing operation within yard limits, No. 52 was required to be operated so that it could be stopped within a distance of one-half the range of vision regardless of the indications displayed by automatic block signals.

# Cause

It is found that this accident was caused by failure properly to control the speed of a train moving within yard limits.

Dated at Mashington, D. C., this tenth day of December, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL, Secretary.