INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 3106

CHICAGO, INDIANAPOLIS AND LOUISVILLE
RAILWAY COMPANY

REPORT IN RE ACCIDENT

NEAR ASH GROVE, IND., ON

JUNE 3, 1947

SUMMARY

Railroad:	Chicago, Indianapolis and Louisville	
Date:	June 3, 1947	
Location:	Ash Grove, Ind.	
Kind of accident:	Head-end collision	
Trains involved:	Freight	: Freight
Train numbers:	75	: 70
Engine numbers:	Diesel-electric units 62B-62C-62A	: Diesel-electric units 64A-64C-64B
Consists:	29 cars, caboose	: 53 cars, caboose
Estimated speeds:	35 m. p. h.	: 20 m. p. h.
Operation:	Timetable, train orders and automatic block-signal system	
Track:	Single; tangent; 0.76 percent descending grade southward	
Weather:	Clear	
Time:	3:22 a. m.	
Casualties:	3 killed; 1 injured	
Cause:	Failure of inferior train to obey meet order and signal indications	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3106

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

CHICAGO, INDIANAPOLIS AND LOUISVILLE RAILWAY COMPANY

July 18, 1947

Accident near Ash Grove, Ind., on June 3, 1947, caused by failure of the inferior train to obey a meet order and signal indications.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On June 3, 1947, there was a head-end collision between two freight trains on the Chicago, Indianapolis and Louisville Railway near Ash Grove, Ind., which resulted in the death of three employees, and the injury of one employee. This accident was investigated in conjunction with a representative of the Indiana Public Service Commission.

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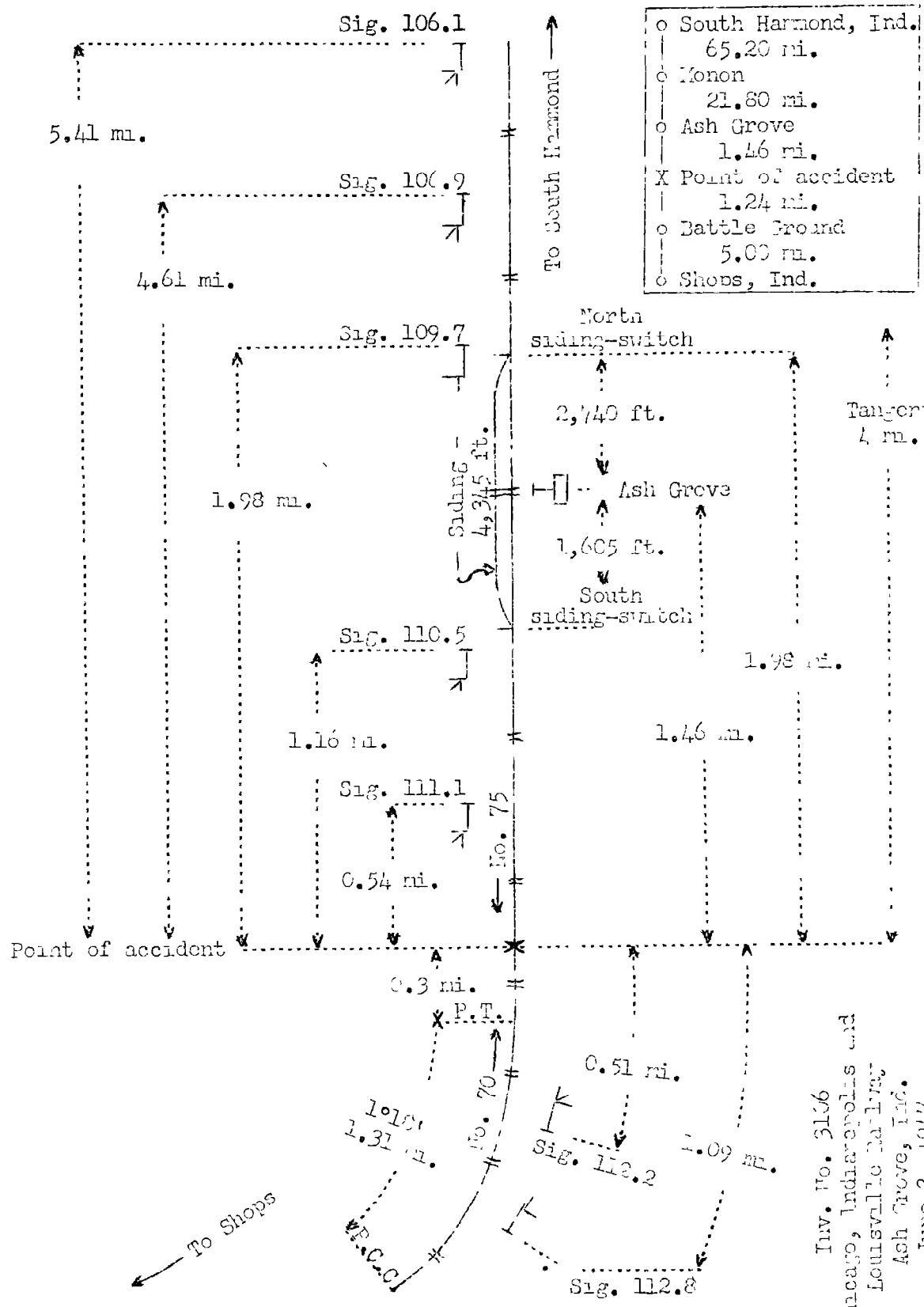
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 3166
Chicago, Indianapolis and Louisville Railway
Ash Grove, Ind.
June 3, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the Northern Division extending between South Hammond and Shops, Ind., 94.7 miles, a single-track line, over which trains are operated by timetable, train orders and an automatic block-signal system. At Ash Grove, 87 miles south of South Hammond, a siding 4,345 feet in length parallels the main track on the west. The north switch of the siding is 2,740 feet north of the station. The accident occurred on the main track 1.98 miles south of the north siding-switch. The track is tangent throughout a distance of 4 miles immediately north of the point of accident and 0.3 mile southward. From the south there is a compound curve to the left, the maximum curvature of which is 1°18', 1.31 miles in length, and then the tangent on which the accident occurred. At the point of accident the grade is 0.76 percent descending southward.

The automatic block-signal system consists of double-location signals near the ends of sidings and intermediate signals between sidings. Signals 106.1, 106.9, 109.7, 110.5 and 111.1, governing south-bound movements, are, respectively, 5.41 miles, 4.31 miles, 1.98 miles, 1.16 miles and 0.54 mile north of the point of accident. Signals 112.8 and 112.2, governing north-bound movements, are, respectively, 1.09 miles and 0.51 mile south of the point of accident. These signals are of the one-arm, upper-quadrant, semaphore type, and are approach lighted. The involved night aspects and corresponding indications and names of these signals are as follows:

Aspect	Indication	Name
Green	Proceed.	Clear Signal.
Red	Stop.	Stop Signal.
Yellow	Proceed at restricted speed.	Approach Signal.

The controlling circuits are so arranged that when a south-bound train passes signal 106.1, signal 112.2 displays proceed-at-restricted-speed, and when a south-bound train passes signal 110.5, signals 112.8 and 112.2 display stop. When a north-bound train passes signal 112.8, signal 106.9 displays proceed-at-restricted-speed, and signals 109.7, 110.5 and 111.1 display stop.

Operating rules read in part as follows:

DEFINITIONS.

* * *

Restricted Speed.--Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

* * *

14. ENGINE WHISTLE SIGNALS.

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

SOUND.	INDICATION.
* * *	
(m) _____	Approaching stations * * *
(n) o o ___	Approaching meeting or waiting points. See Rule S-90.
* * *	

34. All members of train and engine crews must, when practicable, communicate to each other by its name the indication of all signals affecting the movement of their train.

S-71. A train is superior to another train by right, class or direction.

* * *

S-72. * * *

Trains in the direction specified by the time-table are superior to trains of the same class in the opposite direction.

S-88. At meeting points between trains of the same class, the inferior train must clear the main track * * *

* * *

Trains must pull into the siding when practicable; * * *

S-90. * * *

* * *

Approaching a point, where * * * by train order * * * movement of train is effected, the engineman, after sounding the station signal, will sound signal 14 N (oo ___) to indicate to trainmen that restriction to be observed at that point will be conformed to.

* * *

In case of failure of engineman to give proper whistle signal, conductor or brakeman must stop the train at once.

210. * * *

* * *

Enginemen must show train orders to firemen and forward trainmen. Conductors must show train orders to rear trainmen.

Trainmen and firemen must call attention to conductors and enginemen should orders be disregarded.

FORMS OF TRAIN ORDERS

S-A.

Fixing Meeting Points for Opposing Trains

(1). No 1 meet No 2 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.

513. When a train is stopped by a Stop Signal it may proceed when the signal clears or it may proceed with the signal in stop position under the following restrictions:

(a) When track is straight and vision clear train may proceed without protection of flag, * * * freight trains * * * not to exceed speed of ten miles per hour.

(b) Where vision is obstructed by curves or other causes or there is a point of danger, then a stop must be made not closer than one-quarter mile from such curve or point of danger and a flagman sent ahead. Train must remain standing to permit flagman to get a sufficient distance in advance to protect his train against other trains. Flagman will continue to protect his train until he reaches a place where his vision to the next signal is unobstructed. Trains following a flagman on foot must not exceed speed of four miles per hour * * *

* * *

Time-table special instructions provide that north-bound trains are superior to trains of the same class in the opposite direction.

The maximum authorized speed for the trains involved was 55 miles per hour.

Description of Accident

At Monon, 21.8 miles north of Ash Grove, the crew of No. 75, a south-bound second-class freight train, received copies of train order No. 207 reading in part as follows:

No 75 Eng 62 meet No 70
Eng 64 at Ash Grove * * *

No. 75, consisting of Diesel-electric units 62B, 62C and 62A, coupled in that order and in multiple-unit control, 29 cars and a caboose, departed from Monon, the last open office, at 2:46 a. m., 36 minutes late, passed signals 106.1 and 106.9, which displayed proceed, passed signal 109.7, which displayed stop, passed the north siding-switch at Ash Grove, where it was required to enter the siding to meet No. 70, passed signals 110.5 and 111.1, which displayed stop, and while moving at an estimated speed of 35 miles per hour it collided with No. 70 at a point 1.98 miles south of the north siding-switch at Ash Grove and 0.54 mile south of signal 111.1.

At Shops, 7.7 miles south of Ash Grove, the crew of No. 70, a north-bound second-class freight train, received copies of train order No. 207. This train, consisting of Diesel-electric units 64A, 64C and 64B, coupled in that order and in multiple-unit control, 53 cars and a caboose, departed from Shops, the last open office, at 3:10 a. m., 50 minutes late, passed signal 112.3, which displayed proceed, passed signal 112.2, which displayed stop, and while moving at an estimated speed of 20 miles per hour it collided with No. 75 at a point 0.51 mile north of signal 112.2.

The Diesel-electric units of both trains, the first ten cars and the front truck of the eleventh car of No. 75, and the first four cars of No. 70 were derailed and badly damaged. The ninth and the sixteenth cars of No. 70 were considerably damaged.

The engineer and the fireman of No. 70 and the front brakeman of No. 75 were killed. The engineer of No. 75 was injured.

The weather was clear at the time of the accident, which occurred about 3:22 a. m.

Discussion

The crew of each train held copies of train order No. 207, which established Ash Grove as the meeting point between No. 70, a north-bound second-class train, and No. 75, a south-bound second-class train. No. 75 was inferior by direction, and, under the rules, this train was required to enter the siding at Ash Grove at the north switch, and to remain clear of the main track until No. 70 had been met. These trains collided at a point 1.98 miles south of the north siding-switch at Ash Grove.

As No. 70 was approaching the point where the accident occurred the speed was about 40 miles per hour. The headlight was lighted brightly. The engineer and the fireman were killed in the accident. The front brakeman was in the rear Diesel-electric unit. He said that when he first observed signal 112.2 it was displaying a proceed-at-restricted-speed indication and that soon afterward a light brake application was made. The first he knew of anything being wrong was when he saw the reflection of the headlight of the opposing train, then the brakes were applied in emergency just prior to the collision. The conductor and the flagman were in the caboose. The first these employees knew of anything being wrong was when the brakes were applied in emergency, and they estimated the speed of their train at the time the collision occurred as 20 miles per hour.

As No. 75 was approaching Ash Grove the speed was about 55 miles per hour. The headlight was lighted brightly. The air brakes had been tested and had functioned properly en route. The engineer and the front brakeman were in the control compartment at the front of the first Diesel-electric unit, the fireman was in the second unit, and the conductor and the flagman were in the caboose. These employees had received train order No. 207 at Monon, 21.8 miles north of Ash Grove, about 37 minutes prior to the time the accident occurred. At that time each member of the crew read the order and they understood that, under the provisions of the order, their train was required to enter the siding at Ash Grove at the north switch and to remain clear of the main track at that station until No. 70 had been met. The engineer said that he became drowsy and did not see the indications displayed by signals 109.7 and 110.5, located, respectively, at the north and the south ends of the siding at Ash Grove, and he was not aware that his train had passed these locations until the engine was in the immediate vicinity of signal 111.1, when he observed that this signal was displaying a stop indication and saw the reflection of the headlight of No. 70. Then he moved the brake valve to emergency position. The speed of No. 75 was about 35 miles per hour when the collision occurred. The fireman, the conductor and the flagman said that they were not aware that their train had passed the meeting point until the brakes were applied in emergency. The front brakeman was killed in the accident.

Cause

It is found that this accident was caused by failure of the inferior train to obey a meet order and signal indications.

Dated at Washington, D. C., this eighteenth day of July, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.