# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3673

THE NEW YORK CENTRAL RAILROAD COMPANY

IN RE ACCIDENT

AT WEISBURG, IND., ON

JANUARY 25, 1956

#### SUMMARY

Pate: January 25, 1956

Railroad: New York Central

Location: Weisburg, Ind.

Kind of accident. Collision

Trains involved: Freight : Freight : Freight

Train numbers: Extra : Extra . Extra

3106 West 9401 West 3005 East

Locomotive numbers: 1980 and 1967 and: 3005

3106 9401

Consists: 48 cars, 64 cars, 39 cars,

caboose caboose caboose

irated speeds: 8-10 m. p. h. : Standing: 16 m. p. h.

in reverse

Operation: Signal inducations

Tracks: Double: tangent: 1.05 norcent

ascending grade westward

Weather: Snowing

Time: 6:34 a. a.

Casualties: 1 killed, 3 injured

Cause: Failure properly to control reverse

movement of a freight train on a grade, and failure to provibe adequate protection on an adjacent main track which

was obstructed as a result of a collision.

### INTERSTATE COMMERCE COMMISSION

### REPORT NO. 3673

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

THE NEW YORK CENTRAL RAILROAD COMPANY

March 1, 1956

Accident at Weisburg, Ind., on January 25, 1956, caused by failure properly to control a reverse movement of a freight train on a grade, and failure to provide adequate protection on an adjacent main track which was obstructed as a result of a collision.

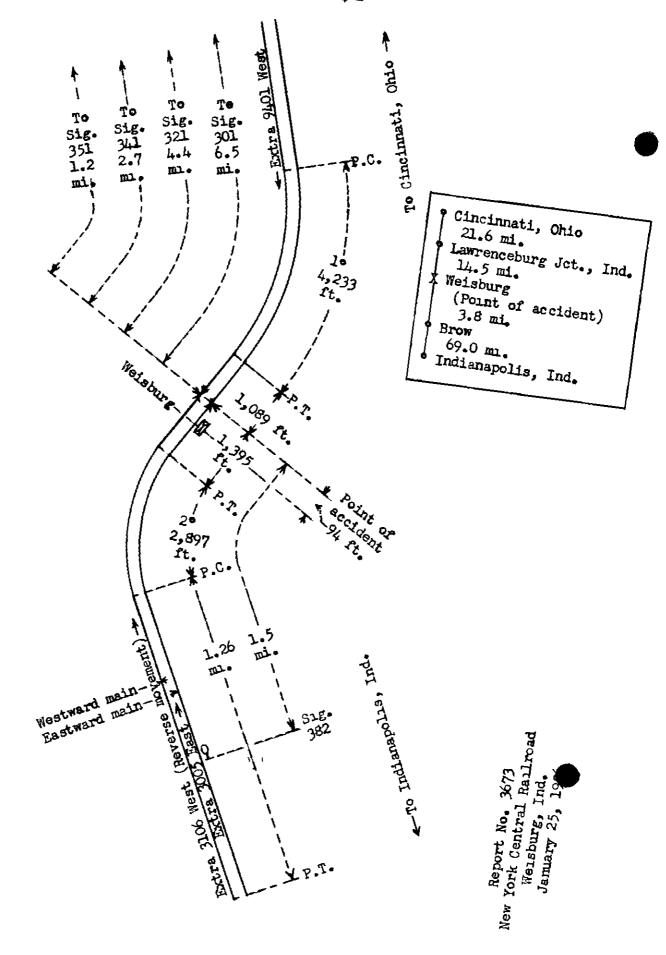
# REPORT OF THE COMMISSION

CLARKE, Commissioner.

On January 25, 1956, there was a collision between a freight train moving backward on a descending grade and a standing freight train on the New York Central Railroad at Weisburg, Ind., and equipment derailed as a result of this collision was struck by a freight train moving on an adjacent main track. This accident resulted in the death of one employee and the injury of three employees. The accident was investigated in conjunction with a representative of the Indiana Public Service Commission.

<sup>1</sup> 

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



### Location of Accident and Method of Operation

This accident occurred on that part of the Indiana Division extending between Cincinnati, Ohio, and Indianapolis, Ind., 108.9 miles. In the vicinity of the point of accident this is a double-track line, over which trains moving with the current of traffic are operated by signal indications. The first collision occurred on the westward main track at a point 94 feet east of the station at Weisburg, 36.1 miles west of Cincinnati. The second collision occurred on the eastward main track opposite this point. From the east there is a 1° curve to the right 4,233 feet in length and a tangent 1,089 feet to the point of accident and 1,395 feet westward. From the west there are, in succession, a tangent 1.26 miles in length, a 2° curve to the right 2,897 feet, and the tangent on which the accident occurred. The grade varies between 1.01 and 1.05 percent ascending westward throughout a considerable distance on each side of the point of accident, and it is 1.05 percent ascending at that point.

Automatic signals 301, 321, 341, and 351, governing west-bound movements on the westward main track, are located, respectively, 6.5 miles, 4.4 miles, 2.7 miles, and 1.2 miles east of the point of accident. Automatic signal 382, governing east-bound movements on the eastward main track, is located 1.5 miles west of the point of accident. The aspects applicable to this investigation and the corresponding indications are as follows:

<u>Signal</u>	Aspect	<u>Indication</u>
301) 321)	Yellow-over-red, staggered	PROCEED PREPARING TO STOP AT NEXT SIGNAL. TRAIN EXCEEDING MEDIUM SPEED MUST AT ONCE REDUCE TO THAT SPEED. REDUCTION TO MEDIUM SPEED MUST COMMENCE BEFORE PASSING SIGNAL AND BE COMPLETED BEFORE ACCEPTING A MORE FAVORABLE INDICATION.
341) 351)	Red-over-yellow, staggered	PROCEED AT RESTRICTED SPEED.
382	Green-over-red, staggered	PROCEED.

The controlling circuits are so arranged that when the block of either signal 341 or 351 is occupied and the block to the rear is clear, the signal at the entrance of the block to the rear indicates Proceed-preparing-to-stop-at-next-signal and the signal at the entrance of the occupied block indicates Proceed-at-restricted-speed.

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

- 7. Employes whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.
  - 14. Engine Whistle Signals

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

Sound. Indication.

\* \* \*

Flagman protect rear of train.

# # #

(h) o o o

When standing, back.

\* \* \*

- 35. The following signals will be used by flagmen:
- \* \* \* Night signals -- A red light,
  A white light,
  Torpedoes,
  Fusees.
- 84. A train must not start until the proper signal is given.
- 99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees. \* \* \*

\* \* \*

102a. When a train is disabled or stopped suddenly by an emergency application of the brakes, or by other causes, adjacent tracks \* \* \* must at once be protected until it is ascertained they are safe and clear for the movement of trains.

Rules for the operation of air brake, train air signal, and steam heat equipment of locomotives and cars read in part as follows:

1559. With passenger and freight trains, when necessary to take slack, independent brake must be applied before reverse gear is put in back motion. Independent brake must be graduated off and slack changed gradually. Only sufficient slack should be taken to insure starting train. \* \* \*

1560. When passenger or freight trains must be backed to a more favorable place for starting, before reaching the point where back-up stop is to be made and while still working steam, the automatic brake should be applied, keeping the locomotive brake released until train is stopped. \* \* \*

The maximum authorized speed for freight trains is 50 miles per hour. Locomotives of the type assigned to Extra 9401 West are restricted to a maximum speed of 40 miles per hour.

## Description of Accident

Extra 3106 West, a west-bound freight train, consisted of steam locomotive 3106, a 4-8-2 type, 48 cars, and a caboose. At Lawrenceburg Jct., Ind., 14.5 miles east of Weisburg and the last open office, helper locomotive 1980, a steam locomotive of the 2-8-2 type, was coupled to the front end to assist the train to Brow, 3.8 miles west of Weisburg. This train departed from Lawrenceburg Jct. at 5.09 a.m. and stalled about 6:25 a.m. with the caboose approximately 1,200 feet west of the station at Weisburg. Soon afterward, in an attempt to start the train, a reverse movement was made to close the slack. While the train was moving eastward at a speed variously estimated as from 5 to 10 miles per hour the rear end struck the front end of Extra 9401 West at a point 94 feet east of the station.

Extra 9401 West, a west-bound freight train, consisted of helper steam locomotive 1967, a 2-8-2 type, steam locomotive 9401, a 2-8-4 type, 64 cars, and a caboose. This train passed Lawrenceburg Jct. at 5.35 a.m., passed signals 301 and 321, each of which indicated Proceed-preparing-to-stop-at-next-signal, passed signals 341 and 351, each of which indicated Proceed-at-restricted-speed, and stopped in response to signals of the flagman of Extra 3106 West with the front end of the first locomotive 94 feet east of the station at Weisburg. A few minutes later the front end was struck by the rear end of Extra 3106 West. Derailed equipment obstructed the eastward main track, and soon afterward this equipment was struck by Extra 3005 East.

Extra 3005 East, an east-bound freight train, consisted of steam locomotive 3005, a 4-8-2 type, 39 cars, and a caboose. This train passed Brow, the last open office, at 6:27 a.m., passed signal 382, which indicated Proceed, and while moving at a speed of approximately 16 miles per hour it struck the derailed equipment which obstructed the eastward main track as a result of the collision between the rear end of Extra 3106 West and the first locomotive of Extra 9401 West.

The caboose of Extra 3106 West was demolished, and the The rear car overturned and rear two cars were derailed. stopped on its side immediately north of the westward main track. The second rear car stopped upright on the track structure of the westward main track with the east end of this car and wreckage of the caboose fouling the eastward main track. The rear car was destroyed, and the second rear car was somewhat damaged. Extra 9401 West was moved eastward approximately 25 feet by the force of the impact. Helper locomotive 1967 and its tender were overturned to the north and stopped immediately north of the westward main track and parallel to it. This locomotive was badly damaged. Extra 3005 East stopped with the front end of the locomotive approximately 300 feet east of the point of collision. ment of this train was derailed. The north sides of the locomotive and tender were scraped, and the left side of the cab was considerably damaged. The first, third, and fourth cars were slightly damaged.

The conductor of Extra 3106 West was killed. The flagman of Extra 3106 West, and the engineer and the fireman of helper locomotive 1967 were injured.

It was dark and snow was falling at the time of the accident, which occurred about 6:34~a.~m.

The caboose of Extra 3106 West was of steel underframe construction with wooden superstructure. It was equipped with a conductor's valve.

### Discussion

The operating rules of this carrier require that employees whose duties may require them to give signals must provide themselves with the proper appliances and keep them ready for immediate use. A train must not start until the proper signal is given. When a train is disabled or stopped suddenly by an emergency application of the brakes adjacent tracks must at once be protected. Rules for the operation of air brakes require that when slack is taken it must be changed gradually.

As Extra 3106 West was approaching Weisburg the enginemen and the conductor assigned to helper locomotive 1980, the first locomotive of the train, were maintaining a lookout ahead from the cab. The enginemen and the front brakeman were in their respective positions in the cab of the road locomotive. The brakes of this train had been tested and had functioned properly. They were being controlled by the engineer of the helper locomotive. Snow was falling and visibility was materially restricted. The driving wheels of the locomotives slipped at frequent intervals, and the train stalled on the curve west of the station at Weisburg. The engineer of the helper locomotive immediately sounded the whistle signal for the flagman to protect the rear of The supply of sand on the helper locomotive was the train. low, and the engineer raked the remaining sand over the outlet pipes of the sand box. He then conferred with the engineer of the road locomotive. Both engineers thought it feasible to start the train, and they agreed that it was necessary to close the slack as a preliminary to starting the train forward. The engineer of the helper locomotive then sounded the whiatle signal for backward movement. said that it was not possible to see the rear end of the train, and no signal was received before the eastward movement was started. He expected the members of the crew at the rear of the train to apply the brakes if necessary during the backward movement. After the movement was started the engineer of the helper locomotive made brake-pipe reductions of 10 pounds and 15 pounds in close succession while the locomotive worked steam to close the slack in the train. He said that the train moved farther eastward than he had anticipated and that the brakes became applied in emergency immediately after the second brake-pipe reduction was made. The engineer of the road locomotive said that he became concerned about the distance of the movement, but because the brakes were being applied by the engineer of the helper locomotive he took no action to stop the movement.

conductor of the helper locomotive said that he was seated behind the fireman at the time the brakes became applied in emergency and that Extra 3005 East passed before protection could be provided. The fireman said that the conductor had alighted from the helper locomotive and proceeded toward the rear of the train before he saw the headlight of the approaching east-bound train. He said that he was attempting to get a fusee to provide protection when the locomotive of Extra 3005 East passed. The front brakeman said that he alighted from the road locomotive when the brakes became applied in emergency and that the locomotive of Extra 3005 East passed almost immediately afterward and before he could provide protection.

The flagman of Extra 3106 West said that as the train was passing Weisburg he and the conductor were aware that it would stall. He alighted from the moving train a short distance west of the station and proceeded eastward to provide protection. He said that at the time he left the caboose the conductor was descending from the cupola. flagman said that the caboose stopped about 600 feet west of the station. Soon afterward he saw Extra 9401 West approaching. He gave stop signals with a lighted fusee, and after the train stopped he entered the station building and informed the operator at Brow that his train had stalled. While he was talking on the telephone, the front brakeman of Extra 9401 West and the conductor of the helper locomotive which was assisting that train entered the station. Soon afterward these employees heard cars moving. stepped outside to investigate immediately before the collision occurred. The flagman of Extra 3106 West then returned to the telephone and informed the operator at Brow that the eastward main track was obstructed. The operator told him that Extra 3005 East had passed Brow several minutes before. The conductor of the helper locomotive lighted a fusee, and he and the flagman ran westward giving stop signals. said that the brakes of Extra 3005 East were applied before the front end of that train passed them.

When Extra 9401 West stopped in response to the signals of the flagman of the preceding train the headlight of the helper locomotive was dimmed. The conductor of the helper locomotive and the front brakeman alighted and proceeded to the station, the enginemen remained on the locomotives, and the other members of the train crew were at the rear of the train. The fireman of the helper locomotive said that he saw the marker lights of the caboose of the preceding train. He said that he and the engineer had left their seats and

were not aware that Extra 3005 West was moving eastward before the collision occurred. The engineer of the helper locomotive was injured to the extent that he could not be questioned during this investigation.

As Extra 3005 East was approaching the point where the accident occurred the speed was about 41 miles per hour. as indicated by the tape of the speed-recording device. The enginemen and the front brakeman were maintaining a lookout ahead from their respective positions in the cab of the locomotive. The conductor and the flagman were in the caboose. The headlight was lighted brightly. 1\_\_\_\_ brakes of this train had been tested and had functioned properly when used en route. The engineer dimmed the headlight when he saw the train on the westward main track. He then sounded a whistle signal to warn two persons he saw in the vicinity of the eastward main track. He said that after he passed these persons a lighted fusee was thrown immediately in front of his locomotive and he saw another person giving stop signals. He immediately made an emergency application of the brakes. He estimated that the locomotive was about 700 feet west of the station at the time the brakes were applied in emergency, and he thought the train stopped within a distance of approximately 900 feet to 1.350 feet.

The supervisor of locomotive performance of the carrier computed from the tape of the speed-recording device that Extra 3106 West moved backward a distance of 1,320 feet from the point at which it stalled to the point of collision with Extra 9401 West. According to his interpretation of the tape, the backward movement reached a maximum speed of 11 miles per hour and a heavy service application of the brakes became effective 396 feet west of the point of collision. The flagman of Extra 3106 West left the caboose before the train stalled. The conductor was killed in the accident, and it could not be determined why no action was taken to stop the train short of the point of collision. After this collision occurred, protection on the eastward main track was not provided in time to avert the second collision.

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### Cause

This accident was caused by failure properly to control a reverse movement of a freight train on a grade, and failure to provide adequate protection on an adjacent main track which — was obstructed as a result of a collision.

Dated at W-shington, D. C., this first day of March. 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,

Secretary.