INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 3196

MISSOURI PACIFIC RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT VALMEYER, ILL., ON

JULY 20, 1948

SUMMARY

Railroad:	Missouri Pacific	
Date:	July 20, 1948	
Location:	Valmeyer, Ill.	
Kind of accident:	Side collision	
Equipment involved:	Engine with cars	: Freight train
Train numbers:	Work Extra 1320	: Extra 1500 South
Engine numbers:	1320	: 1500
Consists:	56 cars, caboose	: Auxiliary water car, 20 cars, caboose
Estimated speeds:	8 m. p. h.	: 20 m. p. h.
Operation:	Timetable and train orders	
Tracks:	Double; 1° curve; level	
Weather:	Clear	
Time:	7:40 a. m.	
Casualties:	1 killed; 4 injured	
Cause:	Open switch	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3196

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

MISSOURI PACIFIC RAILROAD COMPANY.

November 5, 1948

Accident at Valmeyer, Ill., on July 20, 1948, caused by an open switch.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On July 20, 1948, there was a side collision between an engine with cars and a freight train on the Missouri Pacific Railroad at Valmeyer, Ill., which resulted in the death of one employee, and the injury of four employees. This accident was investigated in conjunction with a representative of the Illinois Commerce Commission.

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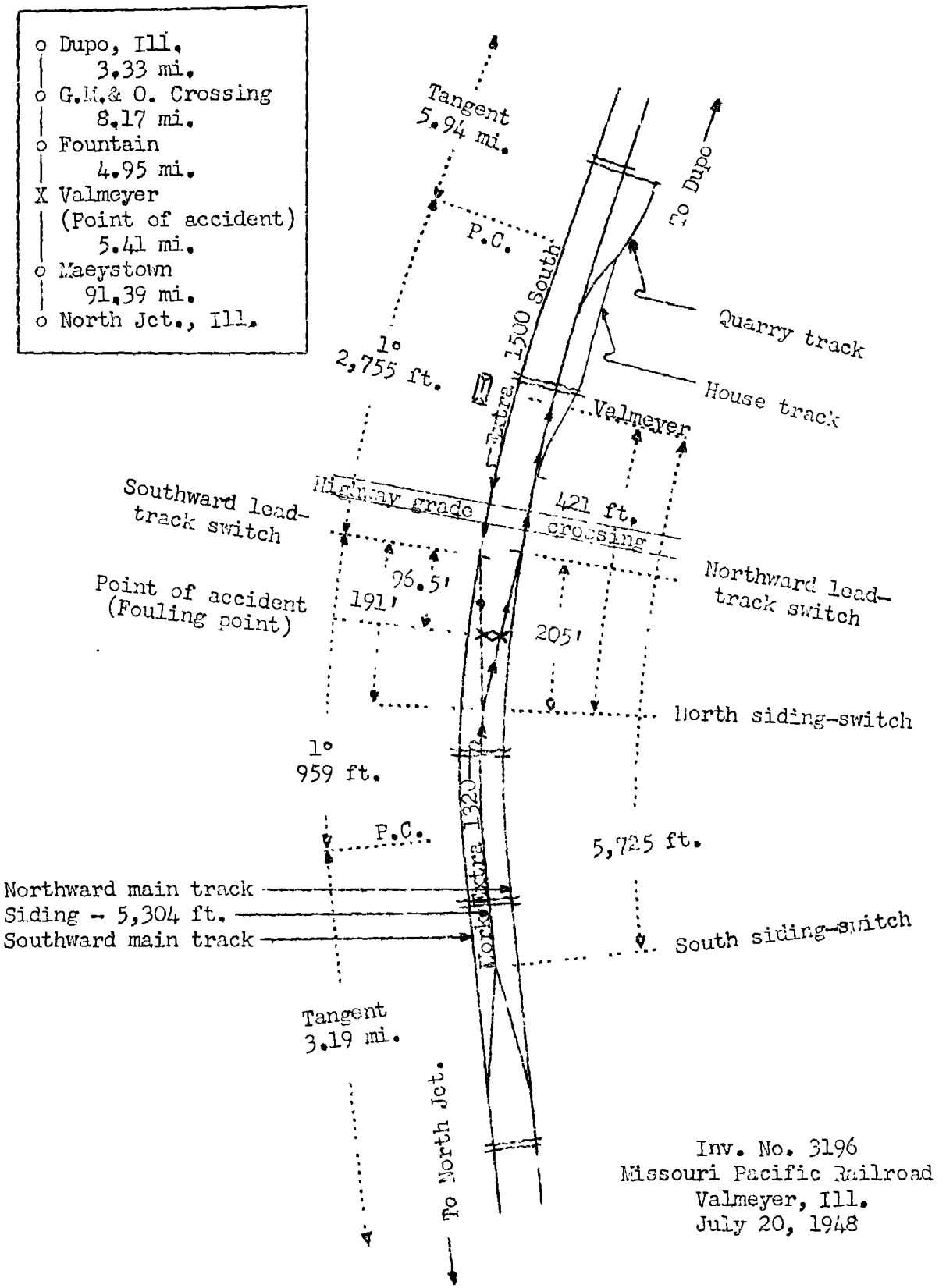
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 3196
Missouri Pacific Railroad
Valmeyer, Ill.
July 20, 1948

Location of Accident and Method of Operation

This accident occurred on that part of the Illinois Division extending between Dupo and Nortn Jct., Ill., 113.25 miles. In the vicinity of the point of accident this is a double-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Valmeyer, 16.45 miles south of Dupo, a siding 5,304 feet long lies between the main tracks. The north and the south switches of the siding are, respectively, 421 feet and 5,725 feet south of the station. Two lead tracks at each end of the siding extend from the ends of the siding to the main tracks. The southward and the northward lead tracks at the north end of the siding are, respectively, 191 and 205 feet long. The siding turnouts are No. 7 and the main-track turnouts are No. 10. At the southward lead-track switch the distance between the centerlines of the main tracks is 20 feet 8 inches. The accident occurred at the fouling point of these lead tracks, at a point 96.5 feet south of the southward lead-track switch. The south end of a house track and the south end of a quarry lead track, located east of the northward main track and connecting with it, are, respectively, 317 and 2,030 feet north of the north siding-switch. From the north on the southward main track there are, in succession, a tangent 5.94 miles in length and a 1° curve to the left 2,755 feet to the southward lead-track switch and 959 feet southward. The grade is practically level.

The switchstands of the lead-track switches are between the southward main track and the northward main track, and are of the hand-operated ground-throw intermediate-stand type. Each switchstand is provided with a reflector-type switch lamp fixed on the stand immediately above a red oval-shape target. The centers of the targets of the southward and the northward lead-track switches are, respectively, 74 inches and 55.5 inches above the level of the tops of the ties. When the lead-track switches are lined for movement from the main tracks to the siding, the targets are displayed at right angles to the tracks.

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

DEFINITIONS.

* * *

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

* * *

14. Engine Whistle Signals.

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

Sound.	Indication.
* * *	* * *
(c) ___ o o o	Flagman protect rear of train.
* * *	* * *
(e) ___ ___ ___ ___ ___	Flagman may return from north or east, as prescribed by Rule 99.
* * *	* * *

15. The explosion of two torpedoes is a signal to proceed at restricted speed. * * *

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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.

When recalled and safety to the train will permit, he may return.

When the conditions require, he will leave the torpedoes and a lighted fusee.

The front of the train must be protected in the same way when necessary by the forward trainman or fireman.

* * *

104. Conductors are responsible for the position of switches used by them and their trainmen, except where switch tenders are stationed. Switches must be properly lined after having been used.

* * *

FORMS OF
TRAIN ORDERS.

* * *

D-H

Work Extra.

(1) Eng 292 works extra on.....track (or.....tracks) 6 45 a m until 5 45 p m between D and E.

The work extra must, whether standing or moving, protect itself within the working limits against extra trains moving with the current of traffic on the track or tracks named. The time of regular trains must be cleared.

* * *

The maximum authorized speed for freight trains is 45 miles per hour.

Description of Accident

Extra 1320 South consisted of engine 1320, 56 cars and a caboose, in the order named. At G.M.& O. Crossing, 13.12 miles north of Valmeyer, the crew of this train received copies of train order No. 8 reading as follows:

> Eng 1320 Work Extra on two main tracks 701 A M until 1201 P M Between Fountain and Maeystown with right over Second Class trains

Fountain is 4.95 miles north of Valmeyer and Maeystown is 5.41 miles south of Valmeyer. Extra 1320 South departed from G.M.& O. Crossing at 6:50 a. m., and it proceeded to Fountain, the northern limit covered by train order No. 8. Work Extra 1320 departed from Fountain on the southward main track, entered the southward lead-track switch at Valmeyer and stopped into clear on the siding about 7:25 a. m. About 15 minutes later, during a switching movement, when engine 1320, in backward motion, was pushing 56 cars from the siding through the northward lead track to the northward main track at an estimated speed of 8 miles per hour, the forty-sixth car was struck by Extra 1500 South at the fouling point of the southward and the northward lead tracks.

At. G.M.& O. Crossing the crew of Extra 1500 South, a south-bound freight train, received copies of train order No. 8. This train, consisting of engine 1500, one auxiliary water car, 20 cars and a caboose, departed from G.M.& O. Crossing at 7:19 a. m., and while moving on the southward

main track at an estimated speed of 20 miles per hour it entered the southward lead-track switch at Valmeyer, which was lined for entry to that track, and struck the cut of cars that was being pushed by engine 1320.

The forty-first to forty-seventh cars, inclusive, of the cut of cars being pushed by engine 1320, and the engine and the first two cars of Extra 1500 South were derailed and damaged. Engine 1500 stopped on its right side, across the northward main track and the siding, at a point 110 feet south of the point of collision.

The engineer of Extra 1500 South was killed. The fireman, the front brakeman, the conductor and the flagman of Extra 1500 South were injured.

The weather was clear at the time of the accident, which occurred about 7:40 a. m.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 36 trains.

Discussion

The crews of both trains held copies of train order No. 8, which authorized Work Extra 1320 to work on either main track between Fountain and Maeystown. Under the rules, Work Extra 1320, whether standing or moving, was required to protect within the working limits against first-class and extra trains moving with the current of traffic. All surviving employees concerned understood these requirements.

As Work Extra 1320 was approaching Valmeyer, the engineer sounded a whistle signal for the flagman to protect the rear of the train. The flagman alighted about one mile north of the north siding-switch, placed two torpedoes on the rail, then started to walk southward toward the quarry lead-track switch. About ten minutes later the train entered the siding at the north siding-switch, placed the caboose on the house track and the fifty-six cars were being pushed northward on the northward main track toward the quarry track when the forty-sixth car was struck by Extra 1500 South at the fouling point of the two lead-tracks at the north end of the siding. When the collision occurred the flagman was at the quarry lead-track switch, the conductor was standing in the vicinity of the highway grade-crossing located about 255 feet north of the north siding-switch, the swing brakeman was on the most northerly car of the cut and was controlling the movement by use of a back-up valve, the engineer and the fireman were on the engine, and the front brakeman was protecting against movements on the northward main track at a point about 3,000 feet south of the north siding-switch.

The movements made by Work Extra 1320 were daily practice at Valmeyer, and all the members of the crew, except the swing brakeman, had worked in this service for some time. The flagman said that it had not been the practice to recall the flagman by engine whistle signal; when he saw his train into clear on the siding he proceeded to the quarry-track switch and he assumed some other member of the crew had closed the north lead-track switch on the southward main track, in accordance with past practice. Ordinarily the flagman depended upon a proceed hand signal given by either the conductor or the swing brakeman to indicate that all switches had been restored to their proper positions. However, in this case, he did not receive a hand signal from either the conductor or the swing brakeman. After Work Extra 1320 was into clear on the siding, the conductor immediately proceeded to provide flag protection at the highway grade-crossing during switching movements, and he expected the swing brakeman to close the switch on the southward main track, although he had not so instructed the swing brakeman. The swing brakeman said that after the caboose had been switched to the south end of the house track he attached the back-up hose on the north end of the cut of cars, then climbed to the top of the most northerly car and gave a back-up signal to the engineer to back the cut of cars northward on the northward main track. He expected the conductor to close the switch on the southward main track and did not observe if it had been restored to normal position. He had been assigned to this crew only a few days prior to the day of the accident and was not familiar with the customary practice during switching movements at Valmeyer. The remaining members of the crew were not aware of anything being wrong until after the accident occurred.

As Extra 1500 South was approaching Valmeyer the speed was about 45 miles per hour. The enginemen were in their respective positions on the engine, the front brakeman was near the brakeman's booth on the tender and the conductor and the flagman were in the caboose. The front brakeman said that soon after he heard the explosion of two torpedoes the speed of the train was reduced to about 20 miles per hour. He was not aware of anything being wrong until the engine entered the turnout of the southward lead-track switch. He estimated the speed of the train as about 20 miles per hour when the collision occurred. The engineer was killed, and the fireman was so seriously injured that he could not be questioned during the investigation. The brakes of Extra 1500 South had been tested and had functioned properly en route.

Cause

It is found that this accident was caused by an open switch.

Dated at Washington, D. C., this fifth day of November, 1948.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.