

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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REPORT NO. 3663

LOUISIANA & ARKANSAS RAILWAY COMPANY

IN RE ACCIDENT

NEAR SULPHUR SPRINGS, TEX., ON

OCTOBER 12, 1955

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**SUMMARY**

Date: October 12, 1955

Railroad: Louisiana & Arkansas

Location: Sulphur Springs, Tex.

Kind of accident: Head-~~end~~ collision

Trains involved: Freight : Freight

Train numbers: 54 : Extra 76 South

Locomotive numbers: Diesel-electric : Diesel-electric  
units 74-D, 70-B, units 58-D, 74-B,  
73-C, and 76-A 51-C, and 55-B

Consists: 101 cars, caboose : 66 cars, caboose

Estimated speeds: 30-35 m. p. h. : 25-35 m. p. h.

Operation: Timetable and train orders

Track: Single; tangent; 0.47 percent  
ascending grade northward

Weather: Clear

Time: 12:40 a. m.

Casualties: 6 injured

Cause: Overlapping of authority of two  
opposing trains

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3663

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

LOUISIANA & ARKANSAS RAILWAY COMPANY

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December 22, 1955

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Accident near Sulphur Springs, Tex., on October 12, 1955,  
caused by overlapping of authority of two opposing  
trains.

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REPORT OF THE COMMISSION<sup>1</sup>

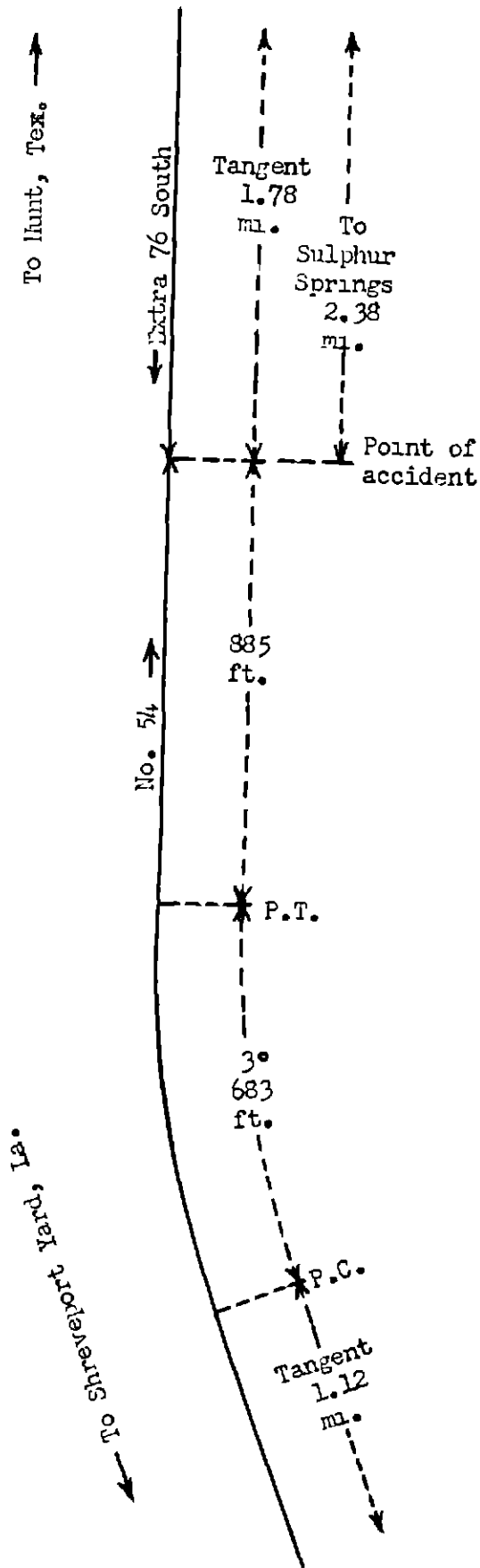
CLARKE, Commissioner:

On October 12, 1955, there was a head-end collision between two freight trains on the Louisiana & Arkansas Railway near Sulphur Springs, Tex., which resulted in the injury of six employees.

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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.



•	Hunt, Tex.	23.4 mi.
•	Brashear	7.9 mi.
•	Sulphur Springs	2.38 mi.
X	Point of accident	7.02 mi.
•	Como	54.6 mi.
•	Hughes Spring, Tex.	75.4 mi.
•	Shreveport Yard, La.	

Report No. 3663  
 Louisiana & Arkansas Railway  
 Near Sulphur Springs, Tex.  
 October 12, 1955

### Location of Accident and Method of Operation

This accident occurred on that part of the Louisiana & Arkansas Division extending between Shreveport Yard, Shreveport, La., and Hunt, near Greenville, Tex., 170.7 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred on the main track at a point 137.02 miles north of Shreveport and 2.38 miles south of the station at Sulphur Springs, Tex. From the south there are, in succession, a tangent 1.12 miles in length, a 3° curve to the right 683 feet, and a tangent 885 feet to the point of accident. The track is tangent throughout a distance of 1.78 miles immediately north of the point of accident. Throughout a distance of more than 3,500 feet immediately south of the point of accident the grade for north-bound trains varies between level and 1.78 percent ascending and is 0.47 percent ascending at that point. The grade for south-bound trains, throughout a distance of 1.5 miles immediately north of the point of accident, varies between 1.50 percent descending and 1.66 percent ascending and averages 0.38 percent descending.

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

73. Extra trains are inferior to regular trains.

\* \* \*

202. To All in Same Words.—Each train order must be given in the same words to all employes or trains addressed.

205. Record of Train Orders.—Each train order must be written in full in a book provided for the purpose at the office of the train dispatcher and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and responses transmitted; and the train dispatcher's initials directly under the last word of the order.

These records must be made at once and never from memory or memoranda.

\* \* \*

206 (a). Transmitting and Repeating.—\* \* \*

When train orders are transmitted by telegraph, the train dispatcher must write the order from the first repetition and underscore each word and figure at the time of each succeeding repetition. \* \* \*

\* \* \*

208. Transmitting Simultaneously.—A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. \* \* \*

209. Writing and Recopying.—Operators receiving train orders must write them in manifold during transmission. \* \* \*

\* \* \*

210. Repetition, Completion and Delivery.—When a train order has been transmitted, operators must, unless otherwise provided or directed, repeat it at once from the manifold copy, in the succession in which the several offices have been addressed.

Each operator receiving the order must observe whether the others repeat correctly.

When repeated correctly, the response "Complete," and the time, with his initials, will be given by the train dispatcher.

\* \* \*

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219. Clearances. ~~Clearances~~ must be filled out by the operator before clearing a train, showing thereon, without erasure or alteration, the address, the total number of orders \* \* \* and the number of each train order, if any, addressed to the train. Operator will then transmit the address and orders numbers from the clearance to the train dispatcher, who will check, and if correct, will reply "OK" with the time and his initials which the operator must enter on the clearance. The clearance with the train orders will then be delivered as prescribed \* \* \*

The record of orders with which train is cleared and the time of "OK" to the clearance will be recorded by train dispatcher.

\* \* \*

## FORMS OF TRAIN ORDERS.

\* \* \*

## S-A

Fixing Meeting Points for Opposing Trains.

(1) \* \* \*

No 5 Eng 58 meet Extra 95 North at B.

\* \* \*

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

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L.

### Annuling An Order

(1) Order No 10 is annulled.

Form L orders must be transmitted by train dispatcher, and repeated in manner prescribed, the same as other forms of orders.

When delivery of an order to a train is not required, the annulling order will be addressed to the operator, who will destroy all copies of the order annulled except his own and write on that:

Annulled by Order No \_\_\_\_\_.

\* \* \*

In the vicinity of the point of accident the maximum authorized speed for freight trains is 40 miles per hour.

### Description of Accident

No. 54, a north-bound second-class freight train, consisted of Diesel-electric units 74D, 70B, 73C, and 76A, coupled in multiple-unit control and identified by the indicators as engine 73, 101 cars, and a caboosc. At Hughes Springs, Tex., 75.4 miles north of Shreveport and the last open office, members of the crew received copies of train order No. 96 reading as follows:

No 54 Eng 73 meet  
Extra 76 South at Como

and train order No. 97 reading as follows:

No 54 Eng 73 meet  
Extra 76 South at  
Broshear instead of Como



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Como and Brashear are located, respectively, 54.60 miles and 71.90 miles north of Hughes Springs. This train departed from Hughes Springs at 10:25 p. m., 1 hour 41 minutes late, passed the siding at Como, and while moving at an estimated speed of from 30 to 35 miles per hour it collided with Extra 76 South at a point 7.02 miles north of Como and 2.38 miles south of the station at Sulphur Springs.

Extra 76 South, a south-bound freight train, consisted of Diesel-electric units 58D, 74B, 51C, and 55B, coupled in multiple-unit control and identified by the indicators as engine 76, 66 cars, and a caboose. At Hunt, the initial station, members of the crew received a clearance form and copies of seven train orders, among which was train order No. 96. Order No. 97 was not listed on the clearance form, and copies of this order, which superseded order No. 96, were not delivered to the crew. This train departed from Hunt, the last open office, at 11 15 p. m., passed Brashear, where it would have been required to enter the siding to meet No. 54 if copies of train order No. 97 had been delivered to the crew, and while moving at a speed variously estimated as from 25 to 35 miles per hour it collided with No. 54.

The locomotives of both trains, the first 12 cars of No. 54, and the first 11 cars of Extra 76 South were derailed and stopped within a distance of 630 feet. The first and second Diesel-electric units of No. 54 stopped side by side immediately east of the track and at right angles to it, approximately 75 feet south of the point of collision. The third Diesel-electric unit overturned to the west and stopped on its left side immediately west of the track and parallel to it. The rear unit stopped up-right and approximately in line with the track. The first Diesel-electric unit of Extra 76 South stopped immediately west of the track and at right angles to it, approximately 100 feet south of the point of collision. The following locomotive units stopped at angles of approximately 45 to 60 degrees across the track structure immediately south of the point of collision. The derailed cars stopped in various positions on or near the track. The first three Diesel-electric units of each locomotive were badly damaged, and

the fourth Diesel-electric unit of each locomotive and the derailed cars of both trains were damaged. Inflammable material in the wreckage became ignited, and the first three Diesel-electric units of each locomotive, which had been damaged by the collision and derailment, were further damaged by fire.

The engineer, the fireman, and the front brakeman of No. 54, and the engineer, the fireman, and the front brakeman of Extra 76 South were injured.

The weather was clear at the time of the accident, which occurred at 12:40 a. m.

### Discussion

The rules of this carrier provide that each train order must be given in the same words to all employees or trains addressed. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. Operators receiving an order must write it in manifold during transmission and then repeat it to the dispatcher. Each operator receiving the order must observe whether the others repeat correctly. Before train orders and the prescribed clearance are delivered to a train, the operator must transmit to the train dispatcher the number of each train order to be delivered to that train. The dispatcher then is required to check his record to ascertain if the operator has included the correct numbers of all train orders on the clearance before he authorizes the operator to clear the train. When train orders are transmitted by telegraph, the dispatcher is required to write the order from the first repetition in a book provided for the purpose and to underscore each word and figure at the time of each succeeding repetition. The time and signals which show when and from what offices the order was repeated, the responses transmitted, and the dispatcher's initials must be recorded. On the line on which the accident occurred train orders are transmitted by telegraph.

Before the accident occurred the train dispatcher issued, among others, train orders Nos. 95, 96, and 97. Order No. 95 was addressed to the crew of Extra 76 South at Hunt and to the crew of a work extra at Hughes Springs. This order pertained to the movement of the work extra with respect to Extra 76 South. Orders Nos. 96 and 97

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were each addressed to the crew of Extra 76 South at Hunt and to the crew of No. 54 at Hughes Springs. Order No. 96 established Como as the meeting point between these trains, and order No. 97 superseded order No. 96 and established Brashear as the meeting point. After these orders were issued, the dispatcher issued order No. 106 addressed to the operators at Hunt and Hughes Springs. According to the record in the dispatcher's train-order book and the copy as received by the operator at Hughes Springs, order No. 106 read as follows:

Order No. 95 is annulled

The order as received by the operator at Hunt read as follows:

Order No. 97 is annulled

After this order was repeated it was made complete to the operator at Hughes Springs at 10:51 p. m. and to the operator at Hunt at 10:52 p. m. Copies of train order No. 97 were not delivered to the crew of Extra 76 South, and the number of this order was not written on the clearance with the numbers of other train orders which were issued to the conductor and engineer of that train at Hunt. This resulted in an overlapping of authority of the trains involved. The crew of No. 54 held orders which required that their train proceed to Brashear to meet Extra 76 South, and the crew of Extra 76 South held an order which authorized their train to proceed to Como, 17.30 miles south of Brashear, to meet No. 54. These trains collided at a point 2.38 miles south of the station at Sulphur Springs. Because of track curvature and the contour of the land adjacent to the track in the vicinity of the curve immediately south of the point of accident, the members of the crew on the locomotive of each train were unable to see the other train until lights of the opposing locomotive came into view at a distance of approximately 1,300 feet. At this time the trains were each moving at a speed of approximately 40 miles per hour. Each engineer immediately made an emergency application of the brakes. The speed of No. 54 was reduced to 30 to 35 miles per hour, and that of Extra 76 South was reduced to 25 to 35 miles per hour before the collision occurred, as estimated by members of the crews.

The train dispatcher said that order No. 106 was transmitted simultaneously to the operators at Hunt and Hughes Springs and that he detected no error in the repetition by either operator. When the operator at Hunt requested authority to clear Extra 76 South, the dispatcher listed the

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numbers of the orders as the operator transmitted them. This list included order No. 95 but did not include order No. 97. The dispatcher said that he checked the train-order book, but he did not detect the fact that the operator had included on the clearance order No. 95, which the dispatcher had intended to annul, and had omitted order No. 97. He instructed the operator to clear the train at 10:53 p. m.

The operators at Hunt and Hughes Springs each said that when he received order No. 106 he had no knowledge that the order was addressed to the operators at both stations. Each said that he heard no address except his own, and neither of them heard the order repeated from another station.

The train dispatcher said that he transmitted train order No. 106 as it was written in the train-order book and that he detected no discrepancy in the order as repeated by the operator at Hunt. The operator at Hunt said that he copied the order as it was transmitted by the dispatcher and then repeated it from his copy. The dispatcher and the operators were not in agreement as to whether the order was transmitted to the two offices simultaneously. The rules required that the order be transmitted in this manner, and they also required that each operator receiving the order observe whether the other repeated correctly. If these rules had been observed the discrepancy in the order, as received by the two operators, undoubtedly would have been detected by these employees even though it was not detected by the train dispatcher.

#### Cause

This accident was caused by overlapping of authority of two opposing trains.

Dated at Washington, D. C., this twenty-second day of December, 1955.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. MCCOY,  
Secretary.