

[FE-37-98](#) (document link)

**SUMMARY FOR FE-37-98:**  
**SELECTED AND POSSIBLE CONTRIBUTING FACTORS**

**SELECTED FACTORS**

**Railroad:** Illinois Central Railroad Company

**Location:** Durant, Mississippi

**Region:** Region 3

**Month:** December

**Date:** 12/28/98

**Time:** 4:32 p.m., CST

**Data for Fatally Injured Employee(s)**

**Conductor**

55 years old

26 years of service

Last rules training: May 1997

Last safety training: November 1998

Last physical: August 1998

**Data for All Employees (Craft, Positions, Activity)**

**Craft:** Transportation

**Positions:**

**Crew of Road Assignment L-DUGR-28**

Locomotive Engineer

Trainman

Conductor

Train Dispatcher

**Activity:** Switching

## **SUMMARY FOR FE-37-98**

### **POSSIBLE CONTRIBUTING FACTORS**

#### **EVENT**

A Conductor, who was riding behind the bulkhead of the lead flat car in a shoving movement, was fatally injured when the lead car struck fallen trees on the track and derailed.

#### **PCF No. 1**

The Conductor did not comply with railroad operating rules requiring him to take an easily seen position on the lead car while directing the movement.

#### **PCF No. 2**

The Engineer did not comply with the restricted speed requirements, making it impossible to stop the train in time, or for the Conductor himself to get off before the car struck the trees.

#### **PCF No. 3**

In non-compliance with Federal regulations, the Crew did not maintain continuous radio communications while switching, and did not provide to one another necessary information such as the precise distance of the movement.

**REPORT:** FE-37-98

**RAILROAD:** Illinois Central Railroad Company (IC)

**LOCATION:** Durant, Mississippi

**DATE & TIME:** Dec. 28, 1998, 4:32 p.m., CST

**PROBABLE CAUSE:** The Conductor, who was riding behind the bulkhead of the lead flat car in a shoving movement, was fatally injured when the lead car struck fallen trees on the track and derailed.

**EMPLOYEE:**

Occupation:	Conductor
Age:	55 years
Length of Service:	26 years
Last Rules Training:	May 30, 1997
Last Safety Training:	Nov. 11, 1998
Last Physical Examination:	Aug. 4, 1998

### **CIRCUMSTANCES PRIOR TO THE ACCIDENT**

On the day of the accident, the Crew of Road Assignment L-DUGR-28 went on duty at 4 p.m. at the Illinois Central (IC) Yard, in Durant, Mississippi, after completing the statutory off-duty period. The Crew, comprising an Engineer, Trainman, and Conductor were assigned to perform local switching service at various locations between Durant and Grenada, Mississippi.

The Crew Members' first assignment was to perform several short switching moves in Durant Yard to assemble their train. Following these moves, the train was ready to depart Durant Yard for their first customer, International Paper. The train consisted of 22 empty bulkhead flat cars, two loaded bulkhead flat cars, and two locomotives (IC-8722 and IC-9618). The loaded bulkhead flat cars were positioned next to the locomotives.

A Track Warrant was issued to L-DUGR-28, which authorized the Crew to operate from Durant to Grenada. Train movements were authorized by Track Warrant Authority and supplemented by an Automatic Block Signal System (ABS). The Conductor boarded the northern most car in the consist (or last car in the consist, lead car in the shoving movement), which comprised empty bulkhead flat cars, and instructed the Engineer to shove northward to International Paper (IP). The Engineer complied with the instruction and started to shove northward toward IP, 6,650 feet

north of the yard at Durant. The Trainman, after aligning switches behind their move, boarded the northern most locomotive and joined the Engineer who was controlling the train from this unit. After clearing a highway-rail grade crossing, the Conductor radioed the Engineer, "The crossing is clear, let's go to IP."

In the accident area, the track was tangent for about 15 miles and ran geographically north and south with no extreme grade percentages. In the accident area, the point of derailment was in the middle of a 139-foot long, open deck trestle. The trestle crossed the Little Indian Creek with the top of the trestle located approximately 12 feet above the water line. At the time of the accident, the water in the creek had risen approximately three feet due to run-off from a rain storm from the previous two days.

At the time of the accident, the weather was cold with a light breeze, and the sky was overcast with a visibility of about three miles. The temperature was 36° F.

### **THE ACCIDENT**

At approximately 4:32 p.m., while L-DUGR-28 was operating at a speed of 22 mph, the Conductor advised the Engineer by radio, "Stop H.C., we are going to hit a tree; I did not see it in time." The Engineer placed the automatic brake valve in the service position, and then the air brake system went into emergency. After stopping, the Engineer tried to contact the Conductor by radio, but he did not answer. The Engineer opened his window and looked out around the car of pulpwood next to his locomotive and discovered that the lead (north) car that the Conductor was riding was derailed to the east side of the track.

The Engineer instructed the Trainman to go to the north end of the train and check on the Conductor. The Engineer ran to an adjacent wood yard office that was close by and called for an ambulance. After the Engineer had returned to the locomotive, the Trainman contacted him by radio and advised him that he was at the north end of their train. The Trainman advised that he had found the Conductor under the third car from the north end and that he was dead. The Engineer then contacted the Train Dispatcher by radio and apprised him of the situation.

Emergency response from the town of Durant, Mississippi arrived at approximately 4:45 p.m., and the Coroner from Lexington, Mississippi arrived at 5:30 p.m. The Conductor was pronounced dead at the scene by the Holmes County Coroner at 6 p.m.

### **POST-ACCIDENT INVESTIGATION**

An IC Track Inspector had hi-railed the line prior to the accident. This was in fact the last movement over the line prior to the accident. The Track Inspector reported that he took no exception to the accident area and did not observe trees either leaning or close to the track. A measurement was taken of the right-of-way, and the subject tree was not located on railroad property. The tree was located 53 feet from the center line of the track.

The Engineer and Trainman were interviewed by FRA personnel after the accident. The Trainman indicated that it was standard practice for the Crew to shove north to IP and that it was also standard practice for the Conductor and sometimes even himself to ride the deck of a bulkhead flat car instead of the side of the car. During the course of his statement, the Trainman indicated that they had been doing this for years and he didn't think anything was wrong with it, except he thought the speed was too much. He stated he felt that it did not make any difference where the Conductor was riding. At that speed, you could not get off the car or protect yourself if a derailment occurred. The Trainman further stated that he never cautioned the Engineer to slow down.

Train L-DUGR-28 had travelled north from Durant Yard 5,220 feet, during which minimal radio communications were made between the Conductor and the Engineer. The shoving move was conducted without continuous radio contact, so there was no way to determine when the trees actually fell across the track.

The investigation disclosed that no one actually observed the Conductor riding behind the bulkhead of the flatcar on the day of the accident. Statements from the Brakeman and a Civilian Witness both indicated that the bulkhead was the normal position for the Crew Members to ride. Since carrier officials stated they did not take exception to employees riding in this position on the car body, it appears that the Conductor was riding behind the bulkhead on the day of the accident.

The investigation also disclosed that the Train Crew Members failed to perform a transfer air brake test as required by 49 CFR 232 prior to their departure from Durant. A mechanical inspection of the equipment involved was conducted, and no defects were noted. The failure to conduct a transfer brake test did not contribute to the accident.

Toxicological tests were conducted as required by 49 CFR §219 on all the Crew Members. All test results were negative.

An autopsy conducted by the State of Mississippi did not indicate any contributing factors to the accident.

## **APPLICABLE RULES**

### **Code of Federal Regulations**

The provisions of 49 CFR Part 220, Subpart 220.49 require that when radio communications are used in lieu of hand signals in connection with the switching, backing, or pushing of a train, engine, or car, the employee directing the movement shall give complete instructions or keep in continuous radio contact with the employee receiving the instructions. When backing, or

pushing a train, engine, or cars, the distance of the movement must be specified and the movement must stop in one-half of the remaining distance unless additional instructions are received.

The provisions of 49 CFR Part 232.13 (e) (1) require that for transfer train and yard movements not exceeding 20 miles, the air brake hose must be coupled between all cars, and after the brake system is charged to not less than 60 pounds, a 15-pound brake service application must be made to determine that the brakes are applied on each car before releasing and proceeding.

The provisions of 49 CFR Part 240.117 (e) (3) require that a review of an existing certification shall be initiated promptly upon the occurrence and documentation of any conduct described in this paragraph with “failure to adhere to procedures for the safe use of train or engine brakes when the procedures are required for the compliance of a transfer brake test according to provisions of 49 CFR, Part 232.”

### **Illinois Central Operating Rules, First Edition**

IC Operating Rule No. 503 reads in part, when handling cars ahead of the engine, when cars or engines are shoved and conditions require, a Crew Member must take an easily seen position on the leading car or engine or be ahead to direct the movement....

IC Operating Rule No. 518 reads in part, when a train or engine is required to move at restricted speed, it must proceed prepared to stop within one half the range of vision short of train, engine, railroad car, roadway workers, or equipment fouling the track, stop signal, or derail or switch lined improperly. The Crew must keep a lookout for broken rail and not exceed 20 miles per hour.

### **Corrective Action**

The IC conducted safety meetings with their employees at outlying points concerning this accident and covered the violations that related to the subject accident. The railroad has taken action via efficiency testing with Crews at outlying points to enforce compliance with the rules.

The railroad is taking the position that the employees are in compliance with operating and safety rules when riding behind the bulkhead on a flat car.

FRA performed follow-up efficiency testing with railroad officials during the week of Feb. 22, 1999, to determine the level of employee compliance with the operating and safety rules. Additional joint efficiency testing will be conducted during the month of April as part of the region's review of the Memphis Terminal.