SUMMARY FOR FE-05-03
SELECTED AND POSSIBLE CONTRIBUTING FACTORS

SELECTED FACTORS

Railroad: CSX Transportation, Incorporated
Location: Cheektowaga, New York
Region: 1

Month: February
Date: Feb. 18, 2003
Time: 12:53 p.m., EST

Data for Fatally Injured Employee(s)

Conductor
51 years old
29 years of service
Last rules training: March 7, 2002
Last Safety training: Jan. 1, 2003
Last physical: Not required by CSX

Data for All Employees (Craft, Positions, Activity)

Craft: Transportation and Engine

Positions:

Switching Crew Y102-18
Locomotive Engineer
Fatally injured Conductor
Brakeman

Yard Master

Car Department Employees

Activity: Car Department employees performed an outbound equipment inspection and transfer train air brake test of the 20-car consist to which Crew Y102-18 then performed switching movements.

EVENT

A Conductor was fatally injured
when crushed between two box cars
during a switching operation.

SUMMARY FOR FE-05-03 CONTINUED

POSSIBLE CONTRIBUTING FACTORS

PCF No. 1

While riding the end ladder during a shoving move, the Conductor was crushed between the boxcar he was riding and the boxcar of an opposing, free-rolling, 5-car consist.

PCF No. 2

Inspection of the five cars that had rolled free revealed that there was no air present in the brake system. The Brakeman verified that no hand brakes had been applied. The Conductor had instructed the Brakeman to check for hand brakes prior to the accident.

PCF No. 3

During a previous switching move, the crew had failed to successfully couple the 5-car cut to a standing 4-car cut because the couplers on the relevant cars had by-passed. No member of the crew was aware of the problem until the collision had occurred.

REPORT: **FE-05-2003**

RAILROAD: CSX Transportation, Incorporated (CSX)

LOCATION: Cheektowaga, New York

DATE: Feb. 18, 2003

TIME: 12:53 p.m., EST

EVENT[1]: A Conductor was fatally injured when crushed between two box cars during a switching operation.

EMPLOYEE:

Craft:	Transportation and Engine (T&E)
Activity:	Switching
Occupation:	Conductor
Age:	51 years
Length of Service:	29 years
Last Rules Training:	March 7, 2002
Last Safety Training:	Jan. 1, 2003
Last Physical:	Not Required by CSX

CIRCUMSTANCES PRIOR TO THE ACCIDENT

On Feb. 18, 2003, following a statutory off-duty period, a 3-member train crew, comprising a Locomotive Engineer, Conductor and Brakeman, reported for duty at 6:59 a.m., EST, at CSX's Frontier Yard in Buffalo, New York. The crew was assigned local switcher Y102-18. Frontier Yard is located on CSX's Chicago Main Line in the railroad's Albany District. Rail movements made within Frontier Yard are conducted at "restricted speed" with a maximum authorized speed of 10 mph. The method of operation on the Chicago Main Line is governed by Railroad Operating Rule 261, and traffic over this portion of the railroad is controlled by Automatic Block System (ABS).

Prior to picking up their locomotives, the Y102-18 crew members attended a routine daily safety briefing during which they were instructed on the safety rule of the day by the on-duty Yard

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[1] "Event is defined as "occurrence that immediately precedes and directly results in the fatality." Possible contributing factors are identified in the following report and attached summary.

Master. Their first assignment was to assemble a train consisting of 20 cars for delivery to various local industries**.** They switched the 20 cars and placed them on the west end of the "North Six" Track where car department employees performed an outbound equipment inspection and a transfer train air brake test. The Locomotive Engineer was located in the cab of the controlling locomotive (CSX 2793), which was coupled to the west end of the train while the Conductor and Brakeman were positioned in the locomotive cab of CSX 1192, which was on the east end of the train. The car department released the train at approximately 11:15 a.m., and the crew received permission to depart eastward via the "Eastbound Running Track" toward CP 433 located at the east end of Frontier Yard. At CP 433, they stopped and waited for a signal indication to enter the main line. At approximately 12:30 p.m., the crew received a signal indication and operated eastward on the main line's Track No. 4 toward its first pick up and delivery at the Bestway Foods plant, located at milepost 432.9 in Cheektowaga, New York.

The Chicago Main Line at this location (MP 432.9) comprised four east/west (timetable direction) tracks, identified from north to south as: Track No. 4, No. 3, No.1 and No. 2, respectively. The walking surface on the south side of Track No. 4 was level with unobstructed visibility for approximately one mile in both directions. The entrance to the Bestway Foods plant was via a manually operated switch located to the north of Track No. 4. Facing east, the track into the Bestway Food plant curved left and descended slightly into the plant.

At the time of the accident, the sky was overcast with light snow flurries. The temperature was 18° F, with light winds.

THE ACCIDENT

When the east end of the train arrived at the Bestway Food's switch, the Conductor instructed the Engineer to stop. The Conductor and Brakeman got off the locomotive at the switch. The Conductor instructed the Engineer to shove the train east, over the switch, to make room for about six cars they were to pick up at the plant. The Conductor uncoupled between the fourth and fifth car of the train and told the Engineer to pull the four cars (from west to east, designated as MP 267835, MP 268204, NYC 221568, and NYC 221532) westward past the switch. The Brakeman aligned the switch toward the plant while the Conductor walked to open the gate. The Brakeman instructed the Engineer to shove the four cars into the plant, where the Conductor coupled onto a 5-car pick-up (from west to east, designated as UP 563222, UP 563100, GTW 384546, GTW 384039, and NYC 221417). The Conductor connected the air hoses between the cars, but did not put air into the train line. He then instructed the Engineer to pull the nine cars back toward the main line. When the last car cleared the switch, the Brakeman aligned the switch back to the main line and instructed the Engineer to shove eastward toward the 16 cars they had left standing on the main line. The Conductor took control of the move and instructed the Engineer to stop as the cars made contact. The Conductor was positioned approximately 1 ½ car lengths from the coupling and apparently was unaware that the couplers on the two cars had by-passed and that the coupling was unsuccessful.

After the train was "stretched," the Conductor walked west and uncoupled between the 5-car pick-up and the four cars to be delivered to the plant. After uncoupling the cars, the Conductor instructed the Engineer to pull west over the switch, and the Brakeman aligned the switch to Bestway Food. The Conductor asked the Brakeman to couple the air hoses on the cars left standing on the main line and to check for hand brakes. The Brakeman crossed over to the south side of Track No. 4 and began walking east, between Tracks No. 4 and No. 3, toward the standing cars. The Conductor was last observed boarding the side ladder on the north side of the leading end of NYC 221532. He instructed the Engineer to shove eastward into the plant. During the shoving move, the Conductor evidently crossed over (via the end platform) to the south side of the car and was riding the end ladder as the east end of the car passed the switch. At about this time, the Brakeman observed the five cars (which had failed to successfully couple) rolling west toward the switch. He radioed the Locomotive Engineer to stop. The Engineer was unable to react before the corners of the two box cars (NYC 221532 and UP 563222) had collided. The Brakeman was not in a position to see the cars come together, but he heard the impact. He walked back (west) toward the switch, where he discovered the Conductor lying on the ground. He had been crushed between the corners of the two cars. Realizing his co-worker was seriously injured, the Brakeman radioed for emergency responders. The Conductor was pronounced dead at the scene.

POST-ACCIDENT INVESTIGATION

Representatives of the Federal Railroad Administration and CSX conducted inspections of the involved equipment, focusing on the safety appliances and brake equipment. The inspection disclosed no defective conditions present on the involved equipment that had caused or contributed to the cause of the accident. The track structure, switches, and walking surfaces also were inspected, with no conditions noted that caused or contributed to the cause of the accident.

Inspection of the couplers at the east end of NYC 221417 and at the west end of AOK 110176 revealed that the unsuccessful coupling was caused by two couplers "by-passing" one another. The coupler at the east end of car NYC 221417 was against the north coupler stop, and the coupler at the west end of car AOK 110176 was against the south coupler stop. Inspection of the five cars that rolled free (from west to east: UP 563222, UP 563100, GTW 384546, GTW 384039, and NYC 221417) revealed there was no air present in the brake system. Statements were obtained from the Locomotive Engineer and the Brakeman. The Brakeman reported to investigators that no hand brakes had been applied to the five cars by the Conductor prior to the accident.

The fatally injured employee's right-hand glove was found attached to the top rung of the B/L end ladder of car NYC 221532, indicating the employee's position on the car at the time of impact.

The Cheektowaga Police Department conducted a separate investigation and determined that the employee fatality was accidental.

Federally mandated post-accident toxicological test results, conducted on the Locomotive Engineer and the Brakeman, were negative.

The "Certificate of Death" issued by the New York State Department of Health, indicated the immediate cause of death as: "Multiple Crush Injuries."

APPLICABLE RULES

CSX Operating Rule (NORAC) 109. Hand Brakes

a. Cars or Drafts of Cars Left Standing

A sufficient number of hand brakes must be applied on cars to make them secure when left standing on any track. If necessary, car wheels must be blocked.

CSX Safety Rules for Transportation Department (Oct. 1, 2001)

2200 - Coupling Equipment

Before attempting to couple equipment, make certain that the couplers are in line with each other and at least one of the knuckles is open.

2201 - Making a Safety Stop

Stop the equipment at least 50 feet, but not more than 250 feet before coupling to equipment. Make certain that:

1. Any employee riding the equipment is not seated in the locomotive dismounts until the coupling is made;
2. Couplers are aligned; and
3. At least one of the knuckles is open.