National Transportation Safety Board

Washington, D.C. 20594

Railroad Accident Brief

Accident No.:	DCA-08-FR-005
Location:	Walbridge, Ohio
Date:	April 1, 2008
Time:	3:22 a.m., eastern standard time[1]
Railroad:	CSX Transportation
Property Damage:	None
Fatalities:	None
Injuries:	One
Type of Accident:	Employee struck by free-rolling freight car

The Accident

On April 1, 2008, about 3:22 a.m., a CSX Transportation (CSX) yard crew foreman was severely injured when he was struck by a free-rolling freight car in CSX's Stanley Yard in Walbridge, Ohio. He injured his left arm and shoulder, head, face, and lungs. At the time of the accident, it was dark and 53° F, with a light rain and winds up to 31 mph.

The foreman and his helper had been switching railcars by using a remote-controlled locomotive. They had started their shift at 10:30 p.m. on March 31, the night before the accident; they were scheduled to finish at 6:30 a.m. on April 1. About 1:00 a.m., after the two men had completed several switching moves, the yardmaster told them that the freight cars on track 4 had to be switched so that they could be added to a departing train. (See figure 1.) Consequently, the foreman walked south between tracks 4 and 5 to check that all cars were coupled, and the helper climbed inside the locomotive that was attached to the cars. As the foreman walked along the cars, he radioed the helper and told him to move the cars north so that he could verify that the cars were properly coupled. The helper later said he had moved the cars about 20 or 30 feet when he heard the foreman say over the radio, "That'll do." The helper stopped the cars and awaited further instructions.

About a minute later, the helper said he heard the foreman use the radio to call for help. The helper left the locomotive to find the foreman. At 3:22 a.m., he found him under a freight car that had been free rolling on track 5; the yardmaster was already at the scene when the helper arrived.

[1] All times in this report are eastern standard time.

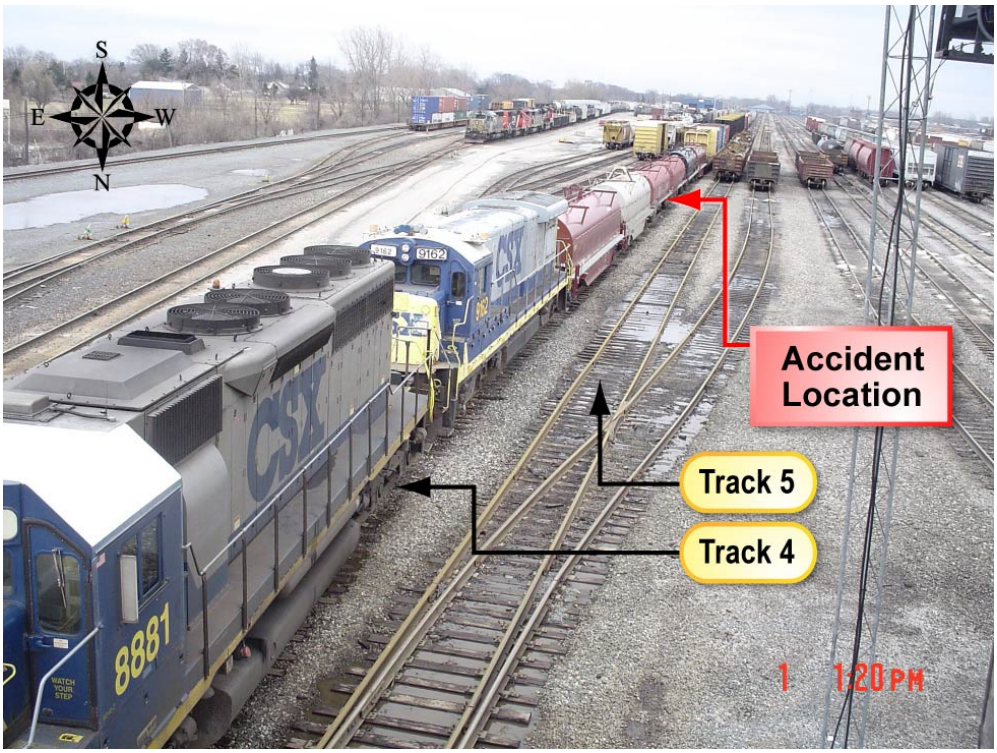

Figure 1. Location of accident (indicated by top arrow).

Emergency Response

CSX personnel called 911. At 3:28 a.m., a police officer arrived. At 3:30 a.m., he contacted Lake Township Communications. At 3:36 a.m., the emergency responders arrived. After they gave the foreman emergency treatment, he was carried to an ambulance, driven to Owens Community College, and then flown to the University of Toledo Medical Center, where he was treated.

Investigation

The CSX owns, inspects, maintains, and operates Stanley Yard. The yard is about 2 miles long, and the tracks run north and south. The yard has 42 tracks. The distance between the center of one track and the center of the adjacent track is typically 12 feet 7 inches. Thus the clearance is very narrow; at the site of the accident, the clearance between adjacent cars on tracks 4 and 5 was only 27 inches. (See figure 2.)

Figure 2. Clearance between tracks 4 and 5.

Since only verbal permission is required to occupy the non-main tracks in the yard, employees must be vigilant about all train and car movements and about the locations of other train crews that may also be operating in the yard. To avoid track equipment, employees must avoid fouling[2] adjacent tracks on which unexpected rolling equipment can appear without warning.

According to CSX's records, at 1:27 a.m., the foreman had requested protection for tracks 5 and 6, because he and his helper were working between the tracks. At 3:11 a.m., the foreman asked that the protection for tracks 5 and 6 be released and that track 4 be protected. The records do not show that he asked that track 5 be protected.

The foreman's remote-control transmitter had stopped working about 1 1/2 hours before the accident. The crew had used the helper's remote-control transmitter to operate the switching locomotive. The use of a single remote-control transmitter complied with CSX's operating instructions. No remote-control transmitter, mechanical, track, or signal issue contributed to this accident.

CSX Procedures for Track Protection

The CSX's timetable[3] and special instructions include procedures meant to stop equipment from moving too close to an employee who is working on an adjacent track. Before an employee starts working on any car in the yard, he or she is required to contact a car retarder operator and request a "spike" protection that locks out the adjacent track. The car retarder operator creates a written record of the employee's request and then applies a spike, which is a metal clip, to the machinery that operates the switch or switches leading to the adjacent track, thus preventing any rolling rail cars from being directed onto that track. A car retarder operator controls track switches and the car retarder system from an elevated tower to route and regulate

[2] *Fouling* means that equipment on an adjacent track is within the clearance zone needed for passing train or car movements.

[3] Chicago Time Table No. 2, Rule 19.5 (Page 97), dated April 1, 2008.

the speed of freight cars entering a railroad yard and to couple the cars to make up trains. During his postaccident interview, the foreman stated that he had not requested that track 5 have spike protection while he was working on track 4.

CSX Managerial Oversight

The CSX uses efficiency tests and observation to determine an employee's level of compliance with its operating rules. The CSX had been testing and observing the activities of its car retarder operators for their compliance with spike procedures. However, CSX had not been testing or observing its train service employees to see whether they were complying with the rule that spike protection be requested. Therefore, CSX's management did not have a level of compliance for the injured foreman.

Yard management had been ignoring or, at least, not emphasizing the requirement for obtaining protection on adjacent tracks. National Transportation Safety Board investigators listened to an audio file provided by CSX, in which they heard conversation between two CSX yard employees that occurred shortly after the accident. In the conversation, the employees said that the enforcement of the spike protection requirement would begin on the following day.

CSX Postaccident Actions

After the accident, CSX's yard management issued a directive that modified the procedures for establishing spike protection for adjacent tracks. When a yard crew is performing certain functions, such as coupling air hoses and adjusting coupling devices, the crew must notify a car retarder operator. To serve as a reminder to the employee that he or she will be working near potential danger, the car retarder operator must, under the new directive, ask the crew whether protection is required for the adjacent track. The CSX has also increased its efficiency testing to ensure that employees obtain the protection that CSX's rules require.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the April 1, 2008, accident in which a free-rolling freight car in CSX's Stanley Yard struck a CSX foreman was the foreman's lack of situational awareness regarding movements on an adjacent track. Contributing to the accident was the foreman's failure to obtain protection from movements on the adjacent track in accordance with CSX's written policy. Also contributing to the accident was CSX's lack of managerial oversight of employees' adherence to the policy of obtaining adjacent track protection.

ADOPTED: March 31, 2011