The Accident

Accident Synopsis

On August 13, 2018, at 12:23 a.m., a Dallas, Garland & Northeastern Railroad, Inc. (DGNO) railroad conductor was fatally injured during a shoving (pushing) movement in Dallas, Texas. The DGNO is a subsidiary of Genesee & Wyoming Inc. (G&W), a holding company that owns short line railroads throughout the United States. DGNO has a joint use agreement with Union Pacific Railroad (UP). The agreement allows the DGNO the use of UP’s Cadiz Yard, which consists of three yard tracks that are located in the downtown area of Dallas, Texas.

On August 12, the yard crew went on duty at Mockingbird Yard at 6:00 p.m. The yard crew included an engineer and a conductor. This was the home terminal for the crewmembers, and each received more than the statutory off-duty period prior to reporting for duty. Both the engineer and the conductor were off duty for 60 hours.

Accident Narrative

After a job briefing, the trainmaster transported the crew to Cadiz Yard. Cadiz Yard runs east to west and includes DGNO tracks 400 through 402; the tracks are adjacent to the UP double main tracks. (See figure 1.)

![Diagram of Cadiz Yard](image)

**Figure 1.** Cadiz Yard with main line and DGNO tracks.
The train crew lined the derail on track 400 to the nonderailing position and performed a standing locomotive brake test. The crew then performed several switching operations using tracks 400 and 401. For the final move, the train crew entered track 401 and pulled out several empty cars that were scheduled to be delivered to a customer, American Iron. The crew then requested permission from the UP train dispatcher to proceed east onto the main track. Once the train cleared the UP main track switch, the crew stopped and restored the UP main track switch to normal position (straight track) and proceeded east to the tracks.

After the crew delivered the cars to American Iron, the engineer and conductor had a job briefing regarding which track they would be returning to at Cadiz Yard. Because the crew departed the yard on track 401, the engineer and conductor agreed that the switch would be lined for that track, and they could shove the cars that they had into that track. The crew departed American Iron with the locomotive and 9 cars loaded with scrap iron. The engineer told National Transportation Safety Board (NTSB) investigators they stopped at the signal authorizing movement onto the UP main track. Once their movement was authorized by a signal indication to proceed, they pulled through an interlocking, which they needed to get a signal to travel back west. After talking with the UP train dispatcher and receiving a signal indication, they shoved west toward Cadiz Yard.

When they arrived at the main track switch to enter Cadiz Yard, the conductor, via radio, instructed the engineer to stop the train. The conductor lined the switch from the main track into Cadiz Yard. The conductor then instructed the engineer to move about three car lengths (continuing west in a shoving movement). After moving about 1.5 car lengths, the conductor told the engineer via radio that he could continue shoving cars west about 30 car lengths. The engineer shoved a few car lengths, and the train came to an abrupt stop against the cars that were on track 400. (See figure 2.) The engineer was surprised by this because he anticipated the train would be routed into track 401. The engineer stated that he never saw any kind of light or other signs from the conductor to indicate his position relative to the movement because he was being directed by radio.

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1 A derail is a track safety device designed to guide a car off the rails at a selected spot as a means of protection against collisions or other accidents; it is commonly used on spurs or sidings to prevent cars from fouling the main line.

2 An interlocking is a point where one or more routes meet or cross; it is an arrangement of signal apparatus that prevents conflicting movements through an arrangement of tracks such as junctions or crossings. It is designed so that it is impossible to display a signal to proceed unless the route to be used is proven safe.

3 See UP Operating Rule 6.5 “Shoving Movements” and Title 49 Code of Federal Regulations (CFR) 218.99 “Shoving and Pushing Movements” for additional information.

4 Car length is in reference to a standard railroad car length of 50 feet.
The engineer said that he called the conductor via radio without any response. He then called the UP train dispatcher and told him that he had lost contact with the conductor. He told the UP train dispatcher that he was going to secure the locomotive and go look for him. The engineer said that after securing the locomotive and using his cell phone for a light, he started walking west looking for the conductor. After he reached the cars that he came against on track 400, he found the conductor (partially) underneath the rear car of the cut of cars they were shoving.

The DGNO general manager was dispatched to the accident site and found the conductor’s switch keys and cap near the derail on track 400. (See figure 3.) The DGNO general manager found that the derail on track 400 was still lined and locked for the derailing position.
When the crew arrived at Cadiz Yard, the intended route to be taken was already lined for track 401. Because the switch was found lined for track 400, it is likely that the conductor inadvertently lined the switch to track 400, where the conductor was standing. The conductor likely proceeded to track 400 to operate the derail, believing that the track would be routed to track 401. He was likely directing his attention to the derail, rather than protecting the shoving movement, when he was struck.

The Investigation

Employment Records

The 29-year-old engineer, hired by the DNGO on December 9, 2009, had been certified as an engineer on September 30, 2016. The engineer’s last hearing and vision exam was on July 7, 2015. He received territory qualification on November 11, 2017. According to the engineer’s operational test records, in the 12 months prior to the accident, he was operationally tested 85 times. There were no entries of noncompliance.
DGNO Employee Fatality

The 33-year-old conductor, hired by the DNGO on August 8, 2017, had been certified as a conductor on December 19, 2017. The conductor’s last hearing and vision exam was on December 18, 2017. He received territory qualification on December 14, 2017. According to the conductor’s operational test records, in the 8 months prior to the accident, he was operationally tested 45 times. There were no entries of noncompliance.

**Cell Phone Records**

NTSB investigators obtained the cell phone records for the engineer and conductor and determined that they were not used while the crew was on duty.

**Postaccident Toxicological Testing**

The engineer and conductor were given postaccident toxicology tests as required by Title 49 Code of Federal Regulations (CFR) Part 219 subpart C. Both the engineer and conductor tested negative for alcohol and other tested-for drugs.

**Training**

DGNO records showed that the engineer and conductor involved in the accident had completed training courses covering various aspects of railroad operations on November 19, 2017, and December 14, 2017, respectively.

**DGNO Postaccident Actions**

G&W initiated a campaign across all owned or leased railroads titled “Moving Equipment Can Kill.” The campaign emphasizes the importance of situational awareness and rule compliance when crossing tracks and moving between equipment.

**Probable Cause**

The National Transportation Safety Board determines that the probable cause of this accident was the conductor improperly lining a switch for movement onto a track that he was occupying. Contributing to the accident was the conductor’s inattention to the train’s movement.

For more details about this accident, visit [www.ntsb.gov/investigations/dms.html](http://www.ntsb.gov/investigations/dms.html) and search for NTSB accident ID RRD18FR010.

**Date:** October 16, 2019
The NTSB has authority to investigate and establish the facts, circumstances, and cause or probable cause of a pipeline accident in which there is a fatality or substantial property damage, or significant injury to the environment. (49 U.S. Code, Section 1131 - General authority)

The NTSB does not assign fault or blame for an accident or incident: rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties…and are not conducted for the purpose of determining the rights or liabilities of any person.” Title 49 Code of Federal Regulations, Section 831.4. Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report. 49 U.S. Code, Section 1154(b).