

Norfolk Southern Railway Collision and Employee Fatality

Location	Decatur, Alabama
Date	January 31, 2024
Accident type	Raking collision
Train 1	Yard job A08AA31; 18 railcars; 2 locomotives; conductor, engineer brakeman
Train 2	Yard job A80AA31; 35 railcars; 1 locomotive; conductor, engineer, conductor trainee
Track	Yard tracks
Hazardous materials	None
Fatalities	1
Injuries	0
Damages	\$61,500

Summary

On January 31, 2024, about 4:15 p.m., the engineer of Norfolk Southern Railway (NS) yard job A08AA31 (crew 1) was fatally injured while performing switching operations when the locomotive he was operating was struck by a rolling block of railcars from yard job A80AA31 (crew 2) in Decatur Yard in Decatur, Alabama.¹ The locomotive was occupying the lead track at the west end of the yard and shoving railcars onto track 10 when 35 railcars rolled west on track 7 from the east end of the yard where crew 2 was working.² (See figure.) The 35 railcars fouled the lead track and impacted the rear of crew 1’s locomotive, raking along the side of the locomotive, and ultimately

¹ (a) All times in this report are local times. (b) Visit [ntsb.gov](https://www.ntsb.gov) to find additional information in the [public docket](#) for this NTSB accident investigation (RRD24FR007) (c) *Switching* is moving rail equipment from one track to another track or to different positions on the same track and does not constitute a train movement.

² (a) A *lead track* connects one or more yard tracks to other yard tracks. (b) *Shoving* is the process of pushing railcars from the rear with a locomotive. *Shoving movements* are frequently used in switching operations.

striking the operating cab where the engineer was located.³ The engineer was transported to a hospital, where he was pronounced deceased.

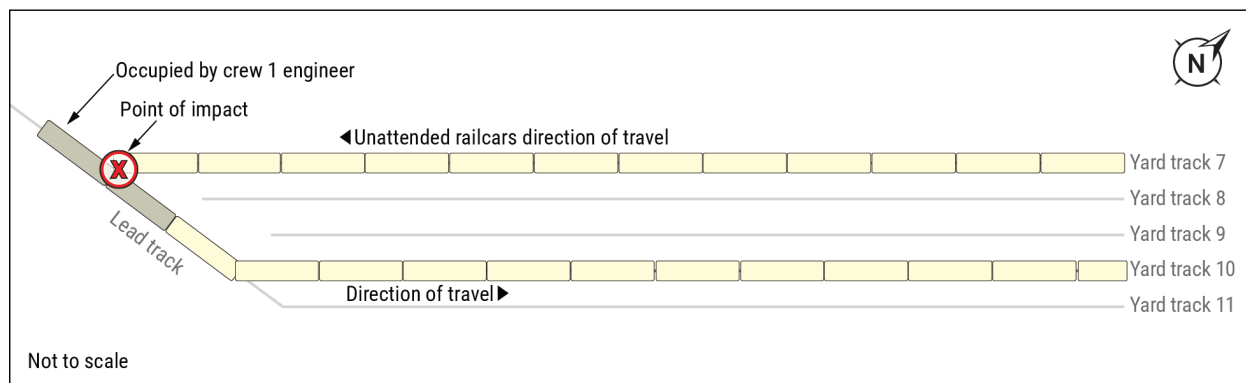


Figure. Accident diagram of the west end of the yard showing unattended railcars impacting the locomotive operated by the crew 1 engineer.

At the time of the accident, crew 1 was switching railcars onto track 10. The brakeman stated that he had crossed over to track 10 to make a cut at the locomotives after they shoved the railcars onto track 10.⁴ The crew 1 conductor was in a utility vehicle protecting the shoving movement onto track 10. The engineer was in the operating cab of locomotive NS 1648.

Crew 2 was performing switching operations at the east end of the yard. Shortly before the accident, the crew positioned 35 railcars on yard track 7 and uncoupled them from the rest of the railcars with which they were working. When interviewed by the National Transportation Safety Board (NTSB), the crew 2 conductor said that he saw three railcars on the east end that had hand brakes applied.

Decatur Yard operating rules specifically state, "at the beginning of each shift, a member of each yard assignment will verify that each track is secured with a minimum of three (3) hand brakes before commencing any switching operations in the New Yard." Further, Title 49 *Code of Federal Regulations* 232.103(n)(1) requires that "a sufficient number of hand brakes, to be not fewer than one, shall be applied to hold the equipment unless an acceptable alternative method of securement is provided pursuant to paragraph (n)(11)(i) of this section."

³ (a) *Raking* means to scrape with a long, sweeping motion. (b) *Fouling a track* means the placement of an individual or equipment in such proximity to a track that the individual or equipment could be struck by a moving train or on-track equipment.

⁴ To *make a cut* means that the crew has uncoupled railcars from the train.

Crew 2 had kicked 2 railcars to track 9 and were returning west on track 7 when the conductor noticed the 35 railcars previously left on track 7 were rolling west toward the lead track. The NTSB reviewed the radio recording and confirmed that the conductor had alerted the engineer of crew 2. About the same time, the crew 1 brakeman also noticed the railcars moving and alerted the engineer of crew 1, warning him to clear track 7 as quickly as possible. The engineer of crew 1 responded that he was trying to clear the track, seconds before the collision.

NTSB investigators conducted reenactments of the accident to observe the way equipment moved on the east end of the yard. Event recorder data was used to replicate stopping conditions during the reenactments.

In one reenactment, NTSB investigators observed how the 3 hand brakes that the conductor had stated were applied affected the movement of the 35 railcars on track 7. With the same 3 hand brakes applied, the railcars rolled west at a very slow speed, stopping within 50 feet. In another reenactment, when the hand brakes were not engaged, NTSB investigators found that the string of 35 railcars moved east on track 7 in a manner similar to what occurred during the accident.

Analysis

Two crews were performing switching operations when a rolling block of railcars struck a locomotive and fatally injured the locomotive's engineer in Decatur Yard.

Federal regulations as well as NS and Decatur Yard operating rules required hand brakes on a minimum of three railcars be applied to properly secure the uncoupled block of railcars and to visually verify the hand brakes were applied⁵

Although the crew 2 conductor told NTSB investigators that he recalled seeing the hand brakes on the east 3 railcars on track 7 were applied, he did not physically check and confirm they were applied. The crew 2 conductor trainee was the only other person in the area when the cut was being made on track 7. During an interview with NTSB investigators, the conductor trainee stated that he was positioned at the track 9 switch when the 35 railcars were cut away from the locomotive on track 7. Therefore, he was not in a position to apply the hand brakes.

From the reenactments performed by NTSB investigators, the NTSB concluded that had the hand brakes been applied to the string of 35 railcars, they would not have

⁵ (a) Title 49 Code of Federal Regulations 232.103(n)(1). (b) NS Operating Rules on Securement, Rule 224 Handbrakes. (c) Rule 225 Handbrake Requirements. (d) To *visually verify* means to ensure the chain is tight; the bell crank is in the up position; and the brake shoes are tight against the wheels before cutting away from the railcars.

rolled, uncontrolled, to the west end of the yard and impacted the locomotive. Therefore, the NTSB concludes that the three hand brakes were not applied before the accident.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the Norfolk Southern Railway employee fatality was the conductor's failure to properly verify the handbrakes were applied on the block of railcars, as required, which allowed them to roll free and strike a locomotive.

Lessons Learned

On February 14, 2024, the Federal Railroad Administration issued "Safety Bulletin 2024-01 (Revised): Employee Fatality—Securement of Rolling Equipment," in reference to this accident. In this bulletin, the Federal Railroad Administration "remind railroads and railroad employees of the importance of ensuring rolling equipment is properly secured at all times."

On February 2, 2024, Norfolk Southern issued a Serious Incident Notice informing employees about the incident, rules to discuss regarding switching operations, and included a rules clarification packet on securement of equipment. NS cited this event in recurrent rules training and during safety interactions with employees to ensure employees are following established securement rules.

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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 (Title 49 *United States Code* section 1154(b)).

For more detailed background information on this report, visit the [NTSB Case Analysis and Reporting Online \(CAROL\) website](#) and search for NTSB accident ID RRD24FR007. Recent publications are available in their entirety on the [NTSB website](#). Other information about available publications also may be obtained from the website or by contacting—

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