



NATIONAL TRANSPORTATION SAFETY BOARD  
**Investigative Hearing**

Norfolk Southern Railway general merchandise freight train 32N  
derailment with subsequent hazardous material release and fires,  
in East Palestine, Ohio, on February 3, 2023

<b>GROUP</b>	<b>H</b>
<b>EXHIBIT</b>	
52	

Agency / Organization

Association of American Railroads

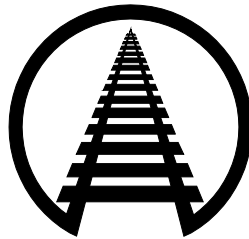
Title

Statement for the Record –  
Michael J. Rush

**STATEMENT OF MICHAEL J. RUSH**

**SENIOR VICE PRESIDENT**

**SAFETY & OPERATIONS**



**BEFORE THE NATIONAL TRANSPORTATION SAFETY BOARD**

**INVESTIGATIVE HEARING ON FEB. 3 NORFOLK SOUTHERN RAILWAY TRAIN  
DERAILMENT IN EAST PALESTINE, OH.**

**JUNE 23, 2023**

**Association of American Railroads**

**425 Third Street SW**

**Washington, DC 20024**

**202-639-2100**

Thank you for the opportunity to appear on behalf the Association of American Railroads. For those of you unfamiliar with AAR, it is a trade association representing large and small freight railroads, as well as passenger railroads.

The February 3 derailment is a stark reminder of the railroad industry's responsibility to the communities in which railroads operate. The railroads are taking what happened here with the utmost seriousness.

Each of AAR's member railroads share the same mission to safely serve communities and customers across the nation. Each train trip is an opportunity for railroads to apply lessons learned to further enhance safety.

AAR helps its members collectively do just that.

As an organization, AAR sets standards for rolling stock – the rail cars and locomotives – that travel from one railroad to another. These standards address the safety and interoperability of railroad equipment, exceeding what is required by regulation. The railroads also spend millions of dollars annually on research to make the industry safer at AAR's research subsidiary, MxV Rail. Indeed, it was AAR's subsidiary that developed the first acoustic bearing detector.

The railroad industry's recent safety record is excellent. This record was built through years of work and investment in employee training, infrastructure, and technologies such as wayside detectors. The railroads have driven risk down across every facet of rail operations.

In 2022, the Class I mainline accident rate was the second best in history, according to Federal Railroad Administration statistics. In addition, the rate of mainline accidents on Class I's attributable to equipment failure was also the second lowest in history in 2022. With respect to the transportation of hazardous materials, the railroad accident rate is far lower than the rate for trucks. Over 99.9 percent of hazardous materials shipments by rail arrive at destination without a release.

The February accident focused attention on overheated bearing detection, which has come a long way since railroads voluntarily tested, developed, and deployed hot bearing detectors nationwide. In 2022, there were thirteen accidents on Class I railroads attributable to overheated bearings. Bearings were responsible for less than 1% of all accidents. One only has to go back to 2000 to find accident rates for overheated bearings over four times greater.

Nevertheless, as the East Palestine derailment demonstrates, overheating bearings are still a cause for concern. Railroads have voluntarily deployed hot bearing detectors for many decades, with over 6,000 currently deployed across the country. When certain temperature thresholds are reached, these detectors notify the train crew of a potential overheated bearing. The Class I's also have committed to installing a thousand additional hot-bearing detectors and are lowering temperature thresholds that trigger the alarm for train crews.

Using hot bearing detectors and advanced data analytics software, railroads are now able to detect potentially problematic bearings before they reach the overheating thresholds. Acoustic

bearing detectors that measure noise to identify defects also detect potentially problematic bearings.

When it comes to enhancing safety, the railroads have long focused on preventing an accident before it occurs. Wayside detectors and inspections are foundational to helping railroads meet that goal.

The railroads must continue to improve their safety record. While rail remains a safe, responsible transportation solution, the industry is committed to becoming even safer in the years to come.