

TESTIMONY OF NATHAN C. BACHMAN
VP OF SALES & BUSINESS DEVELOPMENT, LORAM TECHNOLOGIES, INC.
SECRETARY/TREASURER, REMSA BOARD OF DIRECTORS

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE
SUBCOMMITTEE ON RAILROADS, PIPELINES AND HAZARDOUS MATERIALS

HEARING ON
EXAMINING FREIGHT RAIL SAFETY

JUINE 14, 2022

SUBMITTED BY



LORAM TECHNOLOGIES

111 COOPERATIVE WAY, SUITE 400

GEORGETOWN, TX 78626

Loram Technologies, Inc. (LTI), formerly known as Georgetown Rail Equipment (GREX) is based in Georgetown, TX. By collaborating with customers, LTI is able to provide innovative solutions that solve tough rail maintenance challenges. LTI provides inspection services, ballast technologies, friction management and structure monitoring and engineering to railroads around the world.

<https://loramtechnologies.com>

Introduction

Good morning, Chairman Payne, Ranking Member Crawford, and Members of this esteemed subcommittee. My name is Nate Bachman and I am the Vice President of Sales and Business Development at Loram Technologies, Inc. (LTI). In addition, I serve on the Executive Committee as the Secretary/Treasurer of the Railway Engineering-Maintenance Suppliers Association (REMSA) a national trade association that represents companies that manufacture rail maintenance-of-way equipment and provide related services. I am honored to join this distinguished panel today and to provide our perspective on the important topic of freight rail safety.

Loram Technologies

Let me first begin by commending Congress for passing the Infrastructure Investment and Jobs Act (IIJA). The IIJA provides visionary and unprecedented levels of funding for key rail safety programs. The Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant program, in particular, is a vital source of funding for the industry to address key safety improvement projects.

Now for some background on Loram Technologies, Inc. Based out of Georgetown, Texas, LTI creates innovative solutions to help the railroad industry. From our GateSync and Solaris ballast delivery systems to the Aurora® track inspection system; our products stand out among the rest as technologically advanced, safer, more efficient and more productive than traditional methods of getting things done. We work with customers across the globe to deliver custom solutions designed around their specific needs.

LTI is part of the Loram Corporation (Loram) based out of Hamel, Minnesota. Loram employs more than 1,400 people with the majority of those being heavy equipment operators and maintainers working on railway lines across North America. The company has manufacturing facilities and corporate offices in Minnesota, Illinois and Texas. It has always been the company's objective to deliver safe, advanced, and efficient solutions to the railroad industry.

REMSA and the Rail Supply Industry

While Loram Technologies is just one business within REMSA, the rail supply segment of the industry has a significant economic footprint. Beyond their critical support for a railroad system comprising more than 1.6 million railcars, 38,000 locomotives, and 140,000 miles of track, the railway supply industry is also essential to the national economy: generating value, stimulating jobs, and paying taxes. The economic contribution of the railway supply industry in 2017 amounted to more than



\$74.2 billion in gross domestic product (GDP) and they paid \$16.9 billion in taxes to local, state and federal governments. Railway suppliers directly employ more than 125,000 people in manufacturing, repair, maintenance, and leasing, among others. firms.¹

As I mentioned in my opening, I serve as an officer for REMSA. REMSA represents nearly 250 companies in the maintenance-of-way segment of the rail supply industry. Most REMSA member companies are small businesses with manufacturing facilities and offices located all across the United States.

REMSA was created in 1965 by the merger of the Association of Track and Structure Suppliers and the National Railway Appliances Association, two long-standing organizations in the railroad maintenance-of-way industry. The association represents companies and individuals who manufacture or sell maintenance-of-way equipment, products, and services, or are engineers, contractors and consultants working in construction and/or maintenance of railroad transportation facilities. REMSA members constitute a large part of the maintenance-of-way industry. The association sponsors Railway Interchange, the largest exhibit of maintenance-of-way equipment, products and services in the United States. REMSA members exhibit rail and track products, track maintenance equipment and services, safety devices and software that enables the railroad industry to work smarter.

In addition to my role on the REMSA Board, LTI is also a proud and active member of the National Railroad Construction and Maintenance Association (NRC) and the Association of American Railroads (AAR).

Finally, of note, REMSA and NRC collaborate on a grassroots program that brings Members of Congress out to our member company facilities so we can help educate Congress on the work that our members do and the impact they have on the community, rail safety, and the local economy.

[Background on Railway Automated Track Inspection \(ATI\) Technology](#)

We appreciate the opportunity to provide our insights on freight rail safety, and in particular, how the rise of technology has helped to contribute to increased safety in the freight rail industry. As one of several companies providing innovative rail inspection technologies that complement the hard-working men and women on the ground, LTI is well positioned to provide a brief overview of this technology.

Let me be clear, the intent of this technology is not to replace workers. In our experience the most successful work environment is one where technology, such as Automated Track

¹ *Tracking the Power of Rail Supply: The Economic Impact of Railway Suppliers in the U.S.* September 2018. https://www.remsa.org//Files/Rail_Supplier_EIS_2018.pdf

Inspection (ATI), can complement the work on the ground to both augment and improve safety for workers and the railroads. That is precisely what this technology does today. Both Congress and the FRA should strive to enact policies that foster this critical relationship.

Both at LTI and in the entire rail supply and contracting industry, safety is our number one priority. We work as a company and industry to continually improve safety performance. LTI is an active member of the NRC Safety Committee and through this work we have participated in numerous FRA Rail Safety Advisory Committee (RSAC) working groups related to track safety standards and rail integrity regulations.

Though FRA data trends indicate that over the past 20 years the freight rail industry is getting safer, we must always endeavor to work together towards producing an even safer industry. Core to this objective is taking the railway methods of the past and utilizing the technologies of today to usher in the next century of railroading. Until as an industry we are able to do this more effectively, progress in the rail industry will be hindered.

Before LTI and other companies developed this technology, track inspections were both labor and time intensive. This new technology can detect tiny defects invisible to the human eye, while enabling railroads to inspect up to eight times as much track each day. By targeting visual inspections by using data-driven technology, we can reduce redundant manual inspections which both enhances greater roadway worker safety and allows for an approach whereby track workers' inspection time can be dedicated to and prioritized around the most pressing track defects.

As a provider of these systems, we have seen firsthand how this technology can uncover track flaws and ballast deficiencies. In addition to track flaws, LTI also uses proprietary state-of-the-art imaging technology, which scans the tracks to reveal the exact condition of every tie and the associated components along the way. It pinpoints any potential problems and marks their exact location so that the railroad can target and repair them in an efficient manner. This technology finds flaws manual detection methods may miss, and it does so while traveling at speeds averaging 25 mph.

LTI collects approximately 40,000 track miles of data annually. With these collections, customers are able to evaluate tie and ballast conditions. This data is used for both urgent track repairs as well as maintenance planning in successive years. By utilizing technologically advanced vision systems, we have been able to collect and catalog data on hundreds of thousands of miles of track. This information has been effectively utilized to help railroads focus their people and dollars to most pressing maintenance needs.

According to the FRA, track-related issues caused one-quarter to one-third of all train accidents from 2001 to 2020. The use of automated track inspection technologies, in addition to visual

inspections, has helped drive down the number of track-caused derailments.² Additionally, per a letter that 23 U.S. Senators sent to then FRA Deputy Administrator Amit Bose on October 29, 2021, the “results of the ATI programs have overwhelmingly proven the safety benefits of the concept. In some cases, the ATI tests have resulted in an over 90 percent reduction in unprotected main track defects per 100 miles tested.”³

Pair this with our own observations on the ground and the data from the Class I railroads’ ATI pilot programs, this technology clearly detects track geometry defects with increased accuracy.

Recommendations

It is clear that through both our own experience as a leading supplier of automated inspection technology and the data acquired through the Class I railroad test programs that the ATI waivers have yielded positive safety results. Moreover, as we have seen, the development of automated inspection technologies is crucial to enhancing safety by reducing the number of track-related and caused derailments.

To that end, we encourage Congress and the FRA to work collaboratively to promote rail technologies that enhance safety in the industry. We believe that the waivers that the Class I railroads have requested for continuing their ATI pilot programs put safety first and should be continued. More data from continued pilots benefits rail workers, rail suppliers, railroads, the FRA and the general public.

This combination of data-driven findings from ATI technology and the visual inspections made by workers on the ground should be a powerful force in moving the rail industry forward. Congress and the FRA should carefully consider how to further promote the acceptance of this technology in the near future, and should also embrace any new future technology that will enhance safety in the rail industry.

Closing

Thank you for the opportunity to share our perspective on freight rail safety. I look forward to answering any questions you may have.

² *Report to Congress: Automatic Track Geometry Measurement System Technology Test Programs*. Federal Railroad Administration. November 23, 2021. <https://railroads.dot.gov/sites/fra.dot.gov/files/2021-11/FRA%20Report%20to%20Congress-Track%20Inspection%20Test%20Program%2011.23.21.pdf>

³ *Senate letter to FRA Deputy Administrator Amit Bose*. October 29, 2021. <https://reason.org/wp-content/uploads/Letter-from-Senators-to-Amit-Bose.pdf>