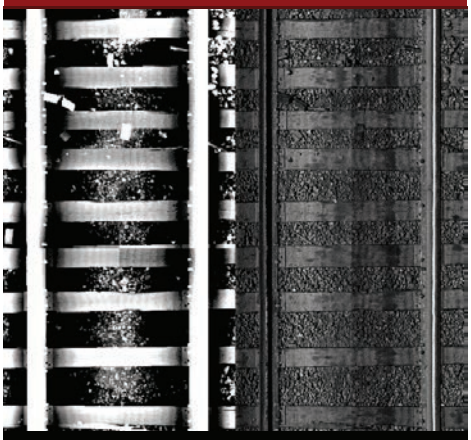
MANDLI COMMUNICATIONS

PROJECT INFO



LCMS Scan of Railway

LOCATION
- Midwest, USA

END USER/CUSTOMER
- A Major National Railway Company

AMOUNT OF DATA
- 5 Miles

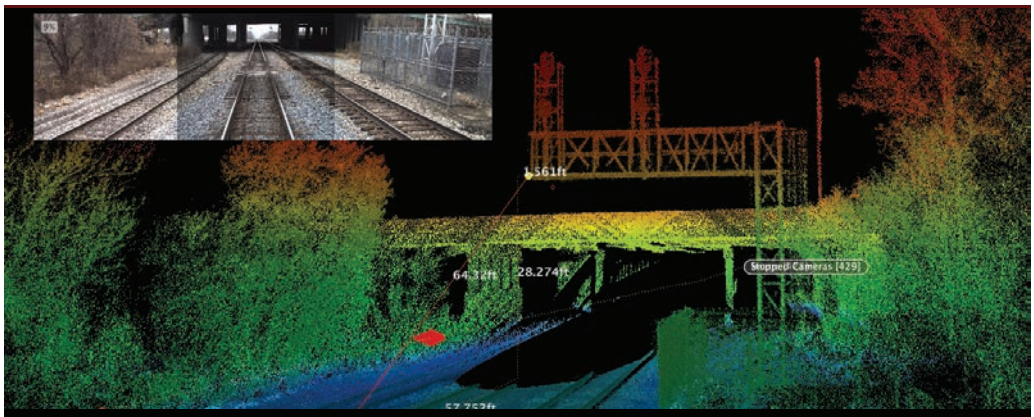
APPLICATION
- Rail and Rail R.O.W. Maintenance

PRODUCTS
- LCMS, LiDAR, GNSS, Photolog

mandli.com

Mandli Rail Maintenance Project

Mandli Communications and Pavemetrics teamed up to provide a major national railway company with data that could help them make maintenance decisions about their rail lines in the future. The railway currently completes manual inspections of their lines as well as automated inspection of the rail geometry, and are evaluating new technologies to improve their rail maintenance and safety.



LiDAR Scan of Railway and Bridge

The rail survey pilot project began at Mandli's offices in Madison, Wisconsin. Using a rented hi-rail vehicle, Mandli Communications outfitted a surveying solution that included mobile LiDAR, dual Pavemetrics LCMS units, and GNSS technology. Through testing, Mandli and Pavemetrics were able to find the optimal height and width of the dual LCMS sensors to create the best images that could be stitched together to create a comprehensive image of the rail. The LiDAR solution utilized included two Velodyne HDL-32E LiDAR heads mounted at the back of the vehicle.

Mandli and Pavemetrics met with rail company officials. The team collected five miles of LiDAR and LCMS data along main lines. The data collected will inform the rail company on the following items: cracks in steel joint bars, missing bolts that hold joint bars together, tie anchors, E-Clip condition, defective ties (wood and concrete), missing or broken tie plates, missing spikes, ballast condition, bridge clearance, right-of-way encroachment and more.

Pavemetrics is a leader in vision systems for the automated inspection of transportation infrastructures. Pavemetrics sensors help infrastructure managers to optimize their maintenance strategies and budgets, and to improve asset performance and safety through fast, accurate, and automatic condition evaluation of transportation infrastructures.

LCMS Scan of Railway

Based in Madison, Wisconsin, Mandli Communications, Inc. is an industry leader in the design and development of highly specialized digital imaging, data collection equipment and operational methodologies for transportation and other industries. With a suite of supporting GIS software and services, Mandli has enabled their clients to design, manage and maintain safe, efficient, and accurate infrastructure projects.

608.835.3500 caya@mandli.com mandli.com