



NTSB RECORD OF CONVERSATION

Investigator name: Troy Lloyd; Investigator in Charge
Investigator name: Joe Gordon; Investigator, Track
Investigator name: Dr. Michael Hoepf; Human Performance & System Safety
Investigator name: Gregory Scott; Signals
Investigator name: Dana Sanzo; Deputy Chief, Railroad Division
Investigator name: Ryan Frigo; Investigator, Operations & System Safety
Mode: Railroad

Date: December 19, 2019, 0900 EST
Persons Contacted: Justin Meko, Kristin Leese, Amtrak
NTSB Accident Number: RRD18FR006

Narrative: On Thursday, December 19th at approximately 0900 EST, NTSB Investigators held a conference call with Amtrak Safety officials.

The purpose of the call was to learn more from Amtrak on ongoing efforts to address issues discovered during the Bowie accident investigation. The following items were discussed:

Item 1. Roadway Worker Technology- According to Amtrak representatives, they have tested multiple systems that provide advance warning of approaching trains. These systems provide audible and visual warning of approaching trains using sensors that activate the warning devices. These systems were tested in multiple track territory. Amtrak has chosen one system (similar to the system used on SEPTA), which can monitor up to 2000' of track. Initial tests demonstrated that the system can be 100% accurate with no false alarms. Although battery life is a limitation in this system, the system does fail safely; when battery power is low, the system provides an alarm. Amtrak has ordered three systems and plans to conduct additional tests when the Spring 2020 production work begins. In order to monitor longer work zones, multiple systems can be used in series to extend the coverage area. Amtrak representatives told NTSB investigators that these systems would be used to supplement Train Approach Warning (TAW) provided by watchmen/lookouts; the systems are not intended to replace watchmen. Amtrak also conveyed



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that developing written procedures and training for employees to use the systems properly and safely is a critical objective.

Item 2. Slow-Order Process- Amtrak representatives provided information regarding the current slow-order process/procedures, including some historical perspective. Amtrak hired an independent firm to analyze train speeds through work zones. The consultants surmised that it was safer for workers when train speeds were lowered from 80 MPH to 60 MPH. When NTSB investigators asked about the uniformity of use regarding the slow-by orders, the Amtrak representatives stated that while the slow-by restrictions are required for larger working groups (dependent on variables such as equipment type, number of workers on the ground, etc.), the use of slow-orders is not “black and white.” The use of slow-by orders is left to the discretion of the Roadway Worker in Charge (RWIC). The RWIC has the authority to reduce train speed in active work zones via a slow-by order at any time. After the Bowie accident, one change was that the 80 MPH slow-by which was required based on equipment types; the 60 MPH slow-by requirement is driven by a review of the entire work location (both workers and equipment). Amtrak stated that there was no plan to change the current slow-by policy. Amtrak intends to ensure that slow-by policies are implemented properly through auditing and testing.

Item 3. Portable Fencing- Amtrak is testing portable fencing for worker protection in multiple track territory. This fencing is made in sections approximately 10’ in length with magnetic bases that affix to the rails. Amtrak plans to use the portable fencing to establish a barrier for an entire work zone or in shorter areas where workers are on the ground. They currently have about 600 sections in hand, but more sections of fencing have been ordered. Amtrak is working to familiarize workers with its use; and has received initial positive feedback from workers and train and engine service employees.

Item 4. Safety Risk Management Process- Amtrak is evaluating the Safety Risk Management process through working groups that include management and field personnel. These groups are



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tasked with identifying the greatest risks in work location and scope in each operating department. Kristen Leese spoke of some of the risks identified in the Engineering Department during this process, which include roadway worker protection, exposure to trains (both high speed and frequency), electrical hazards, and equipment collisions. The findings of these working groups are reported to Amtrak's Executive Safety Council and operating department heads.

Items 5 and 6. Hot Spots, SSWP, and Job Briefings- Amtrak has reviewed, revised, and reintroduced the Hot Spots guide. The revisions include a sight distance chart to aid workers in sight assessments when using TAW. These manuals were not provided to employees between 2014-2018; the representatives interviewed didn't know the historical background of the reason for this lapse. In meetings with the labor leaders, the reason purported was cost savings, but this was not verified. Amtrak also has included a job briefing requirement to walk employees through the sight distance evaluation process and to include this information in a Sight Specific Safety Work Plan (SSSWP).

Item 7. Aerial Stands (for Watchman/Lookouts)- Amtrak representatives commented that they consider aerial stands to be useful. This is especially true in locations where the grade adjacent to the track is significant. Amtrak currently has about 20 portable stands, with more on order.

Item 8. RWP Training- Amtrak submitted their current RWP training program to the FRA for review and approval, although this submission is not currently a federal requirement.

Approximately a year prior to the Bowie incident Amtrak hired nine instructional designers to evaluate the training and develop training fundamental to adult learning principles. Amtrak increased the number of training scenarios to help employees better understand the proper



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application of the rules. Amtrak stated that aside from initial training provided to RWICs, there is no additional RWP training required for those employees.

Item 9. Radio Communication Assets- Amtrak is working to identify locations where communication failures are common along their roads. This initiative is aimed at mitigating problem areas. Amtrak also stated there are no plans to modify the scope of radio usage for worker protection.

Item 10. C3RS and Voluntary Safety Reporting- Amtrak reported that they have reengaged with the maintenance of way union (BMWED) in the voluntary safety reporting system. Amtrak currently has a memo of understanding with BMWED related to safety reporting. The program has been in effect for 18 months, and Amtrak is encouraged by the results so far. BMWED opted not to participate in the system that reported calls to the FRA. Near miss situations that are reported are evaluated by a standing committee and after-action reviews are completed. One after action review resulted in the creation of an Engineering Congress. A collaboration between labor and management where employees at all levels reviewed scenarios and discussed mitigations that could be properly applied. In September of 2019 Amtrak hired a director to manage and enhance all voluntary reporting programs.

Item 11. Just Safety Culture- Amtrak representatives reported that they are committed to implementing a just culture within their organization. Amtrak has contracted an outside party to educate their managers on the principles of just culture. And, Amtrak has eliminated cardinal rules and is using coaching and counseling when non-compliance is discovered except when behaviors are deemed willful and reckless. The goal is to develop trust with the employees to find out why things happen; not just what happened. This change also eliminates some disciplinary actions, such as time off without pay. Amtrak representatives stated that they have streamlined their core values which were “plentiful, hard to find, and not well known”. The core



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values now start with “do the right thing,” which is the core value that Amtrak is focusing on. The other values are “excel together” and “put customers first.” Amtrak’s just culture initiative is led by a committee that includes department VPs and a cross section of operational department heads. The committee has three executive sponsors and the board has been briefed on Amtrak’s refreshed values and drive to establish a just culture across the organization.

End of Summary