



**Crashworthiness/Survival Factors Investigation Attachment
Amtrak's Post-accident Response**

**Joplin, Montana
RRD21MR017**

(4 pages)

NATIONAL RAILROAD PASSENGER CORPORATION

Wilmington Training Center, One High Speed Way, Wilmington, DE 19801



May 12, 2022

Mr. Jim Southworth
Investigator in Charge
National Transportation Safety Board
490 L'Enfant Plaza East, SW
Washington, DC 20594

Dear Investigator in Charge Southworth:

This correspondence is in reference to the tragic accident involving National Railroad Passenger Corporation (Amtrak) train 7 (24) "Empire Builder" that occurred on Saturday, September 25, 2021, in the vicinity of Joplin, MT on the Burlington Northern Santa Fe Railroad. Amtrak is grateful for the opportunity to serve as party to the investigation being performed by the National Transportation Safety Board (NTSB) under your leadership.

As you are aware, Amtrak is in the process of maturing a high-quality Safety Management System (SMS). A foundational element of our SMS is being a robust learning organization. Specifically, an organization that exhausts the time, effort, and energy to thoroughly understand root cause(s) and contributing factors of an accident. Moving forward, this approach allows us to pursue and implement robust mitigations to prevent recurrences of a similar nature. While the "Empire Builder" investigation is ongoing, we have already identified several lessons learned that lead to opportunities for improvement. It is our intention to pursue mitigations for the identified hazards in the near term and in advance of the completion of the investigation. Below is a summary of the areas where opportunities were identified that we will look to mitigate:

- Passenger Safety Systems
 - We are committed to establishing more robust oversight to ensure that all emergency systems such as the public address (P.A.) system and emergency lighting is tested and fully functional in all train cars prior to placing the cars in revenue service.
 - We will be evaluating the need for emergency supplemental communications for use by the crew when the P.A. system is inoperable. We understand that we must establish a most effective backup plan.
- Passenger Communications
 - Unlike in the sleeper cars, the passengers in the coach cars depend on the P.A. system to provide safety information (such as the availability of safety cards). The Passenger Train Emergency Preparedness Plan (PTEPP), Section 11.0 states that **"Amtrak crew members are to conduct frequent, brief, onboard announcements made so new and existing passengers are consistently informed of the actions required should an emergency situation occur"**. We are fortifying our training and procedures to ensure that OBS personnel understand that we do not have the autonomy to establish "quiet periods" and safety information is to be consistently provided for the duration of each trip.
- Battery Securement and Markings
 - We will be improving the securement of batteries to prevent unintended movement both laterally and vertically. This is an area of concern that Amtrak has been evaluating and our commitment to resolving this concern is unflinching.
 - We will be marking our battery compartments with marking that is legible in daylight for 20 feet with contrasting background and retro-reflective decal material.
 - We will be marking the electrical cabinet in the mid-car vestibule to assist emergency responders in locating the emergency power shut off for the train car in the event of an emergency. The marking will be on a retro-reflective or photoluminescent background with contrasting lettering as appropriate for the positioning.
- Inadvertent Seat Rotation

- With new equipment purchases Amtrak has looked to eliminate the hazards associated with inadvertent seat rotation. In fact, in our most recent purchase of train seats, we selected positive retention system seats. We remain committed to continuing to purchase seats with some type of retention system to prevent inadvertent rotation.
- Inadvertently Locked Bedrooms
 - Amtrak is committed to exploring engineering solutions or identifying tools to address passengers activating the door lock into their bedrooms (interior security latch) with crew members unable to disengage from the exterior of the room and being unable to unlock the door to be extricated.
- Passenger Accountability
 - Amtrak understands the importance of developing a manifest that can be utilized by emergency responders to determine the actual number of occupants onboard a train at the time of an incident. We will work to develop an acceptable solution for ensuring emergency responders can be provided with a train occupant manifest.
 - Broader distribution and use of electronic mobile devices (eMDs) by all onboard personnel provides first responders with multiple interface opportunities to assist in passenger accountability post incident. Amtrak is in the process of evaluating the feasibility of providing training to include the use of eMDs for OBS staff.
- Training
 - There exist inherent challenges with performing in-person training for emergency responder organizations across the country. However, Amtrak is committed to pursuing the feasibility of developing and making online training available to the first responder community across our network.
 - Amtrak will, at a minimum, ensure that emergency response organizations are aware that training is available.
 - Providing access to the PTEPP assists emergency response organizations with determining training needs and setting up operational plans in the event of an emergency. It also serves as a valuable resource for emergency rail operations. Amtrak will notify emergency response organizations of the PTEPP's existence and make it available to them.
- Communications
 - Amtrak is revising our crew training curriculum paying particular attention to establishing clear expectations for communications between the crew members, communications with arriving emergency responders and communications between crew members and passengers in an emergency.
 - Amtrak will evaluate and identify a more effective measure to make crew members readily recognizable to passengers, emergency responders and fellow crew members on scene during an emergency.
 - Amtrak will pursue supplemental communications for OBS employees not normally provided radios.
 - Amtrak will clarify roles and responsibilities for onboard crew members in the event of an emergency establishing a chain of command to serve as party representative for first responders until an Amtrak officer can arrive on site. Responsibilities for the party representative will include, being available at the incident command post to assist emergency responders with information such as occupants on board the train, those occupants that require special extrication needs, hazards present in, on or around train cars, location of tools and emergency shut offs and provide a direct line of communications between the Incident Commander and the railroad.
 - Amtrak is committed to ensuring that crew members will receive training in emergency passenger evacuation prior to being assigned to revenue service.
- Resources for Emergency Responders
 - Amtrak will perform benchmarking activities with other transportation providers to identify opportunities to best familiarize first responders with our various types of equipment.

- To aid emergency responders, Amtrak will pursue making schematics for each car in a consist available. The means for making them available will be evaluated to determine whether they are posted at each door or provided to crew members to share.

I trust that the information contained within this letter demonstrates our commitment to thoroughly understanding the opportunities to enhance safety of operations gathered in the initial phases of the investigation. More importantly, I'm confident that the post-accident actions we are taking are formidable and appropriate.

Sincerely,

A black rectangular redaction box covering the signature of Justin Meko.

Justin Meko
Vice President
Operational Safety
National Railroad Passenger Corporation (Amtrak)