Survival Factors Attachment-
Record of Conversations-
Interviews with Amtrak
Representatives

Joplin, Montana
RRD21MR017

(18 pages)

(Copies of the record of conversations were provided to the Amtrak representatives for comment and revision. Only Amtrak's Senior Manager of Equipment Engineering provided comment and suggested a revision that was incorporated into the docketed draft of the ROC. It should be noted that Amtrak representatives were given the opportunity but declined to sign the documents.)

NTSB RECORD OF CONVERSATION

Investigator name: Sheryl Harley, Investigator, Crashworthiness/Survival Factors Group
Mode: Rail

Date: January 14, 2022
Marie LaPosta and Dave Skillman, Amtrak
NTSB Accident Number: RRD21MR017

Narrative: On Friday, January 14, 2022, at about 1:57 p.m., a Teams meeting was held to discuss the issues and findings related to the Crashworthiness/ Survival Factors investigation of the Amtrak derailment that occurred in Joplin, Montana on September 25, 2021.

Investigator Harley advised the participants that the intent of the meeting was to provide Amtrak with an overview of the various safety issues and discussed realistic solutions to these issues and provide Amtrak with an opportunity to comment and to provide additional information regarding Amtrak's response to the derailment as a whole and these issues specifically.

Issue #1: HAZARD IDENTIFICATION MARKINGS

Investigator Harley advised that as previously discussed, emergency responders encountered hazards associated with unmarked battery compartments and the inability to locate the emergency power shut offs for the train car.

Mr. Skillman commented that marking the compartments would be something that Amtrak could do easily. The question of concern is about the disconnecting of the power to the car which would also affect the emergency lighting.

Investigator Harley: Emergency responders first concern is to identify the presence of hazards, that includes the location of the battery compartments which pose a potential hazard to the responders. It is usually a last resort for responders to disconnect batteries especially involving heavy equipment such as train cars; however, there is a need for emergency responders to be able to locate the emergency electrical cabinet to shut off the power to the train car to prevent a fire. This is usually more desirable than trying to disconnect the power at the battery box.

Mr. Skillman advised that the compartments are already marked and believed that the lack of markings on the accident train cars may be related to the derailment itself.

Ms. LaPosta advised that the battery compartments on the Superliner fleet are not marked. She noted that on the single level fleet cars where the batteries hang underneath, those cars are marked. (Investigator Harley commented that during the examination of the accident train cars, it was noted that none of the battery compartments were marked, to include the cars that remained upright and basically undamaged. **(Investigator Harley reading FMCSA's marking regulations as an example of how to potentially accomplish marking the battery compartments to include legible wording, contrasting background, visible in the daylight at least 50 feet away, and visible at low light, no light situation [photoluminescence?])**

Mr. Skillman advised that photoluminescence would require a power source, that the correct type of enhancement for visibility is the use of retro-reflective materials in decals for marking the outside compartments. **(Investigator Harley acknowledged that "retro-reflective" is a more accurate description for decaling or marking the battery compartments and electrical cabinets to achieve the necessary conspicuity in low light/no-light situations.)**

Issue #2 EMERGENCY RESPONSE RESOURCES- CAR SCHEMATICS

Investigator Harley: During the interviews with the emergency responders on the scene and as part of Amtrak Part 239 debrief, several of the responders' reported difficulties in the search and rescue operation. The responders did not know the layout of the train cars and found that during their sweep through some of the cars, the responders inadvertently missed spaces (rooms) where victims could have been potentially trapped. The responders, at the debrief, had suggested that making car schematics available to them at the scene would facilitate the search and rescue operations, prevent the possibility of missing trapped victims, and allows a more rapid and accurate assessment of the scene.

Investigator Harley noted that during the on-scene inspection of the train cars, several of the cars had car schematics posted near the end car doors, and some had schematics posted at the mid-car door vestibules. However, schematics were not located in every car, or in a standardized location. The investigator could not state whether this signage possessed any type of photoluminescence or reflectivity.

Ms. LaPosta advised that providing the car schematics is not required by regulation. Though the newer Venture cars do have the train car schematics posted within the car and possessing the required photoluminescence. Ms. LaPosta noted the schematics in these cars include the layout/drawing of the car and shows the location of the exits but acknowledged that the signage is not provided at every door. It is possible to post train car schematics at locations such as end car doors and the car's vestibules where it is likely that passengers would be using those doors as a means of egress.

Ms. LaPosta advised that she doesn't know if these car schematics are required by regulation in newer cars, but advised it was not a requirement for the older train cars. It is possible for Amtrak to explore providing this type of information, like seatback information cards, which would include the location of the electrical cabinets.

(Question: Mr. Skillman to Investigator Harley: Regarding standard markings of power disconnect. Investigator Harley requested clarification on the question whether Mr. Skillman was referring to the standardization of how the power is disconnected or how it is denoted by the markings. Mr. Skillman stated that he was referring to the emblem included in the layout or schematic showing the location of the power shut off. **(Investigator Harley advised that to her knowledge, there is no standardization regarding how the electrical cabinet/location of emergency shut off is marked or noted on placards or signs. It may be a matter of training emergency responders to know what to look for when viewing the train car schematics.)**

Issue #3 PASSENGER ENTRAPMENT

Investigation Harley advised that during several of the interviews, one incident of note involved a trapped passenger in a sleeper car that raised an issue about Amtrak personnel being able to access an incapacitated passenger who has locked themselves into their room. In the incident, a female passenger in the last sleeper car (2730) had secured the interior lock of her bedroom prior to the derailment. After the derailment, the female passenger became trapped between the side of the car and the bunk, making her unable to unlock the interior latch to allow rescuers to extricate her. The emergency responders smashed the glass door pane, above her head, to climb in and disengage the lock. (Questions: As per previous conversations with Mr. Skillman in Beech Grove, has Amtrak considered any further about the development of a tool that could disengage the interior room lock in an emergency when the room occupant is incapacitated or unable to do so.)

Mr. Skillman (who participated in earlier discussions about this, provided further explanation to Ms. LaPosta) The internal room security locking mechanism includes a latch that folds down and a keeper that holds the latch in place. Mr. Skillman advised that he was looking into the development of a tool, like a blade with a tapered edge (not a sharp edge) that could be slid through the door to disengage the lock. The tool would be kept on the keyring of the conductor. It couldn't be kept in the emergency cabinet due to a lack of security.
Ms. LaPosta confirmed that such a tool could not be publicly accessible, for security reasons.

(Question: By Investigator Harley inquiring about keys carried by car attendants especially those in the sleeper cars. Do they unlock other types of sleeper car room doors)

Ms. LaPosta advised that the "coach key" is a skeleton key that unlocks the end car doors, automatic side doors, if train is so equipped but do not unlock the rooms in the sleeper. Each room has a doorbell which the car attendant rings to notify the room occupant that the attendant is at the door and to open the door.

Issue #4 SEAT ROTATION

Investigator Harley acknowledge that Amtrak had been purchasing seats with the positive retention system to prevent inadvertent rotation. However, it was noted after re-interviewing the assistant conductor that the entrapment of the female passenger, in the first uncoupled coach car (the farthest west car identified as the 14 Coach) was caused by the inadvertent rotation of a row of seats. During the derailment, the seat in front of the passenger rotated as she was thrown forward. At some point, the passenger ended up between the seat and the interior side of the train car. The seat then rotated back into position, pinning the passenger between it and the car sidewall. The assistant conductor advised that the seat pedal lock mechanism was found broken and rescuers were unable to rotate the seat to free the passenger. Subsequently, the fire department cut the seat out.

Ms. LaPosta provide clarification to the statement made by Investigator Harley:
Amtrak purchased the new seats with the positive retention system for a different type of train car. The seats were purchased for the newer fleet cars and were not retrofitted for the older cars, such as the Superliners which were built in 1970s. The Superliners have a permanent track that the seat frames can be detached from and replaced if needed. The same seat frames can last for the life of the train car. The train cars with the new retention system include the Acela and Surf liner fleets.

Investigator Harley acknowledged that it may not be feasible to retrofit the newer seat technology into these legacy fleet cars. Instead, the NTSB acknowledges that Amtrak has been purchasing these seats for their newer fleet cars and that the inclusion of the positive retention system improves rail passenger safety. It is the NTSB's position to acknowledge this safety accomplishment, post DuPont, and hope that Amtrak continues to support the new technology as it looks to find a new vendor for these seats due to the current manufacturer going out of business.

Issue #5 WINDOW RETENTION

Investigator Harley spoke of the ongoing investigation and current Volpe study regarding the issue of window retention. Investigators acknowledged the problem of balancing the need to keep passengers within the train car during an accident and the need for the easy removal of the windows to permit passenger egress and emergency responder access to the car interior during an emergency.

Ms. LaPosta advised that Amtrak is pleased that Volpe is looking into this issue. This is certainly an issue that Amtrak has been studying as well. The determination of the various tradeoff between windows being able to remain in and when they must come out is an issue that needs to be examined by Volpe who can conduct studies and performing the needed technical analysis for determination of acceptable tradeoffs and provide guidance from the FRA. This is something that Amtrak is not capable of accomplishing in house.

Mr. Skillman explained that this is not a promissory note as a representative of Amtrak, but eventually the train cars involved in this accident will be scrapped. It is a possibility that, depending on Amtrak's willingness to donate the cars, that they could be used for testing purposes in the study regarding this issue**. Ms. LaPosta** advised that in the past, Amtrak has donated equipment for studies such as this. Amtrak frequently donate cars for testing use, museums and specifically to provide documentation of wreck damage for use in studies.

Issue #6 EMERGENCY LIGHTING

Investigator Harley advised that during the interview with the LSAs in the Diner car, it was discovered that the emergency lighting was inoperable in that car and despite Amtrak being aware of it, the train was allowed to board passengers and leave Chicago. As per NTSB requests, Amtrak supplied copies of the train car inspections performed prior to the train departing the Chicago station. Investigator Harley noted that the documents don't articulate any reported issue with the emergency lighting or document the efforts to get the lighting to function as witnessed by the LSAs. Specifically, the LSAs advised that maintenance crews boarded the train and spent time "flipping switches" trying to determine the problem with the emergency lighting. The documents provided do not include any documentation that sounds like the efforts observed by the LSAs. (Question: By Investigator Harley: Could Ms. LaPosta and Mr. Skillman examine the paperwork provided by Amtrak, currently in Kiteworks, to ensure that the investigator has read it correctly and did not misinterpret the document. Investigator Harley advised that post-derailment, passengers, emergency responders and train crew members report that the emergency lighting failed in seven cars, to include the Diner Car.) *The list of the seven affected train cars were read out.

Ms. LaPosta advised that the cars in that train had the emergency lighting redone in the last few years. It is "disturbing" that there may be an issue with the emergency lighting in those cars so soon after the modification. Mr. Skillman advised that the battery shorting out would have cause the failure of the lighting however, the photoluminescence strip should have provided adequate light especially immediately following the derailment.

(Upon request, Investigator Harley verbally provided the list of train cars with no emergency lighting post derailment for a second time.)

Ms. LaPosta advised that the issue of most concern is the lost of emergency lighting in the train cars that remained upright. Amtrak, as required by regulation, conducted a test sample of the emergency lighting in its train cars. Ms. LaPosta checked and advised that none of the train cars involved in the derailment were part of this sample testing but the cars that were tested were the same type and with the same lighting design.

Final Question:
Investigator Harley advised that during the interview with the car attendants, it was apparent that they were unaware of who was responsible for checking emergency cabinets and ensuring that everything was there; though several of the car attendants reported that they automatically check the cabinets in their train cars.

Ms. LaPosta advised that the checking of the emergency cabinet is part of the daily inspection conducted by Mechanical. She noted that items that frequently go missing is the first aid kit which, once opened, must be replaced and Glow Sticks which amazingly go missing each year "around the end of October".

Investigator Harley advised that the investigation found no issue with the emergency cabinets or the equipment within. In fact, during the rescue operations, crew members used many of the tools located in the cabinets during the extrication of passengers. It was the emergency responders that noted it would have been convenient to know that the tools were there, especially the glow sticks which would have been useful in those cars without emergency lighting and the darkness if the interior.

Ms. LaPosta reviewed the various action items as discussed in the meeting to include the development of the tool to assist in the disengagement of room locks that should be available to onboard personnel. The train car schematic or possibly information sheets that can be provided at the scene of the derailment to emergency responders and "lift crews" who would be called upon to lift the cars during the search and rescue operations. Amtrak recognized the need to provide this information especially when the train cars, in Joplin, had to be lifted during the initial emergency response. Both Ms. LaPosta and Mr. Skillman would follow up regarding the inquiry into the emergency lighting, inspection, and documentation.

Mr. Skillman advised that he made notes as part of his observations regarding the various issues and would investigate the question of the emergency lighting.

Investigator Harley advised that she wanted to update Amtrak on the outcome of a potential safety issue raised by an FRA investigator on the scene. The issue was able to be addressed during the follow up investigation visit to Amtrak's Beech Grove facility. This allowed the investigator to conduct better testing to determine if an issue existed regarding the operation of the end-car doors. It was determined that no issue existed that the problem stemmed from

the way the initial tests were conducted on scene. The investigator would follow up with the initial FRA investigator regarding the findings.

Ms. LaPosta advised that another item that is being examined is the possibility of placing some type of markings on the roof to help emergency responders locate a part of the roof that can be cut to facilitate the extrication of passengers. The issue, that needs to be addressed, includes finding a location in the roof that is free from electrical wiring. Currently, it is unknown whether there is a location in the roof (Superliner cars) that would permit cutting without the hazard of cutting through wires. The second safety issue is that the Am Fleet and Superliner I cars have roofs that are composed of asbestos. Mr Skillman clarified that it is a specific type of asbestos used for sound deadening in the train cars. Ms. LaPosta advised that it still pose a potential hazard if the emergency responders cut through the roof. Amtrak is still examining if it possible to mark locations where roof extrication can be done without the electrical hazard.

Meeting ended at 2:57 p.m.

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End of Summary

I have reviewed this document and found it to be true and accurate to the best of my knowledge.

_____

Print Name

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Sign Date

NTSB RECORD OF CONVERSATION

Investigator name: Sheryl Harley, Investigator, Survival Factors Group
Mode: Rail

Date: January 7, 2022 (EST)
Mary Carlson-Bis, Amtrak Director of Emergency Management
NTSB Accident Number: RRD21MR017

Narrative: On Friday, January 7, 2022, at 10:00 a.m., a Teams meeting was held by Ms. Carlson-Bis, Amtrak Director of Emergency Management with Investigator Harley of the NTSB, to discuss the status of the Survival Factors investigation and issues arising out of that investigation.

Emergency Preparedness Plan:

Investigator Harley advised that she had obtained a copy of the BNSF-Amtrak Joint Emergency Preparedness Plan (EPP). During the interviews with emergency responders and other representatives from local government agencies, the investigator handed the parties a copy of the plan. The various group of individuals reported that they had never seen the document before.
(Question by Investigator Harley: How does Amtrak disseminate the EPP to various emergency responder organizations that will likely respond in the event of an emergency.)

Ms. Carlson-Bis advised that the EPP is developed in response to FRA regulations by Amtrak and BNSF and reviewed every three years or when substantive changes occur (changing of contact information such as name or telephone number) by the FRA. The document is intended for the railroads and Amtrak doesn't share the EPP with emergency responders. Instead, Amtrak conducts training for emergency responders, "Passenger Train Emergency Response" training and some of the information contained in the document is shared with emergency responders during the training but otherwise the document is for use by the railroads only. Portions of the document that may be provided during the emergency responder training includes safety procedures such as the communications between Amtrak and the Host railroad to ensure that (train) traffic has been stopped and that the relevant information has been provided to arriving responders.
(Investigator Harley: (reading from section 9.0 of the EPP) *"Distribution of Emergency Plan: In addition to training requirements, Amtrak shall also ensure that an appropriate number of copies of this Plan (or applicable portions thereof) are offered to all emergency response organizations that may be required to participate in an emergency situation or simulation. Plans will be distributed by hard copy, electronic mail or electronic document sharing websites if available.".* Question: Have I mis-read or misinterpreted what is written in the document regarding Amtrak's requirement to provide this plan to emergency response organizations.)

Ms. Carlson-Bis advised that the document is not provided.

(Investigator Harley: Preamble: As per the interviews with emergency responders and information obtained during the Part 239 Debrief, most of the responders had never received training in rail emergencies. The last known training of this kind was held in Shelby, Montana approximately 15 years ago and attended by the Assistant Fire Chief. The Fire Chief, who is also a city of Chester employee, was sent to another part of state to attend training offered by Amtrak but that training occurred 8 years ago. **(Question: Investigator Harley: How is the need for emergency responder training being handled by Amtrak (as a whole) and in this part of Montana (specifically.)**

Ms. Carlson-Bis advised that training is handled by Amtrak's Regional Emergency Managers (REMs). The REMs are now assigned to States as well as routes. Once a request for training has been received, the REM facilitates the request. Since COVID, Amtrak has petition FRA to allow Amtrak to make these training courses, computer-based, and available online. The FRA has now approved Amtrak's request to put these courses online. In addition, Amtrak will also track course completion and facilitate the next step or level in training to include "hands on" training with the equipment. Ms. Carlson-Bis advised that Amtrak doesn't have the capacity to handle the training of all the emergency responders across the country. But the idea is to provide the entry level course online.

Ms. Carlson-Bis advised that recently, emergency response training, had been moved under the umbrella of Amtrak's Emergency Management Division. Before October 1st, the program was administered by the Amtrak Police Department under Emergency Management and Corporate Security. The Amtrak Police still provides training to law enforcement agencies called "Rail Safe" but that is not part of the FRA regulatory requirements.

Ms. Carlson-Bis advised that she believed that Amtrak was not reaching enough people and that by providing computer-based training with a more robust website to include ease of use along with tracking and strategic applications can improve emergency responder training.

(Question: Investigator Harley: Amtrak requires emergency response agencies to request training. Amtrak is not proactively providing the training)

Ms. Carlson-Bis advised that in some areas, training is provided only by request of the agencies. In some areas serviced by Amtrak, Amtrak is proactive reaching out to offer training through advocacy. This is especially true in states that have multiple trains servicing them, such as the Northeast Corridor where some states will see 4 to 8 trains a day compared to areas that see only two trains a day. In addition, Amtrak is now tracking its outreach. Ms. Carlson-Bis advised that Amtrak has experienced instances where it has offered training, but the local organizations

failed to "take up" Amtrak on its offer. These incidents need to be tracked as well as part of Amtrak outreach efforts.

Communications

Investigator Harley advised that during interviews with emergency responders, passengers, and Amtrak employees (BOS), it was determined that issues involving communications arose during the aftermath of the derailment. Investigator Harley advised that for this discussion, the communications issues will be broken down into three parts.

Part 1: Crew Communications with arriving Emergency Responders

Interviews with emergency responders revealed:

1. Arriving emergency responders were not immediately met by a representative from the train crew. Emergency responders initially was provided no information on the number of passengers on board the train, whether passengers needing special assistance to evacuate the train were present and assisting with navigating the train interior and potential hazards.
2. Eventually, an Amtrak employee provided a paper copy of the passenger manifest to the Incident Commander, who found the document undecipherable given the time limitation during this mass casualty incident. **[Conclusion: Amtrak "Passenger Manifests" are not readable by individuals not within Amtrak's corporation.]** The crew member that provided the manifest advised that it would require a calculator to ascertain the number of passengers on the train. The crew member did not remain at the command post to assist emergency responders.
3. The Incident Commander (as well as investigators from the NTSB) found that on the back of several manifests, crew members had added names. When asked by the Incident Commander, the crew member that provided a copy of the manifest could not say whether the names (written on the back of the document) represented passengers already on board or additional occupants.

(NTSB investigators noted that as many as 61 names had been written on the back of some of the manifests.)

4. During the search and rescue operations, Amtrak crew members were not readily available to assist emergency responders in locating those spaces where passengers could potentially be trapped, identifying hazard spaces such as the (unmarked) battery compartments, containing batteries damaged in the derailment, which also posed a hazard to the

responders and to passengers. In one instance, the rescue operation was hampered by the inability of responders to locate the emergency power shut offs for a train car when wires began to arc.

Part 2: Communications between Crewmembers

Despite the "Chain of Command" outlined in the Emergency Preparedness Plan and the training provided by Amtrak, communications between members of the crew were inadequate and resulted in confusion for both crew members and passengers alike.

1. Immediately following the derailment, the conductor advised that he left the Transition Sleeper/Crew Dorm car and ran to the rear of the train to assist in passenger extrication. Four crew members (BOS) were in that car at the time of the derailment. The conductor failed to communicate with them, providing clear, concise instructions. The conductor also did not delegate his authority to another member of the crew or an abled-bodied passenger.
2. Interviewed BOS crew members advised that after the derailment they attempted to locate the conductor to obtain instructions about passenger dispositions such as the need for evacuation. When conductor could not be located, the crew members began searching for each other.
3. Amtrak provides communication devices, radios, to conductor, assistant conductors, and engineers. Communications between crew members (BOS) is provided by the onboard P.A. system which rarely works after a serious accident. Because the car attendants (OBS) had no other means of communications, they were forced to physically seek out one another and conduct face to face communications.
4. One of the car attendants realized that no one had taken charge of the scene or provided the crew members with instructions on the disposition of the passengers, so the attendant took charge and provided leadership and command authority at the scene and **enable the crew to function more effectively as a team.**

Part 3: Crew Communications with Passengers

Information regarding crew communications with the passengers was obtained during interviews with both the passengers and the car attendants (BOS).

1. During the interviews with the passengers, several complained that members of the crew disappeared from their train cars.

a. Crew members advised that they physically checked on the passengers in their car before leaving the car to look for the conductor or other car attendants. Passengers were initially advised to shelter in place to include the passengers on a train car where the fire alarm had activated indicating that the car was on fire and to evacuate. The car attendant advised that there was no fire and no immediate need for passenger evacuate, so he told the passengers to remain in their rooms. However, the alarm continued to sound, and the car attendant could not be located by the passengers in the car. The failure of the attendant to provide information or designate an abled-bodied passenger (as permitted by the EPP) created confusion and panic in that train car.
b. It was also noted that in three cars, the assigned car attendant was injured in the derailment and could not perform his/her duties.

2. Several passengers erroneously reported that a female passenger had to take charge of the scene after the crew could not be located.
    a. The female described by the passengers was identified as one of the BOS crew members. At the time of the derailment, she was off duty and out of uniform. Several of the passengers failed to recognize her as a member of the crew.
    b. The attendant, in question, reported difficulty in obtaining passenger compliance with instructions because the passengers failed to recognize her as a member of the crew.

(Investigator Harley suggested that Amtrak's issuance of high visibility vests could assist passengers to recognize crew members and facilitate better compliance with instructions and assist crew members with locating each other in a crowd.)

3. Several passengers reported a "loss of faith" in the crew and their ability to ensure their safety. This resulted in several passengers taking matters in their own hands and acting in a reckless manner.
    a. One incident, reported by several witnesses, it began after the car attendant had left the train car (without informing the passengers he was going to do so) and later returned to order the passengers to evacuate. The attendant was confronted (verbally) by two irate passengers who advised that they were no longer going to follow his instruction because they felt that Amtrak (as a whole) and the car attendant (particularly) was incapable of keeping them (the passengers) safe. The two individuals deliberately ignored the car attendant's instructions to evacuate

through the right-side mid-car door which was deemed the safest means of egress. Instead, the two men entered a room on the left side of the train and with the help of another passenger, removed the emergency window and jumped out of the train car. One of the witnesses advised that she was tempted to follow the two men because she too had lost faith in the car attendant. However, she exited the train via the mid-car door as instructed on the request of her spouse.

Take-Aways:

Ms. Carlson-Bis advised that there were a lot of take-aways and training potential that resulted from listening to the passenger interviews:

- Additional training modules can be folded into the training already required by regulations for train crews that can address many of these issues.
- Issuance of high visibility clothing to assist crew members and passengers' ability to readily identify the crew is something that can be implemented easily.
- Additional training can be added to cover topics such as incident scene management to address
    - Primary responsibility of conductor to
        - Bring crew together
        - Provide clear, concise instruction and assignments
        - The conductor or designee requirement to integrate into the on-scene incident command
        - The ability to designate another crew member in the event of incapacitation or whenever necessary
        - The need to re-enforce, to include OBS (car attendants), that they are empowered to designate someone (to include an abled-bodied passenger) in their stead to ensure the adequacy of communications between the crew and passengers during an emergency.
        - Realization that there may be a hesitancy by employees to take control due to fear of penalty or accountability

Ms. Carlson-Bis advised that lesson learned from rail accidents are used to improve crew training. She recounts a prior Amtrak accident where a crew member was handed a radio by the conductor. The employee had never been trained on how to use the radio. This resulted in a modification of Amtrak's training to include instructions on the use of the radio.

- A potential solution to the communications issue may be providing access to a radio for OBS employees in the event of an emergency.

(Question: Investigator Harley: Would this training also include training the OBS on the use of eMDs)

Ms. Carlson- Bis advised that that has already been included in the upcoming training for 2022. It was noted that Amtrak provides this training to its employees every other year.

Passenger Accountability

Investigator Harley advised that the discussion into the issue of passenger accountability can be divided into two parts. The first part encompasses the ability of emergency responders to identify the number of victims on the scene and the second is about passenger safety to include safety precautions and the need to implement security measures.

Ms. Carlson-Bis explained the difficulties with the "Passenger Manifest":

1. Amtrak must acknowledge that the personnel and organizations that it will be dealing with during an emergency are not railroad oriented. This results in confusion regarding passenger accountability and specifically the passenger manifests. To Amtrak, a passenger manifest is a document that details the number of tickets sold for a particular train. The manifest does not provide a true accounting of the actual number of passengers on the train. The manifest details the proposed destinations, where passengers are ticketed to board or disembark, but due to the nature of rail travel, does not provide an actual accounting (of physical persons on board). Though Amtrak can usually provide a good estimation (an average number) of passengers expected to be onboard.

(Investigator Harley noted this is certainly different from the expectations or the knowledge of most emergency responders that assume that a "passenger manifest" is a document used to identify the actual number of passengers onboard a train.)

2. The eMDs, on the other hand, can provide better accounting accuracy for the number of passengers on the train, within a smaller margin of error. The eMD is a tool used by train conductors to scan passenger tickets and thus provides an accounting of the passengers onboard.

Ms. Carlson-Bis acknowledged that there are limitations to the accuracy of the eMDs. The example, an accident occurred right after the train left the station, where the conductor may not have had the time to walk through the train and scan the tickets of the newly boarded passengers. **[NTSB Conclusion: The information stored on the eMDs is potentially more useful than the current "passenger manifest" to emergency responders.]**

Current considerations by Amtrak:

a. Amtrak is examining the feasibility of equipping the OBS with eMDs. Another possibility is the downloading of the eMD app to a cellphone which would allow the information to be available to the OBS.
b. Amtrak has developed templates to better assist with the issue of passenger accountability.

Investigator Harley discussed the issue with the passenger manifest related to the inability of the lay person to decipher the document expeditiously and the realization that the manifest does not represent the information needed most by emergency responders on the scene.

Ms. Carlson-Bis noted that one other possible solution is to come up with a different word or terminology to accurately express what information is being requested and what information is being provided. Ms. Carlson-Bis understands that emergency responder's definition of a passenger manifest is like the passenger list maintained by airlines "after the cabin door on a plane has been closed' which provides the exact number of souls on a plane.
[NTSB Conclusion: There is a need to get away from rail terminology when communicating with emergency responders, especially if that terminology is specific to one rail entity.]

(Question: Investigator Harley: About the minimum training to be received by an employee prior to deployment revenue service)

During the interviews with the car attendants, one individual reported that he had never received training in emergency evacuation of passengers. The crew member advised that he was hired during the Pandemic in 2020 and immediately furloughed. The employee advised that in August 2021, he was called back to work and underwent accelerated training because of crew shortages.

Ms. Bis advised that Amtrak has an initial onboarding, new hire curriculum delivered by the technical training group. The training known as PREPARE encompasses modules that cover various aspects of the job. Passenger Evacuation is a part of that training, and it is very unusual that an employee would be operating on a train (in revenue service) without receiving the basic

emergency passenger evacuation training. * Ms. Bis advised that she would investigate further but noted that this certainly isn't an organizational norm.

Regarding the other aspect of passenger accountability (safety/security issues), Ms. Bis acknowledge that it is very difficult to account for those passengers who don't want to be documented on the train and "walk away" after the event. (Brief discussion into the Tucson, AZ incident on the Amtrak train.)

Safety Briefing

Investigator Harley advised that through interviews with passengers and car attendants, there appeared to be a randomness in the providing of safety information to the passengers upon boarding. In the sleeper cars, passengers are more likely to receive the information. Other factors that determine whether a passenger receives any basic safety briefing (acknowledging the availability of the safety card) depends on the crew. Information is passed along, especially in the coach cars, by the P.A. System. After 10 p.m., P.A. announcements are not made. Announcements are more likely to be given at major station stops, when large groups of passengers' boards rather than an individual, etc.

Ms. Carlson-Bis advised that Amtrak recognizes the need to inform passengers of the safety cards provided in the train. As part of the need training curriculum, conductors are being told to carry a safety card in their back pocket and as they scan the passenger's ticket, show the card to the passengers, and point out the location of the card at their seat and the need to review it. This ensures that every passenger has the benefit of a safety briefing.

Additional areas being examined by Amtrak for improvement:

Amtrak is examining the adequacy of their placarding on the interior and exterior of cars regarding emergency egress.

Interview terminated at 11:21 a.m. (EST)

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End of Summary

NTSB RECORD OF CONVERSATION

I have reviewed this document and found it to be true and accurate to the best of my knowledge.

_____

Print Name

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Sign Name