PHILLY VOICE

MAY 17, 2016

NTSB: Radio conversations about SEPTA incident distracted Amtrak 188 engineer prior to crash

Regional Rail line windshield had been shattered by object minutes before fatal derailment

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The engineer operating the Amtrak train that derailed in Philadelphia last year lost "situational awareness" when he was distracted by radio communications about a nearby SEPTA train emergency, the National Transportation Safety Board announced Tuesday morning.

Engineer Brandon Bostian accelerated Amtrak Train 188 to 106 mph shortly before entering Frankford Junction, where it derailed, killing eight people and injuring more than 200 others.

The radio conversations at the focus of the investigators report were about a SEPTA Regional Rail train that had been struck by an object minutes before Amtrak 188 entered the area.

NTSB board members voted 3-1 on Tuesday to accept that the distraction from the radio conversations about the SEPTA train was among the probable causes of the Amtrak 188 crash.

NTSB investigators also said darkness may have added to Bostian's confusion, noting there were fewer visual cues to identify where he was traveling.

At 106 mph, Amtrak 188 was traveling too fast for the rail lines in Frankford Junction, which has a 50 mph limit. The NTSB concluded Bostian may have thought he was traveling on the rails after Frankford Junction, a strip of tracks where the speed limit does increase to 110 mph.

The NTSB also blamed the lack of a Positive Train Control system, a railway safety technology that would have prevented the derailment. However, the NTSB said it cannot penalize the railroad for lacking the PTC system on its lines until 2021.

"Unless PTC is implemented soon," NTSB chairman Christopher Hart warned, "I'm very concerned that we're going to be back in this room again, hearing investigators detail how

technology that we have recommended for more than 45 years could have prevented yet another fatal rail accident."

The board's conclusion aligned with news reports from Monday that the probable cause of the crash was Bostian being distracted by radio conversations.

Attorneys Robert Mongeluzzi and **Tom Kline**, who represent 32 passengers of Amtrak 188, disagreed with the NTSB's conclusion, saying investigators failed to ask Bostian probing questions and based their conclusion on speculation.

"Why was he accelerating when he was going into that curve, and then why did he suddenly decelerate?" Kline said. "He knew where he was at some point when he recognized that the curve was ahead.

"... Yes, he probably was concerned about the SEPTA train incident that occurred. It was equally plausible that he then decided that he was going to get out of dodge. He was going to get out of that neighborhood, and he accelerated the train."

After the derailment, Bostian told investigators that he recalled radio transmissions from a SEPTA operator who said a rock had shattered his windshield. He was monitoring the radio traffic until about a minute before his train reached its peak speed, investigators said.

Mongeluzzi said the Amtrak engineer changed his testimony, noting he first told the NTSB he had no memory of the accident but later "claimed 20 distinct and different memories," which included everything but the time when he was accelerating into the junction.

Bostian suffered a head injury during the derailment that may have impacted his memory, NTSB investigators concluded.

"It's not so much the stress of the event as it is the blow to the head," said Dr. Mary Pat McKay, NTSB chief medical officer. "It is the blow to the head that causes the amnesia, and it is not unusual."

The lawyers also wanted the NTSB to hold Amtrak accountable for not having an Automatic Train Control system installed on the northbound rails of Frankford Junction. The railroad had installed the technology, which differs from PTC, on the southbound line.

"Shortly after this accident, Automatic Train Control was added, not just on the northbound curve here at Frankford Junction, but at multiple other locations across the United States," Mongeluzzi said. That established "how easy and inexpensive it would have been."

A Temple University professor who was onboard the train when it derailed said he was stunned by the findings. Duy Nguyen, of Teaneck, New Jersey, suffered a cut on his head and fractures in his back. He attended Tuesday's NTSB hearing.

"The part that doesn't make sense is how does one accelerate when you're distracted?" Nguyen said. "The inclination is to slow down." He added: "Part of me is mad at Amtrak. Part of me is resigned that there's something that happened and you have to endure and survive and move on."

NTSB investigators said Bostian's cell phone did not show any activity while he was operating the train. Alcohol and drug use were ruled out as possible factors, too.

Investigators also said Bostian had never been disciplined for operating infractions during his career and that his crew members thought highly of his abilities as an engineer.

Speed limit signs are not posted along the tracks because there are differing speed limits for freight trains, Acela trains and regular Amtrak trains, investigators said. Instead, Amtrak engineers rely on memory to know the varying speed limits along their respective routes.

"It stresses this point of once you get lost, you're in trouble," NTSB Investigator Ted Turpin said. "I think in this circumstance, that's what happened."

But NTSB investigators stressed that PTC could have prevented the derailment.

NTSB Vice Chair T. Bella Dinh-Zarr urged the board to more heavily emphasize the lack of PTC in its official conclusions, but the she did so to no avail. She cast the lone dissenting vote when the board adopted its conclusions.

"Eight people have died, dozens more have been injured — life-changing injuries — because the government and industry have not acted for decades on a well-known safety hazard," Dinh-Zarr said. "I ask: Why does our probable cause focus on a human's mistake and what he may have been distracted by?"

The NTSB has cited the lack of PTC as a contributing factor in 25 crashes during the last 20 years. That included deadly wrecks in Chatsworth, California, in 2008 and New York City in 2013.

PTC had been installed at Frankford Junction but was still being tested at the time of the crash.

The NTSB recommended research into seat belts in rail cars and ways to secure luggage that can become missiles in a derailment, training for crew members on multitasking, and using new equipment and procedures to help engineers track their location in spots without PTC.

Amtrak released a statement saying it has "taken full responsibility for and deeply regrets the tragic derailment." It pledged to carefully review the NTSB findings and recommendations and quickly adopt them where appropriate.

Amtrak has installed PTC on all the track it owns on the Northeast Corridor from Boston to Washington. A 56-mile stretch from New Rochelle, New York, to New Haven, Connecticut, is owned by other railroads and is expected to have automatic controls installed by the end-of-2018 deadline.