I, Kenneth J Hylander, have read the foregoing pages of a copy of ~~my~~ Richard Anderson's testimony given during a follow-up interview stemming from NTSB's investigation of the collision of Amtrak Train 91 with CSX local train F777 on February 4, 2018, in Cayce, South Carolina and these pages constitute a true and accurate transcription of same with the exception of the following amendments, additions, deletions or corrections:

PAGE NO:	LINE NO:	CHANGE AND REASON FOR CHANGE
6	17	Northwest not Northwestern
9	1,2,4	Air Lines not Airlines
11	18	for clarification... technical operations not tech ops
13	15	"Austin" not "Boston"
32	10	"Hidden by" not "Hitting"
40	17	"AWARE" not "Aware"

I declare that I have read my statements and that it is true and correct subject to any changes in the form or substance entered here.

Date: _____ Witness: _____

Due to Richard Anderson's unavailability, as his designated representative at the interview, I declare that I have read Mr. Anderson's testimony and that it is true an correct subject to the above changes to the transcript for the reasons noted.

Party Representative for Richard Anderson [redacted] 5/9/19

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *
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COLLISION OF AMTRAK TRAIN #91 AND *
A STATIONARY CSX TRANSPORTATION *
TRAIN NEAR CAYCE, SOUTH CAROLINA * Accident No.: RRD18MR003
FEBRUARY 4, 2018 *
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Interview of: RICHARD ANDERSON
Chief Executive Officer/President
Amtrak

NTSB Headquarters
Washington, D.C.

Monday,
April 1, 2019

APPEARANCES:

RICHARD HIPSKIND, Investigator in Charge
National Transportation Safety Board

RYAN FRIGO, Rail Accident Investigator
Operations and System Safety
National Transportation Safety Board

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KEN HYLANDER, Executive Vice President and
Chief Safety Officer
Amtrak

I N D E X

I N T E R V I E W

MR. HIPSKIND: Good morning, everybody. My name is Richard Hipskind, and I am the investigator in charge for NTSB for the Cayce, South Carolina accident. We are here today on April 1st, 2019 at NTSB's headquarters in Washington, D.C. to conduct an interview with Mr. Richard Anderson, who is the Chief Executive Officer for National Railroad Passenger Corporation, or Amtrak.

This interview is in conjunction with NTSB's investigation of a collision of Amtrak Train 91 with CSX Local F777 on April 4th, 2018. The local train --

MR. HYLANDER: It was February 4th.

MR. HIPSKIND: Pardon?

MR. HYLANDER: February 4th.

MR. HIPSKIND: Oh, excuse me.

MR. HYLANDER: You said April 4th.

MR. HIPSKIND: Excuse me. I appreciate that. It was February 4th. The local train was stationary in CSX's silica storage track located near Cayce, South Carolina, and the Amtrak train diverted from the main track into the storage track via a main track switch during a signal suspension. The NTSB accident reference number is RRD-18-MR-003.

Before we begin our interview and questions, let's go around the table and introduce ourselves. Please spell your last name and please identify who you are representing and your title. I would remind everybody to speak loudly and clearly enough so we

can get an accurate recording. I'll lead off and then pass off to my right.

Again, my name is Richard Hipskind. The spelling of my last name is H-I-P-S-K-I-N-D, and I am the investigator in charge for NTSB for this accident.

MR. FRIGO: Ryan Frigo, F-R-I-G-O, NTSB, railroad operations and system safety.

MS. IMPASTATO: Theresa Impastato, I-M-P-A-S-T-A-T-O, Amtrak, Senior Director of System Safety.

DR. HOEPF: Michael Hoepf, H-O-E-P-F. NTSB, system safety.

MR. HIPSKIND: And Richard.

MR. ANDERSON: Richard Anderson. I'm the Chief Executive Officer and President of Amtrak.

MR. HIPSKIND: All right. Thank you, everybody.

And, Mr. Anderson, do we have your permission to record our discussion, our interview, with you today?

MR. ANDERSON: Yes, sir.

MR. HIPSKIND: And, Mr. Anderson, do you wish to have a representative with you at this interview?

MR. ANDERSON: No, sir, other than having Ken and Theresa here.

MR. HIPSKIND: Now, Ken, will you please --

MR. HYLANDER: Ken Hylander, H-Y-L-A-N-D-E-R, Executive Vice President/Chief Safety Officer, Amtrak.

MR. HIPSKIND: All right. Thank you, Ken.

And, Mr. Anderson, do you mind if we proceed in this interview on a first-name basis?

MR. ANDERSON: That would be good.

MR. HIPSKIND: Okay, thank you for that. And for full transparency, were you provided a topic list, a roadmap, for this interview that included the broad topic areas for today's discussion?

MR. ANDERSON: Yes, sir.

MR. HIPSKIND: And was helpful?

MR. ANDERSON: Yes, sir.

INTERVIEW OF RICHARD ANDERSON

BY MR. HIPSKIND:

Q. All right. Since we have not interviewed you here, to my recollection, at any time while I've been at NTSB, could you give us kind of a synopsis of your work and executive-related history? And, Richard, I really would like for you to focus on the years that you spent at Northwestern and Delta and bring us up to your current position title and all that.

A. Okay, thank you. Thanks, everyone, for having me here today. My career in transportation started in 1987 when I joined Continental Airlines in Houston, Texas, as a lawyer and was given responsibility for regulatory compliance including FAA compliance and NTSB matters.

And in the course of that tenure at Continental, from 1987 to 1990, I had extensive experience representing Continental with the

Federal Aviation Administration and was involved in NTSB matters, as we had a significant aviation accident on November 15th, 1987. So that gave me a pretty strong grounding in regulatory and safety oversight of the aviation industry.

In 1990, I went to work at Northwest Airlines as deputy general counsel, and in 1992 began to move into business and operations. And during my tenure there in the legal department, among other things, I had responsibility for regulatory compliance.

In 1992, I took over responsibility for environmental compliance, real estate, and a myriad of other businesses. And then in 1996, took over responsibility for technical operations, which is maintenance and engineering at Northwest, and then eventually evolved into becoming the EVP of operations, the chief operating officer, and then the chief executive officer.

And at Northwest, we were leaders in the adoption of ASAP and FOQA, which are the Flight Operations Quality Assurance program and the aviation safety reporting system that is in use today in the industry.

So it's at that point in time, in 1987, that I was involved with a team of people that recruited Ken Hylander. Ken was the director of engineering at United Airlines. And Ken joined us as chief engineer, and then, in addition to being chief engineer was placed in charge of our safety programs.

And at Northwest, we developed a data-driven approach to both

operations and safety, and we developed good metrics around tracking our performance against regulatory compliance. We developed the ODI, which was the Operational Difficulty Index, which were all the things that created for difficulties on airplanes, like in-flight shutdowns and pressurization events and the like. And then we had a Flight Safety Index in addition to the usual employee health, welfare and safety metrics.

So we began really working on driving the business to a much safer level of operation by the use of metrics, quality assurance, and forward-looking assessments of where the risks would be in our business. And these were really -- probably, we didn't realize it at the time -- were really the precursors to where SMS is today.

But we would manage very closely to the data when we saw an uptick in events that were precursors or indicators that perhaps there'd be some risk in the future in the business. And as we matured toward what is SMS today, we developed more capabilities around risk management and the adoption of safety policies to mitigate the risks in the business.

Then, in 1998, I became chief operating officer of Northwest, and then -- I believe it's 1998, somewhere around there -- and then I became CEO in early 2001 of Northwest. And I stayed there for about 4 years, and then I left the industry in 2004 and I went to work at United Health Group in Minnesota. And I was president of the commercial businesses at United Health Group and was involved there for 3 years, and then was recruited by the

Creditor's Committee of Delta Airlines' Chapter 11 Bankruptcy and became a member of the board of directors of Delta Airlines in May of 2007. And then, shortly thereafter, was recruited to be the CEO of Delta Airlines in -- I believe that was announced in late summer of 2007.

And when I got to Delta, there was no ASAP program, there was no FOQA program, and the company's on-time performance and its other metrics were quite poor. We didn't have good visibility into the kind of data you need to really run a safety program because we didn't have ASAP and FOQA, which is the genesis of the data that you need to figure out how the system safety's performance is across the airline.

Ultimately, at Delta, we bought Northwest Airlines and, fortunately, that brought over to the company a lot of really good operators that Delta did not have. And among those were Ken Hylander, and Ken brought over the FOQA and ASAP and what I'll call the precursors to SMS from Northwest.

And then, at the time of the merger between Northwest and Delta, Ken was responsible for the merger to a single operating specification. And then, ultimately, the implementation with Lee Moak, who was the head of ALPA at the time, we had his support, my support and, fortunately, Ken engaged, and we implemented ASAP and FOQA at Delta.

And we had a number of FAA violations at the time for maintenance problems, and we went down the road with FAA for a

voluntary disclosure system. So every time we found an anomaly in our maintenance programs, which were typically AD overruns, MEL overruns, CDL overruns, basically time-controlled events or documentation events, we would go through voluntary disclosure to the FAA. And then we would participate with the FAA in a program to get -- to do the root cause analysis and then put the fixes in place so that it wouldn't happen again, and ultimately reached a point, through the voluntary disclosure system with the FAA, that we no longer went to enforcement actions. Everything was done through a voluntary disclosure system. And the same occurred for all of the operating departments in the company.

So, I believe, Ken, we were the first adopters of SMS in aviation, at Delta?

MR. HYLANDER: Yes, I think so.

MR. ANDERSON: Yeah, and we were sort of right at the beginning -- actually, we were sort of ahead of the rulemaking. But we thought that it was fundamentally important to have as much information about what was going on in our operation as possible. And the only way to get that information was in a just culture where our pilots, flight attendants, mechanics, dispatchers, other operating personnel had free and open access to disclosing everything that occurred in the system.

And the most important principle behind that was giving everybody the unfettered right to stop the operation at any point in time without any risk of recrimination so that we all bore the

responsibility of running the operation safely. And the only way to really run an operation safely is to have everybody have -- know that they can openly and honestly, in a very transparent way, discuss what's going on in the operation. And most importantly, everyone has the authority to stop the operation with no recriminations whatsoever.

And we implemented those programs at Delta quite successfully. And we saw, on the employee injury side of our business, we saw our employee injury rates go down to the lowest levels in the aviation industry.

And we ultimately signed up on the OSHA side of our business for their highest level of regulatory relationship, VPN [sic] programs. So our goal was to become a member of the VPN programs at OSHA for our groundworkers every place we could, whether it was a reservation center or an engine shop.

And then, in flight operations and in technical operations we managed the business to our Flight Safety Index and our Operational Difficulty Index. On the tech op side of the business, that meant collecting significant amounts of data on the performance of every airplane and every system on every airplane into a central database with a core team of engineers assigned to each piece of equipment. And that core team of engineers would have powerplant systems, structure, cabin engineers, and they were responsible for driving our maintenance program to reduce Operational Difficulty Index.

The Operational Difficulty Index was really a precursor to something more significant happening. And our philosophy was if we drove down in-flight shutdowns, if we drove down pressurization events, if we drove down gear indication events, we would ultimately operate the airline much, much safer because those incidents would go down as writeups and anomalies on the airplane and other things would come up. So you were always working on the top 20 anomalies on a piece of equipment and focusing your engineering work to repairing those systemically.

So the classic example was the DC-9 landing gear indication system. The DC-9 landing gear indication system had a design defect in the proximity switches. So we were often getting -- when you throw a landing gear down, you got to get three greens. And if you get one green, one red, one green, then you're in an operational difficulty, right, because you don't have three down in green. Typically, all the gears were down in green. And you'd have to do fly-bys and all kinds of other extraordinary measures to make sure it was safe to land. Well, we did a complete modification of the switch on the airplane to fix that problem, and then we put all the airplanes through a speed line and we replaced all the landing gear indication switches.

And we could go through, for hours, incidents by fleet. And on the A-330, it was actually some of the plumbing problems in the lavatories were causing really significant problems. There was a problem on the A-330 with the pitot tubes giving a false

indication in cockpits, particularly in icing situations.

So, I mean, we -- Ken and I could probably go through and catalogue hundreds of these from memory where we knew we had a specific problem. And then the engineering work would be applied. We'd go fix that problem. It would move off the list and something else would move on. And you just kept at that list, and that's how we attacked the maintenance side of the business.

On the ops side of the business, we had pilot reports and we had FOQA data. And FOQA data was the most powerful data that we had. The FOQA data was the most powerful data that we had because it auto-downloaded -- on the modern airplanes, it auto-downloaded the flight data recorders.

And we had MITR, I believe it was, or -- we had a third-party service. Who'd we have?

MR. HYLANDER: Boston Digital.

MR. ANDERSON: Yeah, we had a third-party service that would take that data and put it in a relational database with parameters. And when we saw anomalies in the operating data from the day before -- every morning, the FOQA team, with the union, sat down and went through all the data and found all the operating anomalies outside of the approved parameters.

A classic example would be unstable approach below 1,000 feet, because we had a rule that you had to be stable -- all the metal out, gear down, ready to land at 1,000 feet. If you had an unstable approach, these sorts of things would all pop up.

And you could trend the data based upon location, type of equipment. Sometimes it may be an individual pilot who needed more training or needed to go back through a sim period. I can remember just a couple examples.

One was we were having an unstable approach problem into San Diego. And what we found out was the FAA was putting us too tight to final. And the airplane we were flying in there was a 757, which is a very powerful airplane. It's hard to get the speed down. And they were dropping us really fast, and we -- it was too fast to stay ahead of the airplane. So we were going into San Diego, hot and heavy -- well, not hot and heavy, hot and long. And we were able to work with the FAA and the air traffic controllers to change the approach paradigm into San Diego.

The other one was when we brought the 747-400 to Delta. And when we were doing max takeoff, full weight, full fuel, out of Atlanta when it was really hot, the margin between stall and climb got really narrow because the airplane was so big and heavy, and it was so hot. And we had a tight turn out of takeoff, and you'd get something called the barber pole, which is an indicator in the flight directory display that tells you you're getting close to stall speed. And we had to change procedures. This is one where Ken and I went in the simulator with the pilots to understand what was going on and what we needed to do to change the way we were doing business.

And so that's that this data gives you; the data is rich from

FOQA, and it allows you to spot trends across the whole airline and then be able to take that data and implement risk management and, in some instances, change your safety policy, but in all instances use those experiences for safety promotion across the enterprise so that you have greater awareness of situations, giving people situational awareness.

Training programs can change. I'm certain that the 747 training program changed at Delta after our merger. And we would use the data to both change training programs, change operating procedures, fix maintenance issues, interact with airports, with the FAA, to mitigate risks across the business when we saw problems crop up.

So, if we fast forward now from Delta, Ken and I both -- I retired. I think I was -- between Delta and Northwest, I was CEO about 13 years -- 12, 13 years between the two. And then my last tenure there was just about 9½, 10 years. And then I came to Amtrak, to serve Amtrak. And we had -- Train 89 was my first involvement, really, with the NTSB report that was issued in -- November of '17?

MR. HYLANDER: Yes.

MR. ANDERSON: And Theresa, you and I spent -- we first met, and it was obvious that just culture and SMS needed to be implemented. That was what your recommendation was. It was absolutely the right recommendation. And we started down that path of implementing SMS and moving to a just culture, and then it

was accelerated by Train 501. And that's when Ken joined us. And now we're heavily down the path with the board of SMS and the implementation of a just culture and the components of SMS. So that brings us up to today.

MR. HIPSKIND: Thank you, Richard. That was very informative.

BY MR. HIPSKIND:

Q. So let me say this. Fair to say that a lot of your experience and beliefs formulated in the aviation industry, that you find that useful to taking on, implementing an SSPP, System Safety Program Plan, and SMS program at Amtrak?

A. Correct.

Q. Okay. And the ramp-up time, I'm going to say, if I listened to you correctly, you were 4 or 5 months, and able to roll that out about a year ago today?

A. Well, not quite a year. We started down the path a year ago. But the rollout, really, is a multi-year process, to roll it out at Amtrak. But, yes, we -- Theresa and I, in November of '17, made the policy decision; 501 occurs, which really gives us the impetus for acceleration; Ken comes on board and begins the implementation. Our formal implementation of the SMS was in November of '18, although -- although, we began implementation of a number of elements of SMS around the time of this accident. And the first one was signal suspension analysis and what Amtrak's policy would be on signal suspension, because signal suspension

was a factor in the Cayce, South Carolina accident.

Q. Okay. And as you know, we interviewed Amtrak's chief operating officer; vice president safety, compliance and training; as well as your chief safety officer, Ken, who's with us today. We interviewed them last week. And these -- those conversations were very helpful in advancing our understanding of Amtrak's efforts with implementing a safety management system, or an SMS, or your SSPP.

So today, I would like to continue that conversation by first asking you if you agree with some of my characterizations of what I think I learned. So are you okay with that?

A. Yes, that's great.

Q. All right.

A. Good idea.

Q. Okay, great. Amtrak is about a year into the release of the SSPP policy.

A. Yes.

Q. And that road to full implementation is a multi-year effort, and so said the three gentlemen last week and I believe that's what I'm hearing you say today. And the other thing I recall is it was one effort that was characterized by a continuous improvement and that values -- that effort values building and sustaining a just culture and working towards that environment. So correct, so far?

A. Perfect statement.

Q. Okay. And although my background is not specifically in SMS principles, my takeaway is that SMS or a System Safety Program Plan, an SSPP, is focused on proactive -- it's proactive in nature. And that's not to say that events, conditions, performance, and behavior cannot be tracked and analyzed and considered.

So when you look at -- in recalling your statements about the aviation, it sounded to me like you can't fix that which is not measured. And so, you'd have a lot of data incoming from a lot of different aspects of each operation of the aviation industry. And so, there is kind of a reactive analysis after things -- after you've measured things, you get them back and you measure them.

So are you in agreement with any of that remark?

A. Yes. Data is the foundation of a good SSP program. I mean, it is the basis for the analysis. And if I can now move away from answering your question based upon history, let's -- I'll bring it to the present day and what we're working on at Amtrak.

One of our goals at Amtrak is to have 100 percent downloadable data from our locomotives, every day, every train. Now, we are a ways away from getting there because we have a lot of locomotives that are in the process of being retired, like the P42s. But ultimately our goal is to have a system safety database that is funded by downloads from the recorders, the digital recorders, on all of our locomotives, so that we can put that data in a large relational database and have the ability to set up

parameters and monitor where we have outliers versus a standard of operation, whether it's speed, stop signals or the like.

So data is so key because it's what gives you insight into what's going on in the operation. So I agree with your statement.

Q. And another example that we discussed, I think, with Ken last week, was you're looking at a lot of enforcement data that comes out of the PTC oversight.

A. Yes, PTC enforcement data tells us how important PTC is, but it also gives us an insight into how the railroad's operating, how individual engineers are performing. And it gives us the ability, then, to modify our operating procedures, our training procedures, our qualification procedures.

It may be something as simple as putting up a big sign at a turn to highlight to the engineer that he's got to slow down at this turn. The point of it is, is it gives you the information you need to scientifically approach a problem, put fixes in place so it doesn't happen again.

And the PTC enforcement data is giving us that, both in terms of individual engineer performance and system performance.

Q. Well, the example you just used is, in fact, one of the improvements that was made on the Sound Transit property a month ago.

A. Correct.

Q. Is that correct?

A. Correct.

Q. Okay. So here's one final thought about SMS or my view of the SSPP, and that is, one expectation of those programs seems to be that it is designed to identify and reduce risk or hazards. And if that is a key element, then it seems to me that risk assessments or risk analysis are expected and a key tool one would use to mitigate or eliminate risk or hazard in the workplace, to enhance safety for the employees and the traveling public.

How far off the mark am I with that?

A. You've stated it well. Now it's key -- the key is implementation on a consistent basis every day across the railroad.

Q. Okay. Just a couple more and see what we can talk about with these. So one of the findings that was explained to us now, from Amtrak's perspective, is that if you were to get a new request for service -- I mean, a state reaches out to you and wants new service, that is not routinely accepted as it was in the past. Now Amtrak holds off until it first conducts a risk assessment or analysis for that property and its operations.

Now, if that's true -- and I have no reason not to accept that that's a valid change that Amtrak has made -- and knowing that with the rollout of the SMS policy and the subsequent development of a template to conduct a risk assessment or analysis, please describe your vision of how much risk assessment should be performed on Amtrak's property. So what I'm asking is, the when, the where, and for what goal, and if you could address

how long you think that might take?

A. Well, we have completed a significant number of risk assessments to date. And actually, the first -- one of the first one's we assessed was about a year ago when we had a request from a state to operate a summer service over a dark territory that we had not operated before, and we turned down the request. We turned down the request because we were in the midst of setting up our SMS program and we still needed to get the risk assessments done for all the non-PTC territory that we would be operating after the implementation of the PTC system on the railroad, which was, you know, at the end of last year. So we made a decision that for a summer operation over a dark territory, our risk assessment was don't operate it.

We made a second really significant change, permanently, through our risk assessment process, and that's special trains. We were often operating special trains, one-off trains operating once, oftentimes on territory that wasn't our territory at all, but it was going to be our equipment, under the control of Amtrak, but with a pilot from another railroad. But we had no engineers and no know-how on operating on that railroad.

The one I remember is operating -- the request to operate a special train from Minneapolis, Minnesota to Duluth, Minnesota. We don't operate on that subdivision. We don't have any experience on that subdivision. And to operate one train up and back, and to do a really good risk assessment -- not a railroad

risk assessment; I'm talking about a SMS risk assessment -- it was too much, and we turned it down.

And so now we no longer operate one-off trains. And we don't operate one-off trains because we cannot really do a good risk assessment for a single train operation. So I would cite those two instances where we've really changed the way -- permanently changed the way Amtrak operates.

Because the problem we had with the special trains, even separate and apart from that, is when we ran a special train, we'd pull one or two road foremen off because you'd have to do so much work to just get a special train in place that it would distract us from running our scheduled trains every day. We need our road foremen out on the railroad and our assistant road foremen being mentors to our engineers, following up on PTC enforcements and the like, doing the training. And these sorts of incidents were all distractions, and so we stopped special trains and special movements.

And I'd use the example, a year ago, of when we declined a state that wanted to run a summer service, scheduled summer service in a dark territory.

Q. Okay. And thank you for those examples. Those seem to be, like, off of Amtrak property. And I want to bring you back to -- the essence of my question is for the rollout that you have with your SMS and using a risk analysis, risk assessments as part -- a key tool, where do you think you're at in just looking at your

property, Amtrak property?
A. Our property?
Q. Amtrak owned and operated. Can you talk about that?
A. I would say -- and I'd like to hear Ken and Theresa's view on this; they're a bit closer. I would say that we're probably halfway to where we need to be in terms of risk assessments.
You know, we have implemented 32 critical safety programs, and I think we've provided the listing to you. But if you look at -- and I'm sure we've probably provided our SMS cone, what I call the cone chart, which is the --
Q. We do have that.
A. Yeah, and --
MR. HYLANDER: The roadmap.
MR. ANDERSON: Yeah, I call it the cone chart because it kind of, you know, takes you up to the mature SMS. And we see ourselves, late 2020, being, you know, fully implemented on SMS. So I would say we are about halfway.
BY MR. HIPSKIND:
Q. Again, a multi-year effort?
A. Multi-year effort. What our board of directors approved was a 3-year plan to implement SMS. And we are tracking well against that. We completed all our accomplishments in 2018 and we're well down the road in 2019. And in 2020, we believe we will be fully implemented on SMS and have the capability to do our risk assessments in those locations where the data tells us we have a

risk assessment that needs to be done.

Q. Okay. Well, that takes care of Amtrak's property, and I get that, and the diagram was -- the roadmap was helpful. So let's broaden maybe some of the application of Amtrak's SMS.

So if conducting risk assessments are important and one should not -- and I don't -- one should not consider at risk assessment or analysis the end-all or the one thing to structure and build out a successful SMS, but still are very important because of what it identifies and the hazards and risks that get addressed and documented during a risk assessment effort.

So, if we accept that, what are your thoughts about an outreach effort with the host railroads to engage, communicate and coordinate with them in performing risk analysis, risk assessments on their property? And I realize that there are issues with that. And so I don't want to seem Pollyanna-ish about all of this, but if you could speak to those challenges as well.

A. Right. Well, I think we've actually had pretty good cooperation with the host railroads on performing our risk assessments because we did all the risk assessments in the territories that were not going to be equipped with PTC. So we have -- when we are completed and completed revenue service demonstrations and get certified across our system, we will still have between 1,000 and 1500 miles of non-PTC territory on Amtrak. And Ken and Theresa and Justin Meko have led an assessment of risk mitigation across those parts of our system.

And I think we've overall had pretty good cooperation. They have given us the kind of access and ability to put in our mitigations. So I'd say, overall, constructive. You know, Ken and Theresa and Justin will have a more granular view of that. But we were able to complete -- and I'm sure that maybe you've shared with them our risk assessment --

MR. HYLANDER: Um-hum.

MR. ANDERSON: -- on non-PTC territory.

MR. HYLANDER: We did.

MR. ANDERSON: So we were able to complete that. That was pretty important for us.

BY MR. HIPSKIND:

Q. Okay. And without belaboring you for all the details of that, I think my closing request, then, would -- to Amtrak would be could we get a listing that would identify the non-PTC territory? And that would give us some kind of a framework of the Class 1's and other host railroads that you worked with.

And if you could kind of -- I don't know if that's going to be documented in terms of date, but it will give us some idea of the framework of some of that work that you've done. So --

MR. HYLANDER: Did we not share the matrix?

MS. IMPASTATO: We did.

MR. HYLANDER: We showed you the matrix. We may have given it to you, but we can --

MS. IMPASTATO: We should update the list to include the --

MR. HYLANDER: And also the alternate schedule.

MS. IMPASTO: That's what was missing from the original list.

MR. HYLANDER: Yeah.

MR. HIPSKIND: Okay.

MR. HYLANDER: If it's okay to add, there were 1400 miles of main line track exclusion, or the MTEA, that we did risk assessments on. But then there were 2500 miles of alternate schedule. In other words, when host railroads said they would not be able to make the 2018 deadline, we had to do risk assessments on all of that as well. So we did about 4,000 miles of risk assessments.

MR. HIPSKIND: Okay. I was going to ask you for a clarification.

MR. HYLANDER: Yeah.

MR. HIPSKIND: And I think you just gave it to me.

MR. ANDERSON: Yeah.

MR. HIPSKIND: Are there any others, Ken?

MR. HYLANDER: Regarding that topic, no. That's really it. But we have a matrix that we have shared, that we can give you, that says what we identified at -- so, first off, where are all those areas and what have we identified as the mitigating actions, what's complete, what's -- what are we working on still.

MR. HIPSKIND: Okay. A summary, then?

MR. HYLANDER: A -- yeah.

MR. ANDERSON: Yes.

MR. HYLANDER: Yeah, we can -- we may have to arrive at some mean -- it's a spreadsheet, as you can imagine, that's huge, but we can summarize that for you.

MR. HIPSKIND: Okay, that -- I think that would be helpful.

MR. HYLANDER: Yeah.

MR. HIPSKIND: Richard, great discussion, but we have Ryan here and I know he's anxious to engage you, too.

MR. ANDERSON: Okay. Great.

MR. FRIGO: Great. Thank you, Dick.

BY MR. FRIGO:

Q. Richard, boy, I'll tell you, listening to you before, one of the first questions I wanted to really ask you was, so good safety is it good for business?

A. Oh, it's required. Because when you are in the passenger customer transportation business, the first and foremost thing that our customers rely upon when they think of what our product is, is safety. And there is an implicit trust that you must honor with your customers, and that implicit trust is we are safe.

And that is the first and foremost and most important attribute of the product at an airline or in passenger rail or, for that matter, any other transportation mode. That is the most important attribute of the product. It's more important than any other attribute of the product. And I think we saw it in aviation in the '90s, when Delta and USAir both had a rash of accidents, and I think it was probably demonstrably proven what effect that

would have.

But, moreover, you owe an important and the highest duty in the law to the people that entrust their lives with you on a train or an airplane. And it is just as fundamental -- it is the most fundamental attribute of your product.

Q. This almost gets into a question of ethics, doesn't it?

A. Well, look, I mean, you can almost make anything a question of ethics. First and foremost, you have a duty in the law. You owe the highest duty in the law, number one. And, number two, if you want this business to be successful at Amtrak, we have got to run an incredibly safe operation for every passenger, every customer and every employee. And that's just the bottom line to being successful.

Q. I appreciate that. And, you know, again, what you mentioned before was -- I found it to be extremely informative, your -- some of your -- the recollection of some of the work that both you and Ken did on the aviation side.

And one of the themes that I know we spoke to Ken about, that I'd like to get your thoughts on, is enforcement versus compliance. And how did that sort of relationship with the regulator, how did that -- you know, did that assist this process of maturing a safety system? Was it an impediment? If you could --

A. It's really important to move past the enforcement and move to the notion of a just culture, because data alone is not going

to give you all the information you need to understand both the safety aspects and the operating aspects of your business. Because the people that are doing it every day -- Amtrak is really fortunate to have tens of thousands of really dedicated people. If you go on the Amtrak system, you will find people that have been -- in the vast, vast, vast majority have been dedicated employees to this company for 30 or 40 years, and they take pride in what they're doing.

In our customer surveys, our employees are the highest positive rating of everything about our railroad. They're eyewitnesses to what goes on in the operation every day. And data alone will not give you everything you need to know about what it takes to run a good railroad, whether it's safety, operations or customer service. So you have to have them fully engaged, and the enforcement approach is an approach that doesn't work.

What we think about with just culture -- and Ken just took our board, the board of directors of Amtrak, through a long paper we can share with you about how the just culture works. We want everybody to fully participate in telling us what's going on on the railroad. And the best example is we have a no-discipline policy with respect to PTC enforcements. The freight railroads have a discipline policy. And from time to time, our host -- not just freights, but our host railroads want to disqualify our engineers. And we stand up for our engineers and, in some cases, will pay protect them and work to get to the root cause analysis,

whether it's more training or a problem with a signal or the like. And we're going to be a better operator if we have that input.

That doesn't mean that drugs, alcohol, intentional conduct, gross negligence, repetitive non-qualification are acceptable. In fact, none of those things are acceptable. And the system, a just culture won't tolerate those things. But you do have to live in a world where, historically, Amtrak would discipline people for rule violations, even when the rule violations were inadvertent or negligent. And we need to move past that.

And we're moving past that. I mean, the cardinal rules are going to be rescinded at Amtrak. And it's going to take time. It's the same kind of evolution where behaviors, both on the part of the union and management, have got to change from the last several decades of how railroads interacted with frontline employees.

Q. You know, Richard, I really appreciate that example between, you know, your engineer and the powers that might be on a host railroad with respect to -- I'll just -- I'll use the terminology learning culture. Because what it sounds like you're attempting to do is -- Amtrak is attempting to learn from the unusual occurrence of that enforcement and, therefore, improve the system, versus the immediate reaction on the host side to punish and disqualify.

From the past few years and looking into some of the incidents that have occurred in Amtrak, that difference in

thinking just seems to be more and more apparent. And I just wonder, how do you view that that challenge to standardizing an approach to managing safety when there is such a fundamental disagreement between what Amtrak is trying to accomplish and, seemingly, what the rest of the industry might be focused on?

Q. Well, the rest of the industry is in a fundamentally different business. And remember that the FRA has specific rules about what the punishment is for specific violations. So the whole construct of the regulatory scheme has built into it that punitive nature, and that's what needs to be changed for Amtrak.

I can't speak to other people's businesses. I'm just talking about what we need to do at Amtrak. And much of this is within our control. You know, we had, over the past 4 years -- I actually have the data here -- we've applied the cardinal rules 73 times -- you know what the cardinal rules are -- and 44 employees were dismissed. We have to change that, and that's what we are about changing when we put in these new policies with respect to PTC enforcement and, ultimately, evolving the enterprise. And it's -- the evolution takes time.

We're moving pretty fast away from the regulatory scheme where there's specific sets of penalties for specific events to an engagement with the employees to understand what the root cause failure was, whether our training program needs to be improved, whether operating procedures need to be changed, whether an individual employee needs more and more training or movement to a

different job.

We will be a much safer operation when we approach the 73 cardinal rule violations in the last 4 years in a non-disciplinary approach, and then have a joint process with the labor union, the employees, and all the affected employees around that employees and the frontline management to get to a root cause.

And we actually gave our board a really great example of one, which was a hidden signal on the Northeast Corridor. Have you told them about this one? This is a good one.

MR. HYLANDER: Hitting the bridge, yeah.

MR. HIPSKIND: Yes.

MR. ANDERSON: Right. That's a classic example of, you know, 10 years ago -- the root cause analysis told you that the signal was probably put up before the bridge. As a result, the engineer can't see the signal until you're under the bridge. And a good SMS analysis says, well, let's put the signal on both sides of the bridge. And, historically, the engineering department would have said, no, that's where the signal's always been, that's where the -- you know, we're not going to get to that kind of root cause analysis. And we cut through that, and we're going to put a signal on both sides of the bridge. And I'll bet you, after we put that signal on both sides of the bridge, we're not going to have a violation anymore because everybody's going to be able to see the signal.

And the engineer shouldn't be disciplined. The engineer

should be in a debrief where you have a discussion about what the engineer saw. And engineer tells you, well, I can't see the signal. Well, why can't you see the signal? Well, the bridge is in the way. That is so commonsensical. A lot of this is just pure common sense.

And part of what you're -- both on management and in the labor unions, although I think the labor unions will probably, in some respects, be more open to this than management at the lower levels -- has just always been a Railway Labor Act approach with a System Board of Adjustment and arbitration. And we've got to move out of that for these kinds of violations. Not for drugs and alcohol -- we have a much firmer policy now -- not for intentional disregard, not for, you know, not complying with rules or theft or criminal activity or the like, that's all excluded. A just culture tells you you've got to be held accountable for that. But in these areas of human error, we've got to move away from a punitive approach.

And the -- even -- I mean, my view is, even if the FRA says we've got to give a certain punishment, we're going to pay protect the employee. We're not going to allow the FRA to keep us from keeping that person on the payroll and letting him do other jobs, because that's a mistake in the regulation. And they -- and we should change this.

Q. You know, it's -- you kind of bring me into my next question, which is, you know, how do you think the regulator can be more of

a collaborator with Amtrak to assist in this monumental shift in thinking on safety?

A. Well, you know, actually we have a -- you know, FRA does a good job with Amtrak in a whole variety of areas. And it's just in this enforcement area where, even on the maintenance side of the railroad and engineering side of the railroad, you know, they issue these enforcement actions, and they pile up, and then at the end of the year some people meet and pay a small percentage, and then it starts all over again, rather than trying to go at the root cause and having the FRA in the room.

I would recommend that the FRA spend time with the FAA because the FAA went through this evolution. Nick Sabatini, Peggy Gilligan, before that, Monte Belger. Ken can give you all the names. You know, we went -- this path is -- this is a solved problem. And the real question is -- and I'm only talking about passenger railroads. I am not talking about freight railroads. That's a different business, right? It's a very different business. It's even sort of similar in aviation, there are some rules that are different for freight airlines than for passenger airlines. A lot more regulation when -- and, rightly so, and a different regulatory regime for, you know, for customer airlines.

This is a trod path. It's a solved problem. It doesn't need to be solved again. And what my recommendation would be, is for the FRA to engage with the FAA and go down the path of SMS implementation for passenger railroads. I don't -- I'm not a -- I

don't have experience in freight railroads. I have experience, you know, at Amtrak.

We are going down this road no matter what, because we believe, and I think the evidence will show, that the SSPP and our SMS, consistent with what your recommendations were in November of 2017, tell us the path we have to go down to continue to improve our safety performance. We are going down that path because we have to go down that path. And we will go down that path within whatever regulatory construct we have because what we're doing is above that regulatory construct. It's -- you know, the SMS rule at FRA was deferred. We were all supposed to have our plans filed in November.

Perhaps maybe one of the ways is to separate passenger rail from freight rail and to have a separate approach and have the regulators really get much, much closer to the FAA and understand how a more modern approach to safety would work, where you need a higher level of safety with 300 souls on a train versus 125 cars of coal. Very different businesses. The passenger business has such a higher standard of care versus the coal business, that they almost shouldn't sit under the same regulatory structure.

Q. And I completely agree with you, but there are times where, you know, where that passenger train has to run on the infrastructure --

A. It does. It does. And that's where I think we've been -- we've gotten, and then we'll go through this with you. You know,

I think that more and more of the freight railroads are cognizant of that and they're being supportive of our efforts to do our risk assessments separately. And we've had great relationships across the freights on PTC implementation. They've been -- you know, at the working level, really worked well with us.

Where I think the rub is going to occur with the regulator is in this non-PTC territory. We want it to all be in PTC, so let's be clear. Because there -- I think there are 200 -- a little over 200 FAST Act slow-down points or curves or speed points in the dark -- in the 1400 miles of non-PTC.

I think -- Theresa, you did the analysis -- 230 or some number like that?

MS. IMPASTATO: Yes.

MR. ANDERSON: Approximately. So you still have the same demand for PTC in this territory. Well, we're going down the path of getting funding from Congress to implement it. So we're going to keep pushing to put PTC on 100 percent of where we operate. But in the meantime, one of the ways that we can help solve that problem is a PTC technology that uses geo-fencing. And we have huge regulatory hurdles to getting this done in the head end of our locomotives because of the FRA regulatory structure.

So if you can imagine a world where, until we got full-blown PTC with trackside wayfinding that we could go to, and then, you know, a pad device of some sort that has geo-fencing that could alarm every time you got to a speed restriction or a signal -- in

other words, use the kinds of technology that we already have in the world today. And, you know, from a regulatory standpoint we can't do that because of the philosophy at FRA. And I think that's a mistake.

I mean, in aviation, every pilot has a device in front of them that has all kinds of important safety information in it. And it makes the cockpit safer in aviation because you can get up-to-date approach plates; you can go right to a maintenance manual or an operating manual if you're in a difficult situation.

And we're in a regulatory regime that's still a regulatory regime that's, you know, for a different time. We need a modern regulatory regime that endorses the notion of SSP and SMS and brings technology to bear -- simulation technology, data technology, head-end technology -- so that we give our employees all the tools that modern science has to make our operation safer.

Q. Yeah, modern technology to implement a safer and smarter and more efficient railroad.

A. Exactly. Exactly.

Q. I like that.

A. Exactly. I mean, we haven't even talked about simulation. We need big investment in simulation so that when you get to something like qualification on the Point Defiance Bypass at 501, we aren't solely relying upon getting enough of the engineers and conductors on a train running back and forth, where we can qualify people in simulators and give them exactly the same experience and

we can give them a dozen runs. But that standard would be established by the Central Safety Department of Amtrak on what it's going to take to qualify, and then this flight -- flight standards -- train standards and training, centrally, would establish what the simulator plan is and what the qualification plan is going to be. And we use technology -- you can use PC-based technologies to teach a lot of route qualification with high-powered PCs, and then you can move into a motion simulator.

We don't -- the application of that technology, I think, has been good at some of the freight railroads, but we have got to apply that technology to a much greater extent at Amtrak.

Q. Thank you for this discussion. I have one more area that I want to --

A. Yep.

Q. -- get your thoughts on. And you briefly mentioned it before, but the -- how important is the collaboration with the labor unions to this process? Because it's -- you know, the Chester report was pretty clear on what was a tumultuous relationship that existed at that time between labor and management. And just as SMS implementation and just culture are multi-year --

A. They are.

Q. -- challenges, so is changing a relationship. One might even say it's generational. And I'm just wondering if you could speak to that.

A. It's really important for our labor organizations to have, within the organization, a safety department where they really have safety professionals that are engaged with the company in doing post-audit analysis of events, like PTC enforcement.

So we really need -- we can't do it effectively without the labor unions being engaged. And that's going to take continued work to build the trust with the labor unions that, in fact, we are really serious about a just culture. I mean, I think the impediments and the challenges -- the company has been through a lot of safety programs, and we need this to be more than a -- this isn't a safety program. This is a change in the way we do business. It's a very different way for a railroad -- I'll lump us in for just a minute with all railroads because we are company emanated from the railroad industry in 1971. Railroads just always had, and still do, if you look at the -- all the cases under the Railway Labor Act -- I used to be a labor lawyer and I used to do labor negotiations. So I have some experience in running labor relations under the Railway Labor Act in the aviation industry.

And the railroad industries always had a very antagonistic relationship and, you know, relied upon system boards of adjustment and arbitration to decide a lot of these issues. And we've got to take Amtrak out of that.

There's still going to be arbitrations over contract interpretation and drug and alcohol and terminations for

inappropriate behavior, intentional conduct, criminal conduct or the like. But in the area of safety and operations, we have got to make this evolution, or SMS and the SSP will not be effectively implemented in order to continue to raise the level of safety and drive down the numbers.

MR. FRIGO: Richard, thank you. Do you need a break or --

MR. ANDERSON: No, I'm good.

MR. FRIGO: Doing okay?

MR. ANDERSON: I've got to -- I have to break at -- I've got to be in my car at 11:30 for -- so we've got about 30 minutes, so I'd just keep moving through it.

MR. HIPSKIND: Ken, any clarifications on anything that Ryan and Richard talked about?

MR. HYLANDER: No. I would just make the connection to when Richard was talking about the technology and getting it in the cab, that I believe he was referring to the work we're doing with -- we called it Project Aware, and you were briefed on. You saw the video that Theresa showed you.

And we're starting it with the conductor because we can do that, but we can't put it in the locomotive without FRA approval. So just -- the words didn't come out, so I would say that was the Project Aware.

MR. HIPSKIND: Thank you for that distinction.

MR. HYLANDER: Yeah, just to make that connection to what you've seen before.

MR. HIPSKIND: Mike?

DR. HOEPF: Thanks, Dick. And thanks for being here with us today -- thanks for being here with us, Richard.

BY DR. HOEPF:

Q. So when we're talking about host railroad operations, I just wanted to give you another chance to talk a little bit about that. I think, you know, you talked with Dick with some of the risk management practices you're implementing. But maybe you could just talk about, you know, as an Amtrak train is going off of the Northeast Corridor, you know, off the property you own, what do you sort of see as being the key assurances for making sure that people are getting from Point A to Point B?

A. Do you mean -- let me ask you, on a -- from a safety perspective or from an operating perspective?

Q. From a safety perspective.

A. From a safety perspective?

Q. Yeah.

A. Well, first we have to have a strong cooperative relationship with our host railroads. You know, except for the Corridor and a little bit of Michigan, our 16,000 miles or so, whatever that number is, of train tracks we operate on, the vast majority are on host railroads. So we need a close working relationship in order for our railroad to operate on those railroads.

Second, we need to have the ability to do these risk assessments and take specific actions at our level of safety to

mitigate risks when our analysis tells us that there are steps that could be taken on host railroads to make our operation safer.

And third, we need to get through this difference in PTC enforcement, because we have a very different view of what happens when one of our engineers or conductors makes a mistake out on the railroad. And I think Ken and the team have been able to work through that, by and large, but we're going to continue to need to work through that.

So I would say it would be those three things.

Q. Okay, great. I appreciate it. Just something else I just want to talk about at a general level. You know, an idea of -- and I don't want to be too much time on, you know, roadway worker protection type of issues. But just at a high level, I'm curious to get your perspective, when you talk about mixing trains and workers.

A. Yeah.

Q. Amtrak trains, obviously, you know, generally travel at a faster rate than freight railroads. And what's your kind of approach to -- or thinking on that?

Q. Well, I've been out on the gangs, and it's a high-risk endeavor. Put it that way. It's a high-risk endeavor to have a four-track railroad, and if you're working on Track 1 and, you know, Track 3, 4 are in operation.

So the first is going to be training and qualification. Training and qualification are absolutely key to both the people

that manage the protection and then the people that are working on the gangs. The second thing is procedures in getting -- making certain we have all the right procedures, which I do think we have the right procedures. And the third piece is getting everybody to comply. In other words, getting people -- which is always the human factor, which you've studied and you've spent, you know, an academic career studying human factors. How do you get rid of those levels of complacency?

When you have the right training, you have the right procedures, you qualify someone, they've passed all the training, passed all the tests, they have all their PP&E on, they're drug and alcohol-free -- or at least we have done everything we can to make sure they're drug and alcohol free, because after Train 91, we stepped up our testing significantly. And then there is that complacency of everything goes right, but someone doesn't get out of the way. I think it's a real challenge.

We were hopeful that there was a technology that could help us, you know, by having each one of the people on the gangs wear some sort of transponder. I know some railroads had experimented with that. The challenge we found is, is that in a close proximity, you know, where you got four tracks, it's hard to make the technology work.

So it goes back to training, qualification, retraining, having the right procedures in place, having strong leadership on the crews so they're doing their safety briefings and their

handoffs appropriately, and that you're getting good compliance and that we have -- we really put the implements of SMS in place to constantly being -- doing risk assessments. And when we do have situations that perhaps would be a violation of our procedures, we hear from the people involved in a no-discipline approach to find out what we can do better to make sure we don't have a problem.

I mean, it's a significant issue to be out there working on the railroad and at the same time having -- you know, because the Corridor runs 2100 to 2200 trains a day in the Corridor. That's a lot of trains. And it's -- you know, they're moving 700- to 800,000 people a day up and down the Corridor, where there's 10 railroads that we dispatch, plus -- that's passenger railroads. That doesn't count the freight railroads.

So it's a big complicated operation. And I think the training, qualifications, correct procedures, correct PPE, correct staffing, and a good SMS overlay of always assessing where the risks are, are keys to mitigating the two problems that we've had, Train 89 and then the Bowie fatality.

Q. Right. Right. And just briefly, I understand you guys have hired an engineering consulting firm to take a look at speed around construction zones. I'm just wondering, is there a reason you guys decided -- opted to pull in some outside analysts on that?

A. Well, I think we hired -- who'd you hire?

MR. HYLANDER: LTK.

MR. ANDERSON: LTK, yeah. We brought LTK in to do that assessment for us, which is appropriate, you know.

BY DR. HOEPF:

Q. Yeah, no. I didn't mean to -- it's not a value judgment or anything. And if you're not, you know, familiar with the rationale behind that, don't -- you know, you don't need to speculate or anything. I was just wondering --

A. Well, no, the rationale -- I do know the rationale behind it. Because after the last accident, you know, the accident in Bowie last year, you know, we restricted the speeds to 60 miles an hour, but we needed to have a more thoughtful data-driven approach to that decision making.

We really reacted, in part, to the tragedy that we had. And now we want to go down a path of doing more scientific and deliberate analysis of what is the appropriate way to manage that risk. So, hence, bringing the engineering firm on board.

Q. Great. Sounds -- it makes sense. I appreciate that.

Last question for you. And from -- my boss here couldn't be here today, but he's really interested in occupant protection, and I just wonder what's your thinking on that, what are the key advancements you'd like to see in an area?

A. Well, my advancement would be -- people will cringe when I say this, in the railroad industry, but, I mean, I would study whether seatbelts make sense or not and whether you ought to have

a standard going forward of having a seatbelt in a 16 GC.

I would look at it. I don't know -- I've heard debate on both sides of the issue, that maybe it doesn't make sense. But I would do the analysis. I would do the study. And I'm sure you've probably done studies on buses, in school buses, in particular, with seatbelts. They may not have the same applicability that they do in aviation, but when I look at 501, you have to legitimately ask yourself the question whether that would make a difference or not, and what are the hazards of having a seatbelt on a train, because I think there may be some hazards. But after walking through those -- through the cars up at the military base or walking, you know, inspecting the cars after 501, at least you ask the question.

The second thing is, is that normal crashworthiness testing, I'm certain, is standard. I'm not familiar with what the FRA standards are for certification. But the second part of that is, you know, good crashworthiness testing for human survivability, and that that would be an important part of the certification process of passenger cars.

DR. HOEPF: Okay, great. Thank you so much, Richard.

MR. ANDERSON: You bet.

MR. HIPSKIND: Thanks, Mike.

Richard, I know we've got a limited number of minutes here, so I'm going to jump around and then we can --

MR. ANDERSON: Yep.

MR. HIPSKIND: -- have your final remarks or closeout.

Oh, excuse me. Theresa, do you have any questions?

MS. IMPASTATO: I have no questions.

MR. HIPSKIND: Okay, thank you. I just want to sew up a couple of loose ends here.

MR. ANDERSON: Sure.

BY MR. HIPSKIND:

Q. We had a discussion about some of the new technology and giving some advance warning to Amtrak crews, and, as Ken -- we talked last week -- it doesn't seem to be a problem with the conductor. And he's basically in a tube, and how can he really know where he's at. So I thought that was very useful. And I look forward to some data being created and I think that's fairly exciting.

And I just want you to, for the record, to -- let's pinpoint the reason and state why it is that you can't have it up in the locomotive cab. Is it a matter of distraction or is it just some interpretation of they're looking at this device as a personal device? But doesn't it still come back to a distraction concern by FRA? Is that really what we're talking about here?

A. Yes.

Q. Okay. All right. And one other thing. When I was listening to you with your aviation examples, and FRA -- forgive me for saying this, but it sounded to me like you were characterizing FAA as being fairly communicative and open and providing guidance.

A. Yes.
Q. And I'm not trying to pit you against FRA. Are you getting that same level that you have -- from FRA that you experienced in FAA?
A. Not at my level. Not at the CEO level, the way I did -- I mean, I have a good relationship with the head of the FRA -- a really good person. But to contrast where we were in aviation, typically I would see the administrator of the FAA two to three, sometimes four times a year. And at each one of those sessions -- Ken was often with me, and we would just go in and ask, how are we doing? Here's what we're worried about; what are you concerned about, about us? What direction do you have for me in leading the airline and what can -- how can I be better, from a regulatory and a safety perspective? What are your indicators telling you about our performance?

And then we did the same thing with our -- the regional administrator over the CMO. The CMO was the Certificate Management Office, and every airline had a CMO. And you had a POI, principal operations inspector, and a PMA, a principal maintenance -- PMI, principal maintenance inspector.

And we would meet once every couple of months with the regional administrator over our CMO, and we would just go through our numbers together and get feedback from them on where they think we had vulnerabilities. Because, at least at the FAA, they have a pretty good database of their own that could help you find

indicators. And we wanted their perspective as much as we wanted to develop our own perspective because they had 50 or 60 full-time inspectors on our company. They were seeing things, and they were putting all those things in their database and their database could have rich information that would help us.

And then we had, you know, our usual ASAP/FOQA meetings where the FAA sat in on all those meetings, where we were with the union, with the FAA, with the company, looking at incident data, looking at FOQA data. And when we did have an incident, everybody would be in the room together trying to figure out root cause analysis and corrective action.

So very different than what we have here. Maybe Theresa or Ken can talk more to the specifics of how we deal with FRA day to day, but at my level, that's the difference.

Q. Okay. Well, just one more question. I want to drill down on this. So when at Amtrak, you guys ramped up and developed your program -- and I understand that there was a little bit of a head start because of your relationship and some requirements from the Canadian experience; you've got a little bit of railroad up there. But when you were putting words on the page and going down your checklist of what should be included in this program -- and I've read it, and it's like 70 pages -- but one of my curiosities is did you have any formal document guidance from FRA about, well, be sure to put this in there, be sure to address this? Did you have anything like that to work off of?

A. I don't know. I'd have to defer to Ken on that.

MR. HIPSKIND: Ken, would you --

MR. HYLANDER: I knew what needed to be in there.

BY MR. HIPSKIND:

Q. Well, I -- no -- oh, I get that. I want to make a comment about that. In talking to you, just today, it seems to me that you're adamant, you're going forward with your version of SMS, your SSPP, regardless of the regulatory content or whatever regulations come out.

A. Well, no, we will comply. So they had an NPRM.

MR. HYLANDER: Right.

MR. ANDERSON: Right?

MR. HYLANDER: Right.

MR. ANDERSON: And we complied with the NPRM. And we filed our plan with the with the FRA. It's just that they haven't made a decision yet on SMS, a final decision, and issued a final rule. My bet is, is they continue to defer it because there may not be wholesale agreement across all railroads that this is something that ought to be done.

But we don't have a choice. We followed their guidance in the NPRM. And we just made sure it conformed over and above that. It gave what I would call a minimum standard of what had to be in the program. We covered that, but we're going above that, because we have a simulator plan, we have a data plan, you know, we have -- just culture is a is a big, big change over and above anything

that they have in their in their guidelines. So --
Q. Well, I find a need to clarify my own remarks. And I think I'm best to do that, but regardless, I already sense that your program is -- probably meets or exceeds the minimum standard. So what I probably didn't actually say, was in my head is, you're not paring back your program --
A. Oh, no. No, no, no.
Q. -- to a minimum standard if a regulation comes out?
A. No.
Q. Okay.
A. All the NPRM does is set the minimum standard. We have an obligation to go -- in my view, our obligation, as a common carrier of human beings, our obligation transcends the basics of what's in an FRA NPRM. We have to go above that. That's just a minimum.

And we already have gone above that with our simulation plan, our data management plan, and all the resources that we've applied to our risk assessments, PTC, 100 percent -- advocates for a 100 percent PTC in the U.S. That's above the legal standard. And, for Amtrak, we are going to be at 100 percent PTC or PTC equivalency -- hence, my points about Project Aware -- so that we can continue to move up the scale in terms of using technology to make the railroads safer.
Q. Yeah, and although -- today's discussion, we've talked about risk assessments that Amtrak has worked with the host railroads on

non-PTC. I just want to make the distinction that when PTC is 100 percent, and especially on your host railroads where you're running trains, that does not remove all the risk that you may look after. It just takes away an awful lot of the big operational human fatigue and error type stuff. Is that --

A. Yes, that's correct. That's correct.

Q. So it's still a goal, maybe, that risk assessments are conducted; it just won't have to focus in on, maybe, so much what PTC is already managing?

A. Well, PTC will give us continual indicators of specific situations that we need to do analysis to determine whether we have more work to do down the road to mitigate risks.

As more sophisticated equipment also comes online, like the Charger locomotives, and we're going through this Amfleet replacement process now that may end up with our purchasing DMUs, you know, train sets, that technology has a lot of sensor capability to let you know more about what's going on, on the railroad you're on and on the train itself.

So PTC -- look, PTC is so important. Don't get me wrong. The four events it's designed to prevent are a big portion of where the risk lies in this business. But I think PTC will continue to be a source of data and information to guide our SMS program.

MR. HIPSKIND: Okay. Let me -- Ken, do you have any clarification to make?

MR. HYLANDER: Regarding that or anything?

MR. HIPSKIND: Just anything in general.

MR. HYLANDER: Well, there's a couple things. First, as any good boss should, when Richard discussed the SMS and maturity 3-year program, that's clearly what we've told our board. I think when I talked about SMS with you, we talked about a continuous evolution. And I think part of that is because there is no definition of a mature SMS; where, as Richard mentioned, the airline industry had a level -- well, he didn't -- the Level 1, 2, 3, 4, and we were sort of the first to charge through that with the FRA. So we had a very specific plan.

MR. ANDERSON: The FAA.

MR. HYLANDER: Excuse me, FAA. So, you know, we intend to continue to update our roadmap and continuously improve it. So the definition of a mature SMS is not out there. So I just wanted to make that clarity.

MR. HIPSKIND: And I understood that distinction --

MR. HYLANDER: Okay.

MR. HIPSKIND: -- from your interview, yes.

MR. HYLANDER: Then there was just two -- well, there's two other points. Richard mentioned OSHA, and I think he said a VPN. It's actually the VPP.

MR. ANDERSON: VPP.

MR. HYLANDER: Voluntary Protection Program that Delta was involved in.

MR. ANDERSON: Yes. Thank you.

MR. HYLANDER: And then I picked up on a mention of 1987 as a recruitment date for me. It was actually 1997 --

MR. ANDERSON: Yeah, that's right.

MR. HYLANDER: -- into Northwest.

And then I don't know the -- there's one -- when Richard was discussing train operating data and the importance of it, I don't know as we had the opportunity to put into the record anywhere our desire and willingness to work with the FRA on what they're calling Project RISE, which is run out of their R&D department, where we believe they're anxious and we're -- and we have volunteered to be a pilot with them on train operating data and working on sharing, and very similar to the aviation world of the ASIAS program. And we have offered that to them.

And I just -- I don't think we talked about that. And Richard did bring up the train operating data piece as critical important. And we see that as a great opportunity with the FRA.

MR. HIPSKIND: And is RISE an acronym?

MR. HYLANDER: It is and --

MR. HIPSKIND: And it stands for?

MR. HYLANDER: -- I wish -- I was afraid you would ask me that.

MS. IMPASTATO: Rail Information Sharing Environment.

MR. HIPSKIND: Okay.

MR. HYLANDER: There you go.

MR. HIPSKIND: And while I'm on this topic of acronyms, I made a decision very early on in this interview not to interrupt everybody's questions and comments based on the use of acronyms. But one thing I would ask, when you get the hardcopy, if you will please, in your errata sheet, where you see some of these, if you would just do me the kind favor of listing the acronym and spelling it out so we can include it for the record, for the public.

MR. HYLANDER: Yep. Then the --

MR. HIPSKIND: You all knew what you were talking about. Sometimes I knew what you were talking about, but in fairness to them, I would like that, make that --

MR. ANDERSON: We are a world of acronyms, aren't we?

MR. HIPSKIND: Well, we all are. So --

MR. ANDERSON: We all are, right.

MR. HIPSKIND: If nothing else --

MR. HYLANDER: One other --

MR. HIPSKIND: Okay.

MR. HYLANDER: Richard mentioned increasing drug and alcohol testing after Train 91. I believe you meant Train 89.

MR. ANDERSON: Train 89.

MR. HYLANDER: Right.

MR. ANDERSON: Right, I got confused.

MR. HYLANDER: Where were the engineer and several employees had --

MR. ANDERSON: We raised our random sample size significantly.

MR. HYLANDER: Yeah, so just to clarify the record on that.

MR. HIPSKIND: He said 91. I knew he meant 89.

MR. HYLANDER: Yeah, right. Okay.

MR. ANDERSON: 89. Too bad we've got a number of those to keep in mind.

MR. HYLANDER: Okay, that's all --

MR. HIPSKIND: Anything else, Ken?

MR. HYLANDER: No. That's all I have. Thank you.

MR. ANDERSON: Good. Good.

MR. HIPSKIND: All right.

MR. ANDERSON: Can you reflect all those corrections to my testimony?

MR. HIPSKIND: I think we've got -- there wasn't that many to correct. Just anything else, briefly, from anybody?

All right, are you ready, we'll close this out?

MR. ANDERSON: Yeah, that'd be great.

MR. HIPSKIND: Okay. So, Richard, well, is there anything that you would like to add or change? And I think Ken took care of quite a bit of it.

MR. ANDERSON: Ken took care of all that.

MR. HIPSKIND: Okay.

MR. ANDERSON: I'm good to go.

MR. HIPSKIND: And are there any questions that we should

have asked, but did not?

MR. ANDERSON: That's a good question. Trying to think about it a minute. Oh, maybe that the question about the support of the board of directors and the resources of Amtrak, and do we have everything we need from our board, and do we have the resources we need to continue the SMS journey? And I would answer that by saying that the board has been incredibly supportive, that the notion of 100 percent PTC on Amtrak emanated from a conversation with the chairman of our board right after 501. And the board's been, in every aspect of our safety and operations, engaged supportive and there's not been a constraint on our resources to be able to implement the program.

So I think that's important to know, what the tone at the top is, and the tone of top, at our board, is -- they're very engaged. They want to know and they want to support because they know how important it is to Amtrak to have a world-class safety program and SMS.

MR. HIPSKIND: Thank you for that. And in one of the interviews I was made aware, our team was made aware, that you've recognized that, they've accepted it, they're supporting, and that you're helping -- listen, this -- some of this SMS, SSPP, and all that, is new to a lot of people who don't have these backgrounds, and I know that you're helping them out with some training on that, so we appreciate hearing that too.

And if nothing else, I will just say thank you, sincerely --

MR. ANDERSON: Thank you.

MR. HIPSKIND: -- for your time and for your comments today.

MR. ANDERSON: Yep. And thank you all for your service.

MR. HIPSKIND: You're welcome.

MR. ANDERSON: We appreciate it. It's really helpful to us when receive your reports. We keep an ongoing list of our performance against your recommendations, and we look forward to receiving your recommendations in these cases so that we can continue to advance the implementation of our SSP and our SMS.

MR. HIPSKIND: Great. Thanks again.

MR. ANDERSON: Thank you.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: COLLISION OF AMTRAK TRAIN #91 AND A STATIONARY CSX TRANSPORTATION TRAIN NEAR CAYCE, SOUTH CAROLINA FEBRUARY 4, 2018 Interview of Richard Anderson

ACCIDENT NO.: RRD18MR003

PLACE: Washington, D.C.

DATE: April 1, 2019

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

Kimberlee S. Kondrat
Transcriber