



NATIONAL TRANSPORTATION SAFETY BOARD
Investigative Hearing

Washington Metropolitan Area Transit Authority Metrorail train 302 that encountered heavy smoke in the tunnel between the L'Enfant Plaza Station and the Potomac River Bridge on January 12, 2015

GROUP	
EXHIBIT	

Agency / Organization

Title

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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WMATA INCIDENT AT L'ENFANT PLAZA
STATION, WASHINGTON, D.C.
JANUARY 12, 2015

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* Docket No.: DCA-15-FR-004

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Interview of: ROBERT TROUP

The interviewee was afforded an opportunity to review this transcript for accuracy. No inaccuracies were identified.

WMATA Headquarters
Jackson Graham Building
Washington, D.C.

Thursday,
April 16, 2015

The above-captioned matter convened, pursuant to notice.

BEFORE: MICHAEL FLANIGON
Railroad Accident Investigator

APPEARANCES:

MICHAEL FLANIGON, Railroad Accident Investigator
National Transportation Safety Board

ROBERT "JOE" GORDON, Investigator-in-Charge
National Transportation Safety Board

RICK NARVELL, Human Performance Investigator
National Transportation Safety Board

LOREN GROFF, Ph.D., Transportation Safety Analyst
National Transportation Safety Board

MICHAEL HILLER, Railroad Accident Investigator
National Transportation Safety Board

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I N T E R V I E W

1
2 MR. FLANIGON: My name is Mike Flanagan with National
3 Transportation Safety Board, F-l-a-n-i-g-o-n. It's April 16,
4 2015. We're interviewing Mr. Rob Troup, who is the Deputy General
5 Manager of Operations for WMATA. And this is in regard to the
6 January 12th arcing incident. And Mr. Troup spells his last name
7 T-r-o-u-p. And I'll ask my colleagues to identify themselves at
8 this time.

9 MR. NARVELL: Rick Narvell. N like in Nancy-a-r-v like
10 in Victor-e-double l with NTSB.

11 DR. GROFF: Loren Groff, G-r-o-f-f, NTSB.

12 MR. HILLER: Michael Hiller, H-i-l-l-e-r, NTSB.

13 MR. GORDON: Joe Gordon, G-o-r-d-o-n, NTSB.

14 MR. FLANIGON: Great. And just to confirm, you
15 understand we'll record the interview and then provide you a
16 transcript to check it, and --

17 MR. TROUP: Yes, sir.

18 MR. FLANIGON: Okay, excellent.

INTERVIEW OF ROB TROUP

19
20 BY MR. FLANIGON:

21 Q. Well, let's start with a general question about your
22 background. And how long have you been with WMATA? How did you
23 get to WMATA and what do you do here now?

24 A. Okay. I'm 4½ years with WMATA. Previous to that, I was
25 15 years consulting, primarily as a signal and communications

1 engineer. But prior to that, I started my career at Amtrak
2 actually as a track laborer, transferred into the signal
3 department as a communications and signal technician. And
4 eventually worked through program management in Amtrak and doing
5 the systems program work for signals and communications and
6 electric traction and track work at Amtrak.

7 So 15 years consulting, came here 4½ years ago as the
8 chief engineer for infrastructure. Worked that job for about 2
9 years, was then promoted to assistant general manager at TIES,
10 Transit Infrastructure and Engineering Services. Responsible for
11 the maintenance of the infrastructure, WMATA facilities, and
12 engineering, all engineering outside of vehicle engineering.

13 And then -- or I'm sorry, and vehicle engineering. And
14 then worked into the DGMO's position, where I'm responsible for
15 everything concerned with rail and also WMATA-owned facilities,
16 and also I have MetroAccess as part of my responsibilities as
17 well.

18 Q. Okay. And so that's the operating side. Are you also
19 responsible for the maintenance?

20 A. Everything that has to do with rail.

21 Q. Okay.

22 A. I'm responsible for the operations of the rail. I'm
23 responsible for all disciplines within the maintenance
24 organization and responsible for all engineering as well.

25 Q. Okay. Well, one of the things we are wanting to

1 understand is, over the past 5, 6, 7 years, and of course you
2 haven't been here that -- quite that long, but we know that
3 following the Fort Totten accident and a series of other accidents
4 around that time, WMATA began implementing a lot of programs and
5 made a lot of attempts to improve safety and improve the
6 organizational culture with regard to safety.

7 So during your tenure at WMATA, what kind of changes
8 have you seen for the good or for the bad or for --

9 A. Yeah, I think --

10 Q. -- you know, what's changed?

11 A. Certainly on the whole, I've seen a lot of -- in regards
12 to safety, most of the changes -- all the changes have been for
13 the good. Organizationally, restructured around -- you know,
14 safety is obviously a very comprehensive standpoint. I mean, you
15 know, you can't have a safe railroad if your infrastructure isn't
16 correct and right and at a state of good repair.

17 So, you know, looking at it from the standpoint of being
18 able to develop a safe railroad, you know, we -- and safe work
19 processes, you know, we organized under the TIES infrastructure
20 standpoint, which drove everything up to, you know, a single point
21 of contact with the AGM, from the engineering side and also from
22 the infrastructure standpoint side, so that the program elements
23 could be prioritized correctly.

24 In addition to that, we've developed a very robust,
25 independent safety organization that helps facilitate looking at,

1 you know, the safety measurement systems that we have going on,
2 being able to look at processes that we have, being able to, you
3 know, assist us in auditing for items.

4 You know, if I could, I think -- you know, taking this
5 -- when I first came here as the chief signal engineer, as a
6 result of the Fort Totten accident -- I'd come here as a chief
7 engineer and previously being a signal engineer, as a result of
8 the Fort Totten accident, I focused very -- you know, a lot of my
9 efforts initially were focused on developing a very robust safety
10 culture within the ATC organization.

11 And that -- you know, we developed what we call the ATC-
12 1000, which is modeled after the CFR 49, the FRA guidelines for
13 testing signal apparatus. It's modeled after -- it's generally
14 called the 27 within the Class 1 railroads. And that's, you know,
15 where it makes a definition of life safety-critical issues, as
16 opposed to just regular preventive maintenance.

17 Originally, when I came here, everybody treated
18 preventive maintenance as the same. And the reality is, is you
19 can grease a switch and it's not -- or not a grease a switch and
20 it's not a safety-critical issue. An obstruction test not being
21 done is a safety-critical issue.

22 So recognizing that, we developed this ATC-1000, which
23 are self-regulatory because we're not regulated by the FRA, and
24 the TOC and FTA do not regulate us to this extent. So it's a
25 self-regulated thing to say these are tests that must be done. We

1 have to do these. We self-regulate them. We go through audits;
2 engineering provides audits to make sure that the testing is being
3 done. They go out to the field to make sure that's done. So
4 we've developed a very robust safety program with that. We have
5 sign-off from our independent safety group, you know, to be able
6 to do that. So those are the kinds of things that we, as a whole,
7 have been implementing, looking at things from a life safety-
8 critical standpoint.

9 I think initially -- and also, one of the things
10 initially that we've tried to do is develop this culture around
11 safety to be able to provide means and mechanisms for employees to
12 be able to self-report, you know, without fear of discipline. You
13 know, one of the things that we have is for the RWP program, which
14 is a very, very robust program, which was well developed before I
15 got here. I believe it was put in place almost right when I got
16 here. It either preceded me by a month, or it was put in place
17 when I got here. So RWP, you know, fashions very similar to the
18 FRA Roadway Worker Protection programs, you know, has a good faith
19 challenge effort in it, where they can -- where employees can
20 manage that. In addition, we have the safety hotline.

21 Most importantly, we introduced the close call program.
22 You know, one of the things is, if you don't know what's unsafe,
23 you can't fix it. And, you know, modeled after what the Class 1's
24 have done in the close call program, I think is a -- it's a very,
25 very important program. Because then we can say, okay, what are

1 you doing out there that we don't know about, that we can fix, you
2 know, before it becomes an accident.

3 So I think we're a maturing safety organization. Now,
4 when I say maturing, what we're very good at now is recognizing
5 lagging indicators. We're very good at collecting data on those
6 issues that we have out there. We're very good at collecting data
7 on incidents that, you know, where we have -- in regards to
8 injuries, accidents, those types. We're very good at follow up
9 for those, and creating, you know, a mechanism for follow up on
10 those that, you know, provide us the ability to have mitigation
11 factors against whatever those are.

12 What we're maturing into, and what I think is critical
13 is what we're maturing into, is where we got to start looking at
14 leading indicators. You know, the -- oh, sure.

15 MR. NARVELL: I'm sorry, just a second.

16 MR. FLANIGON: We're going to take a short --

17 (Off the record.)

18 (On the record.)

19 BY MR. FLANIGON:

20 Q. And after a short break, we're back with Mr. Troup. And
21 I'm trying to remember, you were talking about --

22 A. Leading indicators.

23 Q. Leading indicators.

24 A. So yeah, so leading indicators. So one thing we're
25 maturing into is an organization that has to look at leading

1 indicators for safety. And I think we're starting to do that.
2 And when I talk about leading indicators, it's the small issues
3 and items that don't result in significant accidents or injuries,
4 you know, but that you know about, that you catch, that, you know,
5 we need to deal with.

6 And I will provide an example. For example, out on the
7 recent one that we had just here with the accident, you know, we
8 may have had some leading indicators in regards to some damage
9 that had been done to some junction boxes throughout the process
10 of this. You know, and it would have been nice to be able to say,
11 okay, we've got an issue with an operator there. Let's look at
12 it. Let's look at that very closely.

13 So those are the kinds of things when I talk about
14 leading indicators that we need to really start paying attention
15 to, which, again, a maturing safety organization eventually leads
16 into. You know, you go through to where you're very apathetic
17 about things to where you become reactive to those incidences, and
18 then you move into the leading indicators. And I think that's
19 what we're getting staffed up for.

20 For the L'Enfant incident, I can speak on the fact that
21 there were some leading indicators that I had there in regards to
22 how the ROCC reacted to incidents, you know, nothing obviously of
23 this magnitude, but just regular single tracking incidents. We
24 sat down with leadership there. We recognized that we had
25 staffing issues with that, and we're in the process of being able

1 to increase our staffing levels at the ROCC to be able to deal
2 with those so that we could develop robust training programs as
3 well. So those are the types of things.

4 Q. Yeah.

5 A. And we're maturing well into there. So I think, from my
6 perspective, you know, we're not just talking about safety, we're
7 actually doing the things that are necessary to create a safe work
8 environment and also a safe ride for our passengers.

9 The infrastructure, you know, there was a huge
10 disinvestment in the right-of-way out here. I could see that. I
11 could see that particularly in the right-of-way where there are
12 issues, and what we were dealing with. And so, you know, we are,
13 you know -- we do have the resources now to be able to adequately
14 address that. Obviously, that takes time. Time and space is what
15 you need on the right-of-way to be able to deal with those.

16 That's one of the most critical things that we have to
17 balance, you know, between our passenger service and our right-of-
18 way improvements that we do. So but, like I said, we do have the
19 resources. We're at adequate resource right now in our capital
20 program to be able to address those issues. Although, there is a
21 backlog that we are working to fill.

22 Q. Maybe you could talk a little bit about organizationally
23 -- you know, some of the response to the January 12th incident was
24 clearly in your domain in terms of the train operations and the
25 OCC and so forth. And some within WMATA was not. And I'm

1 thinking of the police, the Office of Emergency Services, and then
2 of course, you know, the whole relationship with the fire
3 department.

4 What's the mechanism that you see that makes sure that
5 you and your counterparts in other departments are kind of synced
6 up, communicating, coordinating, on knowing what needs to happen
7 and, you know --

8 A. Yeah, I think the -- you know, there's SOPs that we deal
9 with. There are standard operating procedures that we have about
10 how those protocols are done.

11 Obviously, the ROCC is most aware initially of what's
12 going on out there. They're the ones that make the report in to
13 the EMS services or fire. You know, WMATA does not have its own
14 fire department. We have our own transit police department. So
15 they report out any issues, you know, in regards to that,
16 providing as much information and detail, you know, as they can
17 provide, or what the dispatcher asks for.

18 The management of the incident becomes -- obviously,
19 from the train standpoint, the management of the incident needs to
20 be on the ROCC. That's what the ROCC, that -- however, incident
21 command is relegated to the transit police department, which is
22 then relegated to the fire-EMS. Should fire-EMS or should the
23 police department tell us to stop trains, they have the authority
24 to do that.

25 So, you know, while we, you know, recognize that we have

1 the big picture, the broad picture of this, if we feel like
2 there's an issue, we feel comfortable being able to say, you know
3 what, we're seeing something else that you may not be seeing
4 that's localized; you know, that may not be the best thing right
5 now to be able to do. But like I said, we do defer to them as --
6 or the ROCC has -- defers to transit police to be able to, you
7 know, make that call on the ground to be able to stop service, you
8 know, we're not running trains anymore.

9 The fire department, whether they go wayside or not,
10 we've got some pretty good SOPs with the fire department in
11 regards to letting us handle those everyday incidents that we have
12 like with arcing insulators, those types of things. Obviously,
13 they don't want to enter the roadway needlessly. So, you know,
14 and they know that we have the expertise to knock out the
15 insulators. So we have pretty good SOPs with the various
16 jurisdictional fire departments in that regard.

17 So that's kind of how that works. Any more
18 clarification?

19 Q. So what do you see as the mechanism to have that
20 communication in advance of incidents for planning, for so forth?
21 And I'm particularly interested in -- because operations is one
22 part of the organization and emergency planning is another part of
23 the organization. And, you know, they come together at some
24 point, but how much interplay is there? And how do you make sure
25 that's all working?

1 A. Yeah, it's interesting. Because I think we probably, of
2 any authority that I've worked in or with, I find that in
3 Washington, D.C. region, we interact quite a bit with transit
4 police and OEM because of the different events that we have: the
5 inaugural events that we have, a lot of the events on the Mall
6 that we have. So there's a lot of regular play between these two
7 groups. The snow events that we have. So I'm -- you know,
8 probably we're interfacing maybe -- you know, directly interfacing
9 12, 15 times a year on specific events that are going on, where we
10 we're working with emergency management on those. So from that
11 perspective, you know, we have a lot of -- we co-exist very well,
12 as far as the planning goes.

13 Additionally, because of our shutdowns that we're doing
14 for the track infrastructure changes, which are, you know,
15 basically every other weekend, we work an awful lot with the OEM
16 departments, the transit police, to make sure that that's well
17 coordinated, you know, that people know where they're going, we're
18 not disrupting traffic needlessly. So I think from that
19 perspective, we -- that that's -- you know, we practice that a
20 lot.

21 Now, intentional incident management, you know, we
22 recently had tabletop exercises. Under the federal regulations,
23 we have to have a wayside exercise once a year. But I think what,
24 you know, is important is -- and this is why I had ordered the
25 quarterly, you know, the quarterly field exercises, which actually

1 the chief and I had talked about prior to the L'Enfant incident;
2 we had talked about this prior to the L'Enfant incident. We knew
3 we had the Greenbelt exercise. We were working to get to those.
4 He was very pleased.

5 As the DGMO, I was willing to give, you know, this
6 amount of time on the right-of-way to be able to do that, which is
7 I -- you know, which I think is important. There's nothing like
8 actually getting out there, and you know, being engaged in the
9 right-of-way, seeing what the challenges are. Because you know,
10 we have multiple jurisdictional fire and EMS that we deal with.
11 We have multiple types of at-grade, viaduct, tunnel undergrounds,
12 different kind of tunnel underground, you know, there's different
13 types of station configurations.

14 So important -- you know, if we were do one a year, you
15 know, we could work now till 50 years and not really hit them as
16 well as, you know, doing -- being able to do them every quarter,
17 to be able to get to the various jurisdictions and also the
18 various terrains that we have. So I think, you know, we needed to
19 be more intentional as we moved on to be able to develop these
20 exercises out, which again, we had planned to be able to do that,
21 which is why we're able to so easily transition into the quarterly
22 checks on those.

23 But one of the things that I will tell you, speaking
24 very candidly, you know, I became very concerned about terrorism,
25 very concerned about, you know, an active shooter on the train,

1 very concerned about, you know, a bomb on the train. And again,
2 recognizing that that takes a high degree of coordination on that,
3 that's why, you know, I said let's -- you know, the chief and I
4 had those conversations early to talk about these exercises.

5 While, you know, L'Enfant incident specifically was not,
6 it emulated a lot on those types of circumstance.

7 Q. Sure. Yeah, and I think that's part of the reasons,
8 other than you just happen to run a transit system in D.C. --

9 A. Yeah. Right, right.

10 Q. -- that there is so much interest in it.

11 A. Yes. Yeah.

12 Q. I'm sure that's the case. Okay. Let's see -- and other
13 than the quarterly, the up -- move up to quarterly quarterly
14 drills, any other changes that weren't on the 10-point list? I
15 mean, we've got the --

16 A. Were not?

17 Q. That were not. Anything else that you've initiated,
18 changes out of that?

19 A. Out of the L'Enfant incident specifically?

20 Q. Yeah.

21 A. Yeah. Actually, I'm introducing four more, which I
22 haven't talked to you all about. So Jim Dougherty was supposed to
23 go, and then if I can think what those were, so --

24 MR. NARVELL: Is that them right there?

25 MR. FLANIGON: Might have mentioned it.

1 MR. NARVELL: Let me see. Is that -- I thought --

2 MR. TROUP: Yep, that's it. Yep, so these are -- you
3 know, the tunnel lighting. You know, we have over 88,000 lights,
4 I think, is what -- yeah, is what it is, 88,000 lights. You know,
5 the problem with doing the sort of the as-needed lighting -- you
6 know, change them as needed, is it's so inefficient, you know.

7 So what I've ordered is to be able to, within the
8 existing forces, is to be able to establish two crews. They will
9 go out in regular course of business, change lights whether
10 they're lit or not. They will change the lights so they will get
11 on a regular programmed replacement of changing the lights.

12 We get usually between 12 and 16 months out of that, so
13 we know that we're hitting close to that lifecycle cost. But, you
14 know, tunnel work is inefficient, as everybody knows. You know,
15 just -- I mean, you have a production ratio maybe of 45 percent by
16 the time you can get your crews mobilized, get down into the
17 tunnel, get the third rail turned off, and get in there. So if
18 you're replacing one light, you're replacing one a night. You
19 know, if I can go in there and replace all of these, then we know
20 that we can do it. And we understand that the, you know, the
21 lighting was an issue, so, you know, I've dedicated resources to
22 be able to do that.

23 Additionally, on -- the thing is the tunnel walkways.
24 You know, obviously, these are not NFPA 130 compliant. You know,
25 our older tunnels are not NFPA 130 compliant, but we want to make

1 sure that any materials, any water, we can mitigate that to the
2 best that we can, make sure that any -- that we recognize that
3 they have the potential to be used as pathways. So between those
4 two items, should there be an emergency evacuation issue, you
5 know, I think it'd be more manageable, you know.

6 So the protocols for the alarms, this is an issue where
7 we have -- there's so many alarms going into the ROCC. And you
8 know, I talk about, you know, when they design the F-14, and you
9 know, the pilots were in there and they got -- you know, I got the
10 kid in the -- the weapons officer in the back, you know, bothering
11 me about stuff, and I got the surfaced air missile thing going
12 off, and I got all this. And they started just turning off all
13 these alarms, not recognizing whether they were critical alarms or
14 not, but it was too much -- it was an overload.

15 So what I've ordered is for us to go through and look at
16 all the alarms that are coming to ROCC. For example, a commanded
17 trip on a breaker sets as an alarm. A commanded trip on a breaker
18 sets as alarm. The question is, is do we really want that? Is
19 that really something that should be alarmed on that? Should that
20 be alarmed?

21 So you know, I've asked them to look at that. And also
22 where do those alarms go? Where's the best place for that? Is it
23 to the controller, is it to the MOC desk, is it to -- you know, we
24 get the SOCC in there, the -- our security and operations command
25 center; is it best to get it in there? So we're going to do that,

1 to be able to do that.

2 And then the quality audit of the ventilation system.
3 The thing that we found was that we had -- you know, we had
4 testing that was being done locally. It was not being driven all
5 the way back to the ROCC. You know, whether or not that was
6 contributory to the accident, you know, we'll decide later. But I
7 know that that's not proper.

8 So what I've done is said, okay, let's have actual
9 auditing done similar to the same way like I talked about with the
10 ATC stuff. That's important to do that follow-up auditing and to
11 identify those life safety-critical issues that are important to
12 get done.

13 So in addition to that, we'll create what will be called
14 the Plant-1000, which will have a group of life safety-critical
15 issues that will be in it. It'll be tunnel ventilation systems.
16 It'll be, you know, certain lighting systems, vent shafts. Are
17 the vent shafts clear so that the fire and EMS can get down there?
18 You know, are they going to go there and there's a bunch of vines
19 kept growing over it and they can't -- you know, they got to cut
20 the vines out. Those different types of -- we'll identify those
21 issues, put them in this Plant-1000 that'll mirror, like I said,
22 the ATC-1000.

23 And I've -- and part of that is also, I have recently
24 developed a job description and advertised for a fire and life
25 safety manager operations. So it's a fire and life safety manager

1 operations who will deal with all these operational issues, work
2 closely with the fire chief here it's safe, to make sure. But you
3 know, from an operations perspective, be able to facilitate some
4 of those items.

5 Q. Okay, well, good. That's good information. Thank you.
6 Kind of on that same subject, has WMATA conducted any internal
7 sort of management level tabletop exercises on responding to these
8 kind of incidents to make sure that, is that -- I mean, that would
9 be one additional mechanism that might kind of get everybody
10 connected and --

11 A. Yeah, what we do is every incident, where we have an
12 injury or significant accident, there's a DGMO report that is
13 produced from that. And generally, that's a collection. Usually,
14 it's, you know, a collection of a number of different disciplines
15 that sit down and get together to be able to go over what that
16 incident is. So at the lowest level, that's what we do for every
17 incident.

18 Now, for other incidents, you know the rise up to it,
19 then we do an after-action review. We will just sit down and do a
20 tabletop exercise after-action, where we'll bring in safe, OEM,
21 transit police, all the various disciplines, media relations,
22 everybody; sit down and say, okay, what happened here?

23 Like, for example, we had the incident Anacostia where
24 we had a transit police officer hit the ETS button. We were
25 single-tracking. He thought -- he looked down, he saw the train

1 coming. He thought it was going to enter the out-of-service
2 platform, not recognizing that the interlocking was in front of
3 the platform, the switch was set right. He hits the ETS button;
4 train loses power. Within less than 5 minutes, we had a self-
5 evacuation. So, you know, those are the types of things we said,
6 okay, where did -- what was the issues there? Where did we mess
7 up? Why did he hit the ETS button? Were we not communicating
8 well enough with incident command? Was ROCC, you know -- should
9 he have called ROCC first?

10 And then, he didn't follow protocols where he didn't
11 stay -- we have ETS, the phones. He didn't get on the phones. So
12 we didn't know why there was a -- there was basically this trip.
13 We didn't know where that was. So we sit down and we have those
14 tabletop exercises depending on the level.

15 At the minimum, there's a DGMO incident report that's
16 put together and then -- you know, we recently had one where we
17 had an operator claim there was a short stop for -- and we take
18 short stops very seriously. You know, I look at them as a clear
19 failure until proven otherwise. So what we found is we looked at
20 it. We looked at the control lines.

21 And it was great, because we get vehicle engineering,
22 ATC, track, everybody in the same room talking about it to make
23 sure that -- you know, to look at it very comprehensively. And we
24 found that it was simply that because of the braking curves,
25 because it was on a ascending grade, you know, it was a little bit

1 closer than what she had ever been comfortable with or recognized.
2 You know, and it wasn't that the train was -- everything was
3 acting like it should have been. But it was nice to be able to
4 get everybody in that room.

5 Q. Okay. Can you explain a short stop?

6 A. I can explain a short stop. So the short stop is where
7 the operator felt that her train had the potential to rear-end
8 another train. So from her mind, she felt that it was -- had the
9 potential to rear-end another train, that the train was not in the
10 proper braking profile. So she didn't hit the mushroom, she
11 didn't hit the emergency stop. She went to full braking on it.
12 And again, we treat those very, very seriously, you know, with
13 those.

14 But again, that was -- I was very comfortable that that
15 was -- and we looked at all the control lines, the braking
16 profile, where the train -- we got all that information. We got
17 the downloads from the train to understand how it was reacting to
18 everything. So -- but again, that's how we look at incidences
19 across the board, and we get everybody in the room to talk
20 together.

21 Q. Okay. Is there any protocol for communication at sort
22 of a higher political level with the District or, you know, the
23 local jurisdiction, you know, high-level WMATA or the board when
24 events occur? And the reason I'm asking, another transit agency
25 we visited talked about, for significant emergencies, kind of

1 having a telecon line set up to talk with the mayor and the police
2 chief and the fire chief and the -- somebody at the transit
3 agency. Is that something you guys --

4 A. For an incident, for an actual incident?

5 Q. Yeah.

6 A. Yeah. I don't know of one, which is not to say that
7 there isn't, you know. But when we did some tabletop exercises,
8 you know, we were connected on one line. I'm trying to think,
9 when we had the -- it was the Concert for Valor. So we had -- we
10 did have the ability to connect the mayors and the regional
11 governors in at that time there, but we did set that up
12 specifically.

13 I don't know -- I mean, the chief would probably be able
14 to answer that. I don't know if that's -- if there's a normal
15 number for that or not.

16 Q. Okay.

17 A. But I know in that specific incident, when we thought
18 there was a high potential for threat, that we set that up.

19 Q. Okay. And can you talk a little bit about the, I guess,
20 they'd be the lagging indicators that you get on smoke arcing
21 events? What do you see and what can you do to determine if
22 trends are going on? I mean --

23 A. Well, for -- we capture all that information, first and
24 foremost. We classify that information, whether it's a stud bolt,
25 whether it's a insulator, whether it's a tie on fire, so we can

1 categorize all that information. We can categorize that by
2 location as well to be able to look at that. So we have the
3 reliability group, which falls under the vehicle engineering. I
4 guess they were within your group. Yeah. So we have the
5 reliability group, which is in the vehicle engineering group, but
6 it's comprehensive to the entire system. It just is under the
7 vehicle engineer. They capture all that data. They look at that
8 on a periodic basis to recognize if there's any trends,
9 particularly localized trends is what we look for specifically,
10 is are we seeing arcing in any specific incident?

11 For example, Medical Center is one. You know, we know
12 we have a high water intrusion on Medical Center. So we sort of
13 say, okay, what do we -- how do we target these? You know, can we
14 get in there, clean insulators, what are we looking at, you know?

15 Stud bolt fires, we get -- we have a regular process now
16 to have -- they come in and check for grounds. I'm trying to
17 think the name of the firm. But they come and check for ground
18 bolts. I can't remember the name of the firm right now, but they
19 come in and they do checks. Okay, you know, they check for -- and
20 then they'll you know, provide -- say, okay, you got to stud bolt
21 the ground here? So we have a regular process for them to be able
22 to go in and look at -- to be able to look at these things for
23 that. Because we know that we have these, so --

24 Q. Sort of like a corrosion control or --

25 A. Or -- yeah. Like that, yeah.

1 Q. -- stray current --

2 A. Russell Corrosion is the firm that does it, and to look
3 for stray current issues.

4 Q. Yeah.

5 A. You know, so we try to capture those. And again, we
6 base that a lot on the information we get.

7 When we're seeing a lot of the insulator fires, question
8 is, okay, what are we going to do about it. We looked at the
9 types of insulators. You know, because they have different types
10 out here, porcelain insulators, fiberglass insulators, plastic
11 insulators, a combination of all three it seems like. So, you
12 know, we look at those, and we said, okay, let's start looking at
13 the type of insulator, what -- you know, looking at it, saying,
14 okay, we notice there's a lot of brake dust, a lot of debris
15 contamination on it. So we're going to start putting in a
16 different type of insulator, you know, to be able -- that actually
17 has a coating on it, so it shouldn't -- it should repel a lot of
18 that. So we're looking at those types of things.

19 But yeah, so we classify for the -- like I said, we do a
20 good job with the lagging indicators, I think, to be able to
21 classify those. The reliability group does a good job, looks at
22 those on a standard basis.

23 So, you know, we noticed we're getting a lot of trash
24 fires at the stations, so it was important for us to say, okay, we
25 need to get out there and start cleaning the stations. So we do

1 look at that, classify that, and are reactive to it.

2 Q. Okay. Switching gears a little bit, one of the things
3 we heard about from a number of folks we talked to is a fairly
4 recently issued discipline matrix. And can you tell me a little
5 bit about that, and also, exactly who falls under the discipline
6 -- who it applies to?

7 A. You know, the vernacular is important here. And that
8 might be, you know, discipline matrix, performance matrix. And
9 what that is, is what we find is, is that the -- we're not
10 consistent between bus and rail and in application of rules
11 violations. And we want to get more consistent towards that end
12 because we do share resources. You know, we get train operators
13 from bus. That's where we get them, and they have the ability to
14 bid back and forth.

15 So we wanted to have -- is we didn't want the ability
16 for poor performers to be able to, again, perform poorly in rail,
17 be able to transfer to bus, and sort of and like -- and not have
18 that poor performance follow them. You know, and then rules
19 violation over here, not recognizing that there was, you know,
20 previous rules violations that were similar. So we've tried to
21 create sort of, you know, similar discipline rules violations,
22 similar criteria, you know, whether it be time off, whether it be
23 counseling sessions, whether it be training, those different types
24 of things that we've been -- that we need to look at.

25 So it's a way to be able to have consistency between the

1 train operators or the bus operators and the station managers, who
2 share those -- you know, where we share those resources.

3 Q. Okay. So are those the three groups of employees that
4 fall under the --

5 A. Yeah, as far as I know, yeah. I think, yeah, the train
6 operators, that's the biggest group that we have on that, yeah.
7 Yeah.

8 Q. So, for example, rail controllers would not fall under
9 it?

10 A. I don't believe so, no.

11 Q. Okay.

12 A. And rail controllers are not 689 employees, so --

13 Q. Right. So it's -- how about maintenance type employees?

14 A. We do not have them under the discipline matrix.

15 Q. Okay, okay. And I think you mentioned the good faith
16 challenge as one of the things, as a positive. And I think we'd
17 agree with you on that. Who works at WMATA can make a good faith
18 challenge?

19 A. Anybody who's on the right-of-way. Anybody who is
20 working on the right-of-way has a good faith challenge. You know,
21 if they go -- when they go through their tailgate safety meetings,
22 or their toolbox safety meetings, and they set up the work zones,
23 they talk about it. You know, they raise their hand and they say,
24 you know, I challenge -- you know, they have a good faith
25 challenge, and then there's a process for arbitration of that up

1 to a certain level. I don't know it offhand.

2 Q. Yeah.

3 A. But there's a process for that, so anybody can engage in
4 that.

5 Q. So anybody who works in the right-of-way, would that
6 include train operators, station agents?

7 A. It's under the RWP program.

8 Q. Uh-huh.

9 A. Yeah, so it's under the RWP program. So the good faith
10 challenge, it would not be part of an operator's regular course of
11 business. And the operators do have the ability for the close
12 call program. They have the ability for the safety hotline. And
13 you know, we do put out there that should you have any safety
14 issues, feel free to contact. But the good faith challenge is
15 specific to the RWP process.

16 Q. Okay. And I guess, lastly -- oh, I had two here. When
17 you put out the instruction on train operators turning off --
18 turning ventilation on their own initiative if they felt it was
19 necessary, how did that get promulgated to all the train
20 operators?

21 A. Well, we went through and we went -- vehicle engineering
22 did a basis for being able to how they could do that. And then my
23 understanding was it got driven down from a training program to
24 them, that they showed them how to do that. Yeah. So I don't
25 know specifics of it. So --

1 Q. Okay. Then now, lastly, we've heard a lot -- from a lot
2 of people on the radio system. So what's your take on the radio
3 system?

4 A. Yeah, the radio system, you know, there's obvious gaps
5 in the radio system. There's absolutely no question about that.
6 We have a radio system where the architecture is difficult to
7 maintain. We don't have monitoring on the BDAs. However, that
8 being said, we have worked very diligently now to where we are
9 testing the radio system actively. We're testing the radio system
10 actively on -- for both the public radio side and the
11 comprehensive radio communication side.

12 At least once a week, we test the stations and the
13 lines. So, and it's -- what's most interesting about that, since
14 we've sort of reorganized on this -- so we've reorganized the way
15 that the maintenance crews go out and check this. What we've
16 found is that they have noticed, as they're going through there,
17 they can tell -- you know, if they see where there's a failure,
18 they can a lot of times tell what the failure is. Like it's a
19 BDA, you know, bidirectional amplifier, or something like that.
20 And they're able to tell the maintenance crew.

21 And the maintenance crew now is much more efficient at
22 being able to repair that. You know, repair that, because they go
23 out with materials now, rather than having to guess at what they
24 need to bring in. And so, you know, I think we've got a lot of
25 good mitigations on that.

1 Moving forward, the T-band relocation project is very
2 important, very important to us. The T-band relocation is very
3 important because the architecture will be much more maintainable,
4 it will be monitor-able from the bidirectional amplifiers. Of
5 course, it will be new infrastructure as well. You know, we're
6 setting that up, you know, so -- to begin work in January as a
7 standalone project. So it's very important that we get that in.
8 And we had always recognize that as taking care of deficiencies
9 that may be present in the existing radio system. Because we knew
10 we had to do -- that was federally mandated T-band relocation to
11 get us to the 700/800 MHz. We're at 490 now.

12 So, but yeah, we fight with the radio system every day.
13 You know, I think the maintainers do a good job, the technicians,
14 the 698, Local 689 technicians do a good job of taking care of
15 that. You know, we've created a program to create coverage in
16 areas where there wasn't coverage. You know, the one thing was,
17 is the police were very concerned about station areas, non-revenue
18 areas that weren't covered. So we did spend some time being able
19 to put new infrastructure in there that we could improve that on
20 that.

21 So we are constantly -- we're not just sitting, waiting
22 for the T-band relocation. I don't want to give the impression of
23 that. We are consistently improving the existing system that we
24 have.

25 MR. FLANIGON: Okay. That's all I have for now. Ask my

1 colleague over here to continue on.

2 BY MR. NARVELL:

3 Q. This is Rick Narvell from NTSB. Rob, I just have a
4 couple things. You've been here 4½ years roughly. What safety
5 issues or concerns do you have as of today? What do you see that
6 bothers you in terms of safety?

7 A. Specifically or -- well, I think the --

8 Q. Anything.

9 A. Getting to the leading indicators is I think the thing
10 that, very honestly, is what -- is maturing into the leading
11 indicators. I mean, I think we have, you know, we have a very
12 good safety program, what we're moving to. But being able to be
13 able to say, okay, we have an issue, and to -- before it becomes a
14 significant issue, we can take care of it. People can connect the
15 dots.

16 Q. Okay.

17 A. That this is recognizable of something of an issue that
18 is something that is going to lead to something bigger, and being
19 able to, with the same enthusiasm as if you had, you know, a
20 significant issue, is to take that same enthusiasm for the leading
21 indicators so that you don't end up with a problem.

22 So I think that, and again that's what we're maturing
23 to. And I think we're close to that, but that's what my concern
24 is, is that we keep on that track. We don't continue to just look
25 at lagging indicators, but the leading indicators are the big

1 ones.

2 Q. Okay. All right. You mentioned to Mike a minute ago
3 about --

4 A. I want to also say one other thing.

5 Q. Sure, go ahead.

6 A. I think from a safety standpoint too, is that we
7 continue strongly with our infrastructure improvements, is one of
8 the things that I think, you know, from a safety standpoint. You
9 know, it -- we're in the right place with that, but you know, I
10 don't get -- I never get comfortable with that, you know, because
11 funding can get cut off at any time, as we know. So we need to
12 keep the funding profile in, we need to be able to keep the work
13 elements going on.

14 Time and space is very important for us. Passengers get
15 tired of bus bridges. Passengers get tired of single tracking.
16 We recognize that, but there is a balance here that we have to do,
17 you know. And until we get that backlog taken care of, we need to
18 keep those funding levels. We need to keep the time and space,
19 and we have to have the support of the jurisdictions, and the
20 region, which we have had, you know. But again, I don't want to
21 get comfortable to think that it's going to be there tomorrow.

22 Q. Okay. Well, that -- let me just kind of piggyback off
23 that. You talked about funding, and I'll -- I'm going to kind of
24 speak of funding as a component of resources. Do you feel you
25 have the adequate resources to execute your mission and your

1 position?

2 A. I think I do. Yeah, I really do. I mean, I -- at the
3 funding levels that we have now, I believe that based on what I
4 have, as far as the ability to do that, I think I have the funding
5 levels. Obviously, if we can get more, there's other things that
6 we can do outside of the right-of-way. And if we talk about the
7 right-of-way, I'm taking care of pretty much what I can from a
8 funding profile; however, there's -- I would like to get more
9 funding for the non-right-of-way facilities, things like
10 Bladensburg garage, for example.

11 Q. Okay.

12 A. To be able to, you know, to be able to put money into
13 those, I think is important, you know, when we look at that. So,
14 you know, being able to do that.

15 But as far as the infrastructure goes, you know, we're
16 about at capacity for that. You know, I have the -- I'd like to
17 get the funding to replace the 5000 Series railcar. You know, I'd
18 like to be able to do that. It's a poor performer that we have
19 right now. And again, when we talk about safety, you know,
20 reliability is a huge factor in the potential for safety.

21 Anytime I have to offload a car because of an issue, I'm
22 presenting something different into the right-of-way, to present
23 the potential for a red signal violation; I present the potential
24 for, you know, a passenger -- misinformation, not getting on the
25 right train, them being confused about where they are. So that's

1 the only thing I'd like to --

2 Q. Okay.

3 A. -- to maintain.

4 Q. All right. Good. Last area here is you had mentioned
5 to Mike about the alarms. And this is principally at ROC.

6 A. Correct, yes.

7 Q. If you're aware, has there ever been type of an
8 assessment, an evaluation done on the SCADA system down there with
9 respect to, you know, with improper alarms going off?

10 A. There was -- yeah, there was. I believe it was done in
11 2010.

12 Q. What were the results of that? Or if you know.

13 A. I have not seen the specific report on that. That's why
14 I've asked them to -- I was just made aware of it. That's why I
15 know about it.

16 Q. Okay.

17 A. Because I had asked about it, and they said they had
18 done that. That actually had preceded me, when I got here. So
19 that's the only reason I know about it. I was made aware of it
20 when we were talking about it, so --

21 Q. Okay. So apparently they're going to take another look
22 at that --

23 A. Yes.

24 Q. -- that whole business?

25 A. Yes. Yeah.

1 Q. Okay, good.

2 A. Yeah. And I think it's a lot -- will be a lot of the
3 same issues, because the system really hasn't changed since then,
4 so that's why I think we can get that executed fairly quickly.

5 Q. Okay.

6 A. From what I understand. Yeah.

7 Q. Great. Thank you, that's all I have for now.

8 A. Oh, sure. Thank you.

9 BY DR. GROFF:

10 Q. Loren Groff, NTSB. I actually have just some follow-up
11 questions related to the discussion of leading indicators. So you
12 gave the example of the junction box damage. What sorts of
13 information sources or avenues are you thinking of to identify
14 those leading indicators?

15 A. I think -- it's first of all, first and foremost, I have
16 to be -- and I'm actually going through that now with staff, is to
17 be able to educate them on what leading indicators are. So then
18 once they understand that, then we can formalize an approach to be
19 able to use safe, the safe department as a conduit to be able to
20 look at those, and say, okay, I -- you know, we identify those as
21 leading indicators, or maybe things that we don't have to worry
22 about.

23 But, you know, first and foremost, it's educating staff
24 on what they are. My most recent staff meeting I asked them to
25 bring four or five examples of what they see out there to be able

1 to do that. It's not a formalized process right now, but like I
2 said, as we mature, you know, to be able to develop a conduit for
3 that, to be able -- education is first so they can be able to
4 identify those. Because those are the people that are going to
5 see it.

6 Safe is not going to be out there all the time. They're
7 not the ones that are going to be able to recognize it. I want
8 first and foremost, the superintendents who are in the field to be
9 able to identify what those are, be able -- you know, to be able
10 to drive those in the safe department.

11 I'll collect them through our safety measurement system
12 that we have, to be able to collect that data we sort of have a
13 warehousing place for that now, to be able to collect that. And
14 then facilitate that information through there. And eventually,
15 drive it down to the field level personnel, as well. But first
16 and foremost, getting our superintendent level personnel
17 comfortable with it.

18 Q. We heard some discussion this week about the process of
19 observations, and variety of -- the QA reviews and operation,
20 things like that. Are there any efforts, either actual or
21 planned, to review data from just routine operations, like, for
22 example, reviewing communications logs or electronic logs from the
23 AIM system or downloading trains, or anything like that?

24 A. Yeah. In fact, that's one of the things that -- I have
25 assistant director ROCC position, which I just hired for. One of

1 the critical things, one of the critical parts of that was to be
2 able to get somebody who has operations level experience. Not
3 necessarily in the railroad, but has high level operations
4 experience, that has a lot of variability into it; combat
5 experience, fire-EMS experience, transit police experience, that
6 type of thing, that can be able to do that. And the intent was
7 for that person to be able to do exactly what you're saying there.
8 To be able to start auditing conversations, be able to develop
9 training programs, put those training programs in play, and then
10 audit those regular operations that they have going on.

11 So that position comes on in May. And, you know, I'm
12 very excited about getting that position on, specifically for
13 that. Because like I said, one of the things that we needed to do
14 was, we needed to develop an ROCC staff who was appropriately
15 staffed, first and foremost, to be able to take care of the work.

16 You know, we went from probably -- and Mike could
17 probably answer this better than I can, maybe a \$200 million
18 infrastructure side capital program, 150 million infrastructure
19 side capital program, to where we were doing \$600 million worth of
20 work.

21 ROCC has a big component of that element because they
22 have to get people on the track. They're the ones that have to
23 move the track equipment, make sure that the work zones are set
24 up. So they became much more busy, just the fact that we're
25 putting out that many more railcars. So we had to appropriately

1 staff ROCC. So like I said, that's the first thing that we did to
2 be able to move into training.

3 And then the second component of this, which we're doing
4 the second component, was to be able to get a position there.
5 Then we could start facilitating those audits and those trainings
6 and stuff. And so that's what we're working with now.

7 Q. Sure, sure. You also mentioned the short stop or
8 perceived short stop incident and the bringing together the
9 collection of disciplines and generating a report from that. What
10 is the sort of threshold that would initiate that sort of an
11 activity? Threshold of an incident?

12 A. The threshold -- well, first it is -- you know, related
13 -- for that kind of thing, I relate it back to what I would
14 consider an FRA clear failure, what would be identified as an FRA
15 clear failure. And that's pretty identifiable under the FRA
16 regulations.

17 Q. Sure.

18 A. And that's a lot of what I bring here is those kinds of
19 things, that FRA model that says, this is -- these are the types
20 of things, these are the thresholds, this is what constitutes a
21 clear failure, until otherwise.

22 Q. Okay.

23 A. And I always think, okay, if I had to report this to the
24 FRA, you know -- now that doesn't mean -- at least that. Now, and
25 some of it is simply the -- like I said, the DGMO incident report,

1 every single incident that's out there, a DGMO incident report is
2 developed. And it depends on if it's simply a track incident,
3 then they work that together. But if it's a multi-discipline,
4 then they do always get together.

5 So every incident that results in an injury or a
6 collision or rules violation, gets a DGMO incident report. And
7 depending on the specific incident, it may result in more
8 disciplines being together. Or like, let's say, it's -- if it's a
9 piece of track equipment running into another piece of track
10 equipment, then it's just track. You know, it's just track.
11 But if it would be a track -- piece of track equipment trailing
12 through a switch, then it would be ATC and track getting together
13 and saying, okay, what's the data show? Does the data show that
14 the switch was right? Was the signal up, was it not, so --

15 Q. Do you have any examples of that sort of a multi-
16 disciplinary approach to something that maybe wasn't that --
17 wouldn't have been something that would have had to be reported or
18 didn't result in any injuries, but someone recognized as a
19 problem?

20 A. Offhand, let me think. Without injuries, I mean, the
21 multi-disciplined approach -- well, I tell you what, we had a
22 multi-discipline approach, it wasn't an incident, but moving to
23 ATO. That was a very multi-disciplined approach. Getting the
24 vehicle engineers, ATC engineers together and safe on that to be
25 able to sit down, make sure the car was ready, the maintenance.

1 And that was again, the maintenance operation, vehicle
2 operations, ATC engineering, ATC operations, and vehicle
3 engineering, getting all them sitting down and saying, okay, what
4 are the elements that we have to make sure, you know, that -- is
5 the wayside ready? Okay, the wayside is ready. Well, has all --
6 have all the ATO components been checked and maintained and
7 engineered and are they safe to be able to go? So we put together
8 the ATO implementation, and so that's kind of --

9 Q. Okay.

10 A. Wasn't an incident, but that -- you know, we created
11 that group to be able to get together.

12 I mean, often -- and then just every Wednesday at 4:00,
13 I have my delay meeting. And the delay meeting, I bring in
14 vehicle engineering, I bring in all the engineering disciplines,
15 and all the operations to discipline and we go over every delay.
16 What was the cause of the delay? What's the issues behind it? Is
17 it a multi-discipline issue that we have going on there? You
18 know, to be able to look at that. And we have some really good
19 conversations in that regard. So we do that every Wednesday. So
20 all the disciplines are brought in as a regular course under that
21 meeting.

22 DR. GROFF: Okay.

23 MR. FLANIGON: Go ahead.

24 BY MR. HILLER:

25 Q. Rob, going to switch gears, and we're going to talk a

1 little bit about with your experience with the oversight agencies
2 here. So with that, how would you characterize the Tri-state
3 Oversight Committee, in so far as their approach to oversight?

4 A. Yeah, well, I think they're engaged. First and
5 foremost, I think they're engaged. Again, the issue that I have
6 is, is what we spend a lot of time doing is discussing parameters,
7 you know, opinion of parameters. And you know, if you get three
8 engineers in a room, you have four way of doing things. So, you
9 know, this is the thing that I -- like I said, you take the FRA
10 model, it's 1/4 inch obstruction that the switch fails on. I
11 don't have to argue whether it's 1/4 inch or 3/8 inch or whether
12 it's, you know, 5/8 inch. It's 1/4 inch obstruction. I know what
13 that is. I know what the tolerances are that I need to be within
14 for that. So I don't spend a lot of time trying to justify my
15 position.

16 And that's the one issue I have with the TOC oversight,
17 is that what we end up having to do a lot of times is justify our
18 position for things, which we may feel is safe. They may ask for
19 more information on it. So I think the FRA -- I really, really
20 like the FRA model. And it's not just because I grew up there.
21 It's again, because what -- because there's very definitive
22 measurements that I have. I know what I have to test to. I know
23 what the critical elements are. And that's the biggest issue that
24 I have.

25 Q. So under the rule of transit oversight, the 49 659, TOC

1 has the authority, and I guess, the requirement to provide
2 oversight. Would you say that they're meeting the minimum
3 requirements of that rule?

4 A. Minimum requirements, yeah.

5 Q. Okay.

6 A. Yeah, the minimum requirements, yeah. But again, what's
7 important, and I'm going to say it again, what's important to
8 have, to be able to have thresholds, definitive thresholds of
9 information. I'll probably say that another two or three times.
10 But it's -- yeah, that's --

11 Q. I understand. And can more be done? Can more be done
12 by the oversight agency, either the Tri-State or the FTA --

13 A. Yeah, I think --

14 Q. -- to help -- to really help define the oversight role
15 and ensuring that, you know, WMATA is a safe operation?

16 A. Without question. And I think what that, a lot of that
17 gets down to is having subject matter experts to be able to
18 provide expertise in those -- on those lines. Not generalized --
19 I mean, they're smart people. You know, FTA, very smart people.
20 TOC, very smart people. But having those subject matter experts
21 that can go out and talk with people, understand what the
22 challenges, being able to define what those limits are, being able
23 to understand those ATC issues.

24 You know, we -- again, if, you know, not that I mind
25 explaining our position or, you know, what we have, but I think

1 it's -- you know, we would have resources better spent if we were
2 talking with a subject matter expert. You know, if my vehicle
3 person was talking to a vehicle person, if my ATC person was
4 talking to an ATC person, so that they talk the same language,
5 they understand what the parameters, what the challenges are, you
6 know, whether something from that context is safe or not safe.

7 So I think that that's one of the things that they need
8 to be able to do. I think there's no question that they need to
9 have -- they need to be staffed appropriately to be able to do
10 that. You know, we are a system that is, you know, essentially --
11 you know, it's going to be a 90-minute ride from Route 772
12 Station, Loudoun Gateway to Largo. You know, it's going to be a
13 90-minute ride that we have. I mean, that's like going from here
14 to Wilmington, or here to Philadelphia, you know.

15 Q. Yeah.

16 A. So I think that that's the kind of thing that -- you
17 know, like I said, we are very big -- we're a big system, you
18 know. And you think about the amount of people that the FRA has,
19 you know, in a region to be able to -- the amount of inspectors.
20 And that's what I like to see. That's what I think the funding
21 level and funding profile for them should be, should be -- like
22 where you have the inspectors and a regional inspection team.

23 Q. So let me just kind of pick at that a little bit. We've
24 got more -- you have more than 1100 trains. You have more than
25 -- you got several thousand buses, 200 miles of track, probably a

1 million or more riders combined every day, and your oversight
2 agency is out there to ensure that you're running safely. And
3 you're characterizing it in a way that you're spending a lot of
4 time having to explain some of the more technical aspects of the
5 critical components of the system. Would you say that these
6 oversight agencies are an adequate means of ensuring safety at
7 WMATA?

8 A. Again, what I would say is they're meeting the minimum
9 qualifications. What I believe is, is that the FRA model that is
10 out there now should be followed.

11 Q. Okay.

12 A. For the transit agencies.

13 Q. All right. How many investigations have the Tri-state
14 Oversight Committee led here at WMATA in your tenure?

15 A. Mike, I don't believe they've led any. I don't believe
16 they've led any.

17 Q. Okay. How many investigations have WMATA and the
18 Tri-state Oversight jointly participated in that you're aware of?

19 A. That I'm -- I don't know. It's been half a dozen to a
20 dozen probably of the major incidences.

21 Q. Okay.

22 A. And, you know, and I say that -- I mean, they're
23 involved --

24 Q. Yeah, what's their level of involvement?

25 A. Their level of involvement -- I mean, if it's a larger

1 Incident like a L'Enfant incident, if it's an incident like we had
2 with the derailment at the Rhode Island Avenue, they're actively
3 engaged. If it's a red signal violation, they're not actively
4 engaged in the investigation, but they're aware of it; they follow
5 it, but they're not actively engaged in it.

6 Q. So do they actually collect facts and draw conclusions
7 and develop recommendations, and provide a report?

8 A. They -- at times, depending on what -- yeah, they may
9 provide recommendations. They will provide recommendations for
10 the various -- like when we put in the Silver Line, you know, they
11 went out, they did inspections and they provided recommendations
12 for us to go back into service. For ATO they provided
13 recommendations for us. And then they do the safety and security
14 certification processes. They do look at that very closely.

15 Q. Okay. So would you cite those as major accomplishments
16 based on their participation and their oversight role?

17 A. I think for those specific items, again, with the Silver
18 Line, I think they were adequately staffed and did what they
19 should've done.

20 Q. Okay.

21 A. With the ATO recertification, with the 7K certification,
22 you know, that was adequate.

23 Q. When the Tri-state Oversight completes their triennial
24 audits, do they actually inspect mechanical systems, track
25 systems, power plants, automatic train control systems, or is it

1 simply an auditing of processes and records?

2 A. They will go out and look at -- we will go out and look
3 at wayside equipment. And they will -- but they mostly focus on
4 records. But they will go out and look at equipment, you know.
5 And, you know, I get -- with the audits, the FTA, they've combined
6 a lot of these audits now, my ISSA audits, FTA, triennials, the
7 TOC audits, so that we don't end up with a lot of -- so a lot of
8 those are combined.

9 Q. Does -- and this will be an easy answer. Does the
10 Tri-state Oversight or the FTA lack regulations or regulatory
11 language to engage in on-site inspections?

12 A. Yes, yes. Absolutely.

13 Q. Okay. Does the Tri-state Oversight Committee look at
14 WMATA's standards to ensure the agency is meeting those standards,
15 such as track gauge, such as switch-point measurements, such as
16 ATC systems?

17 A. I'm trying to think, Michael. It was the FTA that
18 recently did that. I mean, they were engaged -- it was a joint,
19 that we recently went through with the TOC and the FTA, they were
20 recently out here, and they were out doing that. So I would say,
21 most recently, yes.

22 Q. Most recently, yes.

23 A. Yes. Yeah.

24 Q. Okay.

25 A. They were with the FTA, so they were engaged in that,

1 with the FTA audit that we just had. And now, with MAP-21, you
2 know, they're sort of -- FTA and TOC are aligned very, very
3 closely almost to the fact where they're almost the same
4 organization, you know, to meet with the MAP-21, since it's the --
5 you know, the oversight as acting as FTA's agent on that. So
6 that's why I say, when the FTA came out and did the audit, TOC was
7 with them and that's why -- yeah, they did that.

8 Q. Are you aware of the requirements of MAP-21?

9 A. Yes.

10 Q. And what's your characterization of MAP-21 and those
11 requirements?

12 A. Yeah, again, I would say, that the MAP-21 requirements
13 are oversight. The problem is that they don't become specific
14 regulatory issues that have to be addressed. I mean, has to be
15 put forward is what these criteria are for pass/fail criteria, you
16 know, to be able to look at this and -- so that I know whether I'm
17 in compliance. You know, that's very important for me to
18 understand; am I in compliance?

19 Q. So WMATA has their new track geometry vehicle. And in
20 general terms, what is this vehicle?

21 A. The track geometry vehicle provides significant amount
22 of testing for us to be able to do gauge testing, profile testing,
23 ultrasonic testing for the internal defects on it. It's a
24 significant vehicle for us to be able to track. We can do a lot
25 of trend dating. We recently put in a program called Protran, I

1 think. No, not Protran.

2 UNIDENTIFIED SPEAKER: No.

3 MR. TROUP: Optram. Thank you. We put in a program
4 called Optram, where the data is downloaded at Optram, and we can
5 go through rationalization of that data. In addition, the track
6 inspection data is to be put in there. So it's a good way to be
7 able to collect data quickly and be able to profile, so that we
8 can do targeted maintenance where we need to.

9 BY MR. HILLER:

10 Q. Has the Tri-state Oversight Committee ever participated
11 in a ride-along inspection?

12 A. They have been on the machine. They have been on this
13 machine. I don't believe that they've ever actually participated
14 in where it was actually a true inspection.

15 Q. Okay, and --

16 A. It was -- they asked for a specific ride to get familiar
17 with the unit. We took them all in the unit. We showed them the
18 equipment and everything, but specifically for an inspection,
19 like, in a regular course, I don't believe. But I could be wrong.

20 Q. Okay, and do you -- does WMATA ever share the data with
21 the Tri-state Oversight Committee?

22 A. That I don't know, Mike.

23 Q. Okay.

24 A. I honestly don't know. If they ask for it, we would,
25 certainly.

1 Q. If they requested it you would provide --

2 A. If they request it we would -- yeah, yeah. I know that
3 we've, like I said, we've provided reams of data for the FTA,
4 probably the track geometry vehicle was included in that. You
5 know, track inspection data.

6 Q. Does the TOC or the Tri-state Oversight Committee hire
7 contractors or consultants to do the oversight?

8 A. Yes.

9 Q. How would you characterize the consultants and
10 contractors? Are they qualified individuals or individuals you
11 would say that are knowledgeable of the mission?

12 A. I don't think I have subject matter experts. I think I
13 have generalized people.

14 Q. General people, not subject matter --

15 A. General people. Not subject matter.

16 Q. Okay. What's been your experience with TOC enforcement
17 actions?

18 A. Well, you know, again, because it's not true regulatory,
19 you know, there is no level of enforcement. And --

20 Q. No level of enforcement.

21 A. You know, when we get to issues of, you know,
22 compliance, I -- you know, there is no regulatory compliance on
23 it, so you know, that's -- again, it's an oversight agency but
24 there is no regulatory compliance that goes along with that.

25 Q. Okay.

1 A. So we obviously work very closely with them, if they
2 have any recommendation or CAPs or anything, to try to work with
3 them, you know, on that. So --

4 Q. Okay. So those are all the questions I think I have
5 regarding the Tri-state, unless you have anything else you want to
6 add, about either the Tri- state or the FTA?

7 A. Nope. I think I'm good.

8 Q. Okay.

9 MR. FLANIGON: Go ahead.

10 BY MR. GORDON:

11 Q. Joe Gordon, NTSB. Early on, following the incident, I
12 think January 20th the document was dated, there were early action
13 items that WMATA had proposed as things they were going to look
14 into. One of those, in particular, was kind of a zoning on smoke
15 detection.

16 A. Um-hum.

17 Q. Do you know the status of that action item? Could you
18 tell us a little bit --

19 A. Yeah, I certainly can. So we looked at technologies on
20 that. We looked at, you know, if we could get comfortable with
21 technology on that. We looked at implementation of that, what the
22 funding cost would be. We're looking at now, at the funding
23 profile of when we can do that work.

24 I'm not convinced and comfortable that I have a
25 sustainable technology available for that yet. But that doesn't

1 mean that we've stopped the efforts on that. I'm still looking at
2 that. And the technology that we do have, we're looking at how we
3 could implement that. And we're looking at specifically is can we
4 implement that during the T-band relocation. Is there a
5 possibility that we could jointly, co-join those projects and do
6 it then.

7 It's very concerning to me anytime we introduce new
8 technologies, that -- you know, again, sustainability is important
9 to me. We put something in, I want to make sure that it works,
10 first and foremost, the way it's supposed to, that we can execute
11 it in the time frame, because, you know, working out on the
12 railroad is a very inefficient, you know, inefficient -- you know,
13 if I can't get this thing in 25 years done in 25 years, I'd rather
14 potentially look at something else, something that would be a
15 better use of time.

16 And I think that that's one of the things is, you know,
17 also doing sort of a risk analysis, and saying okay, if -- you
18 know, once I get the cost elements data, if this is a \$100 million
19 project, is that \$100 million better spent in providing more cable
20 or a bigger return rail or, you know, something along those lines
21 that maybe could mitigate those smoke issues or incidents along
22 those lines. So being able to look at that.

23 So, you know, I haven't given up on it yet. We're
24 projecting this out, seeing what the technology is, seeing what
25 the funding profile is, what the cost, and when we could do that.

1 Q. Okay. Okay, and standard operating procedure, I believe
2 it's Standard Operating Procedure 6 that deals with smoke ahead of
3 a train; so a train reports smoke, and then the operator's
4 response to that smoke. What's WMATA's plan to implement -- you
5 know, you have to investigate that, find out where the smoke is
6 coming from, but how -- what's the plan to do that with the
7 current detection system that's out there now?

8 A. Yeah, so if we get a report a smoke, we offload the
9 train. And then we send a test train in to see where that smoke
10 is, what's going on there. Recognizing, then turning the operator
11 back, so if he encounters smoke, then he can easily turn back and
12 go. So, and we also have, for the smoke, again developing the
13 tunnel ventilation procedures and having trained the ROCC
14 operators on how to do that; where might the smoke be located? So
15 there's a whole comprehensive effort to be able to do that.

16 Q. Okay. Okay, so training. And you and Rick were talking
17 about the SCADA. I believe there was an audit done of the -- kind
18 of the nuisance alarms that trip breakers, and some of that
19 additional information. That report or audit was done in 2010?

20 A. I believe it was. 2009, 2010, something like that,
21 yeah.

22 Q. I'd like to get a copy of that.

23 A. Sure.

24 Q. If we could. That'll be something that we'll request
25 there. And would it be a fair assessment, the controllers -- to

1 say that the controllers were sometimes almost getting conditioned
2 to reports of smoke and -- prior to the January 12th incident, and
3 there's been kind of a shift in that focus following the incident?

4 A. I don't know they were getting comfortable with smoke.
5 You know, I don't think that that's the situation there. You
6 know, I think that would be an unfair characterization. There
7 obviously has been a greater awareness now of smoke because of the
8 incident. So I don't want to -- you know, I don't want to give
9 the impression that we're getting very complacent with smoke
10 incidents. I don't think that that was the issue.

11 I think, you know, when you look at this incident as
12 whole, which I know you will, you know, a lot of smoke incidents
13 going on at the same time, you know, being able to identify where
14 those are. You know, we treat -- we call the fire department all
15 the time. We have a regular protocol to be able to do that, so --
16 from that. But now, again, I think simply because of the
17 incident, there was been a greater awareness.

18 Any incident, you know, that -- you know, you look at
19 the opportunities to do things better. I mean, you got an
20 obligation to do that, to change your processes, procedures, you
21 know. So I think that that's kind of what we've done is we've
22 said, okay, what's our obligation here to get better? What
23 happened out there that shouldn't have happened out there? What
24 can we improve on?

25 Whether it was contributory or not, you know, I mean,

1 that's one of the good things about being involved in the
2 investigation with the NTSB is, you know, we look at all the data,
3 whether it's contributory or not, if we can make a determination
4 that, you know, it's something that should have been done. You
5 know, like if you recognize like your smoke detector, you know,
6 your battery wasn't changed every year -- smoke detector worked,
7 but you didn't have the process, well, that's something you
8 change. And that's the same kind of thing we're looking at here.
9 You know, what is -- what can we do to improve, even whether it
10 was contributory or not.

11 Q. Okay.

12 A. So I think we do have a higher awareness, though, of it.

13 Q. Okay, thank you.

14 A. And we're working a lot better. And a lot of that
15 awareness has been with our working relationship with fire-EMS.
16 You know that's where a lot of that awareness has shifted. We're
17 working very, very closely with them. I believe transit police
18 always had a good relationship with them. But I think right now,
19 we're really focused on a sustainable relationship to be able to
20 afford and really focusing on that. So I think that's really been
21 something that we've improved upon.

22 Q. Okay. There's been, you know, talk about the aging
23 infrastructure and kind of catching up with some of the deferred
24 maintenance of the -- that's, you know, been in the past.
25 Knowing, you know, the maintenance is never going to stop --

1 A. Right.

2 Q. -- you know, on a system when you're out there running,
3 it's always going to be there, but what would you say as far as
4 catching up to where now you're just maintaining a system, you've
5 got it back up? What kind of time-frame with the assets and
6 availability of getting in there to do the work, would you say
7 that you'll be caught up with the past deferred?

8 A. Well, it always seems like something else pops up.
9 That's one of the issues that I have. You know, I think for the
10 general infrastructure itself, for the track infrastructure, you
11 know, we're looking at probably a 2018/2019 time frame for the
12 track infrastructure itself. And we have platforms, which you
13 know, we're dealing with now. We have -- and again, that takes
14 time and space away.

15 And I wouldn't have expected some of these platforms to
16 deteriorate like they have in the 20, 25 year time frame. So as
17 we start seeing some of these items pop up, you know, things we
18 didn't know about, you know, that have been hidden from us -- you
19 know, we need to go through the inspections, but the things that
20 have been hidden from us, pop out.

21 So it's a really hard answer for me right now along
22 those -- like I said, from the track, simply track infrastructure
23 standpoint, 2019. From an electrical infrastructure standpoint,
24 probably 2025. If we get the funding for the 100 percent eight-
25 car trains, that's probably where the funding question -- what I

1 would say is, you know, it would be nice to have the ability to do
2 that, to be able to go in, and rather than go in twice, you go in
3 once.

4 You know, if you're going to rehab with traction power
5 substation that's a 6 megawatt, and you got plans eventually to do
6 a 9 megawatt, you might as well do a 9 megawatt now. You know, so
7 I think from that standpoint, you know, from an electrical
8 standpoint, probably 2025 is where we would be for that.

9 From an ATC standpoint, you know, we do that in a step-
10 wise approach, and from an ATC standpoint, from a true state of
11 good repair standpoint -- I say state of good repairs to be able
12 to mostly, like I said, progress to where we take out what are
13 called the K-relays, the nonvital K-relays that we have, which are
14 no longer manufactured, put in microprocessors, get the -- or
15 nonvital microprocessors, get them in. And then eventually
16 replace the vital relays. I'm not so much concerned about the
17 vital relays, because they have a long shelf-life on them, and I
18 can replace them, and they can continue to have a long shelf-life
19 on them.

20 So from a state of good repair aspect, I'm not too
21 concerned about the ATC system, other than the regular track
22 circuit maintenance that we have going on with replacement of the
23 track circuits. So that's an ongoing maintenance standpoint. But
24 the ability to do the nonvital work is probably from 2025 to 2030,
25 the ability to do that -- and then we just start over again with

1 everything on that. So that's kind of where we are for those.

2 Q. Okay.

3 A. Based on the time and space that we have now.

4 Q. Okay, thank you for that assessment. I have nothing
5 further.

6 BY MR. FLANIGON:

7 Q. Just a couple of follow-ups. Doing okay, need a break
8 or anything?

9 A. Fantastic.

10 Q. Okay. You and Joe were talking about smoke detection
11 systems and improvements. And a question that we had for
12 Mr. Bitar, and he's tracking down the answer, but I'm going to ask
13 you --

14 A. Okay.

15 Q. -- just in case you have any insights on it. There's a
16 smoke detector in the vent shaft where -- just adjacent to where
17 the arcing occurred. And that -- we've got a time from someone
18 on, you know, when that alarmed. What we don't have a good handle
19 on is where it alarms to. Do you happen to know that?

20 A. I don't know specifically. I think it's to the ROCC,
21 but I'm not positive. So I'll have to get that information back
22 to you.

23 Q. Yeah, okay.

24 A. And are we sure that's a smoke detector and not a heat
25 detector?

1 Q. I was told it was a smoke detector.

2 MR. GORDON: I think that is smoke detector.

3 MR. TROUP: A smoke -- okay. I just want to verify that
4 as well too. Okay.

5 BY MR. FLANIGON:

6 Q. Yeah. Okay. Thinking about the organizational culture
7 and changing that to make safety more of a core value, it's not an
8 easy job. It's not like some kind of engineering projects
9 where --

10 A. Right.

11 Q. -- you can get out a slide rule and, you know, and
12 figure it out. But clearly, one of the biggest challenges that
13 I've seen in most organizations I've looked at or been a part of
14 it is there's a vision, kind of at your level, and the
15 organization general manager, executive team, and it's not always
16 the same vision as you sort of spread out down in the
17 organization.

18 So what are some of the mechanisms to spread that out,
19 and what are some of the indicators that you have available to you
20 to give you feedback on how that's going?

21 A. I think, first and foremost, it's making direct change
22 in the way people's thought processes go. And I can give you an
23 example. We had red signal violations. You know, coming from a
24 very traditional background is you are automatically disciplined,
25 you get your 5 days off.

1 Q. Yeah.

2 A. And then if you have another one, you know, you're
3 dismissed.

4 Q. Decertified in the FRA world, yeah.

5 A. So, you know, so -- right. So, you know, the red
6 signals, you know, that's a discipline. Boom, boom, boom.

7 So I was recently at an APTA conference and we had
8 people that were talking about -- this Atticus group was talking
9 about red signal violations the freight railroad had asked them to
10 come in and look at. And they looked at it not from a rules
11 violation standpoint, but why was the person engaged into it and
12 they looked at it from a psychological standpoint. And I wouldn't
13 do it justice, but part of your brain is like the memory part and
14 the other is the cognitive skills parts that -- the things that
15 you're not normally engaged in, and that can get filled up. You
16 can only have so many functions going on, and that's when the
17 memory part of your brain takes over.

18 They were saying when they were looking at this one
19 thing, it was interesting, the guy went by a work crew, and guy
20 didn't acknowledge him. One guy did and the other guy didn't.
21 And the engineman started thinking to himself, well, this guy
22 didn't acknowledge me. You know, and it made him angry, and he
23 started thinking about it. And he went around the corner and
24 was -- his memory part of the brain was I've always got my
25 diverging signal, I'm always on the passing sign here, I'm always

1 going into that, that's what I'm going to do. There was a stop
2 signal. He didn't even see it because he was angry and frustrated
3 by this.

4 So they looked at that and they said, okay, how do we
5 train people not to -- first to recognize that that's happening to
6 them and move them. So as part of the red signal study, you know,
7 we came in and we said, okay, look, we're going to start to have
8 to look at red signal violations differently, so it drives that
9 level down into the assistant general superintendent,
10 superintendent level so that they start asking those questions of
11 those people when the red signal violation happens. It's not
12 simply, okay, you're out of service. We're going to drug and
13 alcohol test you. It's what was going on, what were you seeing,
14 you know, to be able to identify what those questions are.
15 So it's driving those behaviors down to that level. That's one of
16 the things, being able to ask those questions.

17 When we have incidents, it's being able to recognize, to
18 be able to say, you know what -- if we have an incidence of
19 significance, we have safety stand-downs. You know, we say, okay,
20 you know what, you know, I'll order safety stand-downs, because I
21 think what it enables then is these conversations to take place.
22 It drives that down. It's not me simply saying, you know what,
23 you better not have that incident again. We're not going to do
24 that. It drives that incident down to that level and it says to
25 them, okay, this is important enough for us not to work. You

1 know, and again, that's where we deal with these leading
2 indicators. Let's talk about this incident. This is important
3 for us not to work, let's engage the superintendents, the
4 assistant general superintendents in the conversations with these
5 field level workers.

6 So it's being very intentional about having mechanisms
7 to be able to make those conversations, and getting people to
8 think differently. Because if you get them to think differently,
9 then they're more engaged. If you get them to think differently
10 about a problem, then they become more engaged, and they recognize
11 okay, there's something different going on here at the
12 organization. There's something different going on, you know, at
13 the authority to be able to do that.

14 So I think first and foremost, that's how you drive --
15 it's not publication, it's not posters on the wall. It's not --
16 you know, that's part of it, but that doesn't -- you know, it's
17 not be safe every day. It is saying -- having those
18 conversations, being very deliberate about making those happen.

19 And the other part is providing people the training,
20 making -- like the RWP training. I think that that was one of the
21 biggest cultural changes that we had out there. And it is, this
22 is going to be implemented; you are not going to take shortcuts,
23 you know, with the RWP. And we had a lot of old inspectors out
24 there, particularly working with contractors, who were not used to
25 the RWP program. You know, but we drove it down to them. This is

1 the way it's going to be.

2 You know, people setting up work zones, being able to do
3 that. So again, different processes, different procedures,
4 getting people to think differently about the way that they used
5 to do things; making that intentionally different and better. You
6 know, and better. So I think that that's kind of how you drive
7 that culture out.

8 Q. Yeah. Well, just kind of as information, almost to a
9 person, everybody we talked to, called out the RWP program as a
10 big organizational plus.

11 A. Right.

12 Q. A big change that had been made here.

13 A. Good.

14 Q. So that had -- that's clearly had an impact. So on the
15 other side of that, what comes back to you to give you a sense
16 that it's working or not working, or you need to change gears
17 or --

18 A. Yeah. The biggest thing that comes back to me, and
19 again, these are, you know, lagging indicators, but it is the
20 injury ratios. That's one of the things that I look at. How
21 successful are we in reducing the injury ratios on that,
22 particularly on the groups that had high ones before? You know,
23 we really focused a lot of attention on the ELES group.

24 And again, it wasn't simply, okay, you got injured, you
25 need to work better. It was, why did you get injured? We started

1 saying, okay, what were the ergonomics here that, you know, we
2 found out that they're in confined spaces. When I say confined, I
3 don't mean from the OSHA regulatory standpoint, but you know,
4 closed in spaces. You know, and it was awkward for them to move
5 stuff.

6 So what are the tools and equipment, voice, whatever we
7 can give them to be able to improve those processes. So when I
8 see us implementing those changes, those thoughts, and I see the
9 injury ratio start to decrease, that's one of the biggest things.
10 That's one of the biggest indicators that I get back from there.

11 And also, when I see people planning work out better,
12 and when I go to the jobsites, because I go to the jobsites as
13 often as I can. To see people who have their PPE on, well, you
14 know, that means people are thinking about safety. They recognize
15 what it -- you know, what's important. They're engaged in it.
16 People are paying attention, people are talking to other people.

17 You know, recently out at the College Park incident with
18 the pedestrian, you know, a guy came through, and he said I got a
19 piece of track equipment coming, you know, please step aside.
20 Well, the piece of track equipment wasn't coming until 5 minutes,
21 you know. But he wanted to make sure everybody was on the side.
22 It wasn't like, okay, it's getting here, you know, come on get off
23 to the side, I want to be able to pull this off. So those kind of
24 conversations are important, they just -- actually being out
25 there.

1 Q. How about the survey that WMATA puts on, what is that?

2 A. The employee engagement survey?

3 Q. Yeah, yeah. What --

4 A. Yeah, I think the employee engagement survey is very
5 helpful because that gives us an opportunity to be able to, you
6 know, without prejudice, because it's anonymous, to be able to
7 say, okay, you know, what are we doing that's right and wrong
8 here? You know, and if people say that they recognize -- if 80
9 percent of the people say that they're comfortable reporting a
10 safety incident, that's very good. It's not -- obviously, you
11 know, we want something much better than that, but that's very
12 good. That shows that we're moving, you know, in the right
13 direction, along those lines. So getting that information back is
14 important to us.

15 And also being able from a safety culture standpoint,
16 being able to connect those dots that, you know, it's
17 -- you know, Southwest Airlines, you know, the president one time
18 said, you know, if we don't do -- if we have coffee on our flip-
19 down trays -- coffee stains on our flip-down trays, it means to
20 the passenger that we don't do our aircraft maintenance.

21 So if my station managers go into a bathroom that is
22 dirty and ugly and corroded and everything, their mindset is we're
23 not doing the maintenance that we need to on the right-of-way.
24 You know, so their safety mindset becomes less. And so I think
25 those are the kind of important things that we -- that through the

1 engagement survey that we need to connect the dots to as well.
2 You know, what are the attitudes that are going to create a poor
3 safety attitude? You know, not directly, but indirectly.

4 You know, when I was with Amtrak, they used to send me
5 to places that had bad production. That's what I would do. I'd
6 go, okay, this area in Boston, we can't get any production. You
7 got to go up and get production out of these guys.

8 Well, I would get up there and inevitably, it would be
9 and old trailer with holes in the floor, dilapidated steps,
10 material yards with stuff all -- you know, crap that was all over
11 it for, you know, from 20 years ago. It's no wonder they had bad
12 attitudes. They didn't have the tools or the proper work
13 equipment. No wonder there was poor production. You know, and as
14 a result, their safety was bad too because they just had that
15 mindset.

16 You know, so the first thing, you go in, you get a new
17 trailer, you get them the proper tools, you clean up the yards,
18 you fix the steps. You know, you put the investment in them, you
19 know, and things change then. Attitudes change, their safety
20 records change. And I think that's what's important. The same
21 kind of thing here.

22 Q. Okay, good. Well, that's -- thank you.

23 A. Thank you.

24 DR. GROFF: No further questions.

25 MR. GORDON: No further questions.

1 MR. FLANIGON: Okay, anything you want to add?

2 MR. TROUP: Nope, I'm good.

3 MR. FLANIGON: All right. Thank you very much.

4 (Whereupon, the interview was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: WMATA INCIDENT AT L'ENFANT PLAZA
 STATION, WASHINGTON, D.C.
 JANUARY 12, 2015
 Interview of Rob Troup

DOCKET NUMBER: DCA-15-FR-004

PLACE: Washington, D.C.

DATE: April 16, 2015

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.

Katie Leach
Transcriber