## UNITED STATES OF AMERICA

## NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

AMTRAK WORKER FATALITY BOWIE, MARYLAND \* Accident No.: RRD18FR006 BOWIE, MARYLAND

APRIL 24, 2018

Interview of: JAMES P. MILLER

Linthicum, Maryland

Wednesday, May 2, 2018

## APPEARANCES:

RUBEN PAYAN, Investigator in Charge National Transportation Safety Board

MICHAEL HOEPF, Ph.D., Human Performance Investigator National Transportation Safety Board

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Brotherhood of Maintenance of Way Employees (BMWED)

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## 1 INTERVIEW (1:31 p.m.)2 3 MR. PAYAN: All right, good afternoon. My name is Ruben 4 Payan, P-A-Y-A-N. I'm a -- one of the investigators from the 5 National Transportation Safety Board. Today is May 1, 2018. 6 are in Linthicum, Maryland interviewing manager Joe Miller -- or 7 JP Miller. MR. MILLER: It's James Miller. 8 MR. PAYAN: James Miller. And this is in connection with an 9 10 accident that occurred at Mile Post 119.2 on April 24, 2018. 11 NTSB Accident Number is RRD18FR006. This interview is being 12 recorded, and a transcript will be provided for you for review and 1.3 to provide any corrections or clarifications. 14 I'm going to go around the room and have everybody introduce 15 themselves. I'll start with you, Mr. Miller. If you could 16 introduce yourself -- or state your name, spell your last name, 17 and your current employer and current title, please? MR. MILLER: Name is James Miller, M-I-L-L-E-R. 18 19 manager of the undercutter operations and Independent Track South, 20 track production routes. 21 MR. PAYAN: Okay. And who's your current employer? 22 MR. MILLER: Current employer is Amtrak. 23 MR. PAYAN: All right, thank you. 24 And the person sitting with you, can he introduce himself, 25 please?

- 1 MR. CAVANAUGH: Joe Cavanaugh, C-A-V-A-N-A-U-G-H, director of 2 production, Amtrak.
- 3 MR. PAYAN: All right, thank you.
- Mr. Fields.
- 5 MR. FIELDS: Carl Fields, F-I-E-L-D-S, Brotherhood of
- 6 Locomotive Engineers and Trainmen.
- 7 MR. HURLEY: Jim Hurley, H-U-R-L-E-Y, FRA.
- 8 MS. LEESE: Kristin Leese, L-E-E-S-E, director of safety for
- 9 engineering.
- 10 MR. STEARN: Steve Stearn, Brotherhood of Maintenance of Way
- 11 | Employees. S-T-E-A-R-N.
- DR. HOEPF: Mike Hoepf, H-O-E-P-F, NTSB.
- 13 MR. PAYAN: All right. Thank you.
- 14 INTERVIEW OF JAMES MILLER
- 15 BY MR. PAYAN:
- 16 Q. Mr. Miller, can we start with can you give us a description
- 17 of your current position and the duties that encompasses?
- 18 A. Yes. Current duties is to oversee, direct, and manage the
- 19 | installation of ties, rail, concrete turnouts, undercutting and
- 20 surfacing operations.
- 21 Q. Okay. Now --
- 22 A. For --
- 23 Q. Oh.
- 24 A. Sorry.
- 25 Q. No, go ahead.

- 1 A. For the production -- engineering production department.
- 2 Q. Okay. And you're based out of Philadelphia; correct?
- 3 A. Correct.
- 4 Q. Okay. And how much -- what's your territory encompass?
- 5 A. Our territory, the Northeast Corridor, anywhere from Lorton,
- 6 Virginia up to Boston, Massachusetts.
- 7 Q. Okay. And under you is -- is it just one undercutter gang?
- 8 Or several?
- 9 A. Multiple gangs. Six gangs with the undercutter. And with
- 10 Independent Track South I have two gangs.
- 11 Q. Okay.
- 12 A. One on the Harrisburg line and one on the Philadelphia line.
- 13 Q. All right. Thank you very much.
- 14 Now, specific to the undercutter gang that was working in the
- 15 Bowie, Maryland area, can you give us the scope of what the
- 16 project involved? When it started? And where -- where it started
- 17 and where it was going?
- 18 A. As far as the whole project, from inception to --
- 19 Q. Yes, please.
- 20 A. We were tasked with undercutting Bowie to Grove Number 2
- 21 Track with the undercutter to remove foul ballasts. We're also
- 22 | tasked with distressing rail, which means that we would pull the
- 23 | existing rail out, replace all the OTM, which OTM is patch clips
- 24 and insulators, thread the rail back in, distress the rail and
- 25 | also weld the rail to make CWR, which is continuous welded rail;

- 1 | surface final PC, and return the track back to service by June 14,
- 2 2018.
- 3 Q. Okay. And do you know when the project started?
- 4 A. Yes. The project started, I believe it was May -- I want to
- 5 say May 2nd.
- 6 Q. Of last year?
- 7 A. Not -- no, March. March 2nd, I'm sorry. Forgive me.
- 8 Q. Oh.
- 9 A. Not May.
- 10 0. March 2nd.
- 11 A. Yeah.
- 12 Q. Of this year?
- 13 A. Correct.
- 14 Q. Okay. Now, before the work started, what was your
- 15 | involvement with the planning of the project and setting up the
- 16 resources?
- 17 A. The -- the year previous -- the year previous the engineering
- 18 department, my directors and systems, system track will come down
- 19 | with proposed locations to undercut. They're give us the area.
- 20 I'll take my supervisor, foreman, my system production engineers,
- 21 | we'll go look at the job that they're proposing this undercut.
- 22 And we'll go -- we'll look at the scope of the job, the location.
- 23 | We take track centers. Basically, we're going out there to make
- 24 sure it's safe for us to undercut in the locations. We do have
- 25 limitations with the undercutter of where we can cut and where we

can't cut. So, we walk the area. We plan it. We look for any 1 2 safety hazards, environmental concerns or anything that could 3 affect our work group when we're performing the operations. Ο. Okay. And how is this documented? 5 It's documented in an SSWP. The SSWP is overseen by myself. 6 I do it collectively as a team with my management team and with 7 my -- my supervisors, my -- my supervisor and my assistant supervisors, and we'll bring the foremen in also to have them give 8 9 their input. That SSWP, we'll write it, I'll review it. After 10 that, I send it out to my supervision. They review it. I also 11 send it to the safety department. It gets sent to the division ahead of time. They'll review it. Then I'll call a -- what I 12 13 call a pre-kickoff meeting. I'll sit down with the division and 14 everybody involved in transportation, CNS, ET, B&B; we'll sit down 15 at the division headquarters. I'll get the SSWP out. We'll go page by page through everything. We'll try to identify any 16 17 hazards, anything that might have been missed by my team, any --18 anything that we wasn't expecting, anything that could delay 19 transportation. We'll talk about schedules. We'll talk about the 20 area of work in. We'll take all that input. I'll edit the SSWP, 21 send it out, mass email again. Everybody will review it again. 22 And if everybody's okay with it, that will be the SSWP we use. 23 Then after that, it gets distributed from me to my management, to my supervisors, to the foremen. 24 They're all 25 instructed to print this out, make sure they have it on the job

- 1 site with them, that way it's reviewable for anybody that shows up
- 2 | from the FRA to any quests that's showing up that wants to review
- 3 | it. We encourage them to review the SSWP. And that's where
- 4 you're going to find all your safety information; where we're
- 5 | working, charge numbers, environmental concerns, where to cast
- 6 pulls, where not to cast pulls, how we're cutting, the direction
- 7 that we're cutting, the rules we're going to use, any -- we go --
- 8 There's actually a hazard -- what we call a Hazard Assessment
- 9 Worksheet in it that goes over looking for pinch points and
- 10 anything -- making sure you're wearing PPE. We identify any hot
- 11 | spots, any areas that's going to be concern that we'll additional
- 12 watchmen or additional protection. And --
- 13 Q. Okay. So, a little bit -- a little bit of everything --
- 14 A. Absolutely.
- 15  $\mathbb{Q}$ . -- out there. How about -- how about the actual form of
- 16 protection that you're going to use; is that addressed in the
- 17 SSWP?
- 18 A. Yes. It is addressed in the SSWP.
- 19 Q. So, it can be anything from -- from --
- 20 A. From watchmen protection, foul time, to track out of service.
- 21 Q. Okay.
- 22 A. To using adjacent tracks out of service. We even put a
- 23 schedule in there when -- with the project, not every -- we can't
- 24 be on straight daylight time all the time, so cut ins and cut
- 25 outs, with surfacing, with undercutter, it's -- it's safer and

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more advantageous for us to -- we'll come in on a Sunday night,
 1
 2
    that way we can get the full -- we can get a full interlocking,
 3
    because generally cut into an interlock, and then we cut out of an
    interlock.
         If we're -- depending on the track, outside or inside,
 6
    determines whether we need to use bridge plates. If we come to
 7
    obstacles, we'll have to come in at night. We try to go
    through -- we'll -- we do go through passenger stations at night,
 8
    no matter if it's inside or outside track because we don't want to
 9
10
    expose the public to any hazards. And that's essentially it.
11
    Q.
         Okay. I just lost my question to you.
12
         MR. PAYAN: Let me go around the room.
13
         MR. MILLER: Okay.
14
         MR. PAYAN: I -- I drew a blank all of a sudden.
15
    apologize.
16
         FRA?
17
         MR. HURLEY: Nothing from FRA.
18
         MR. PAYAN: Okay. Amtrak?
19
         BY MS. LEESE:
20
         So, the SSWP, do you guys typically -- like, prior to the
21
    start of the job May -- or March 2nd, do you hold -- get the group
22
    together and do any kind of overview as a group? Or do you
    meet --
23
24
    Α.
         Yes, as a group.
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25

0.

-- and hand it out?

A. We all will gather -- the whole undercutter group, the
workmen themselves, will -- I'll reserve a hotel for the -- in a
conference room for the day. We go in that conference room. We
go through the SSWP, page by page. We answers every -- we try to
answer every question they have. We cover all the safety aspects
we can.

What happens generally with the production unit, we'll have a lot of new guys come into the unit. With production during the winter, it's our slow time, we go into what we call an overhaul. So, I know -- and I'll -- my management and my supervisors know every time we go into production, every year it's new. We have new faces. We have new people that's not used to our operations, so we really stress the dangers of the undercutter, the dangers of where we're working, what you got to watch out for, what you need to pay attention to, and we cover that with all of them. And we stay in there as long as we need to, to make sure these guys got it. And that's -- no matter what, that happens every meeting -- I mean, every project. We do that every project.

- Q. Do you typically, when you have that meeting, get a lot of give and take from the guys? A lot of --
- 21 A. Oh, yeah, absolutely.
- 22 Q. -- questions and --

A. Absolutely we do. And most of them is coming from the newer guys that are in the unit that's never seen what we do. More seasoned -- our more seasoned guys, they -- and you know, they're

- 1 interjecting, helping to answer questions themselves to the guys.
- 2 So, it's a good collaboration between the men and management and
- 3 | all the supervisor -- supervision involved.
- MR. LEESE: That's it for us. Thank you.
- 5 MR. PAYAN: All right, thank you.
- 6 BMWE?
- 7 MR. STEARN: Thank you. Steve Stearn of -- with the
- 8 Maintenance of Way Group. Thank you, Mr. Miller, for coming in.
- 9 BY MR. STEARN:
- 10 Q. Now, the SSWP and -- I guess it's divided into chapters or
- 11 | sections or somehow?
- 12 A. Right.
- 13 Q. And so, for me and my interest, chapter devoted to safety,
- 14 could you give me some -- what kind of information would be
- 15 | included under the safety --
- 16 A. Under the safety -- besides the hazard assessment worksheet,
- 17 | I also will put in a site-specific work plan that address what me,
- 18 | as a manager, supervisors and foremens, what we should daily be
- 19 | looking at. I also put in there any special instruction that
- 20 | pertains to the job, like slow-bys with the undercutter. That is
- 21 | put in there; specific rule. And any rules that pertains to what
- 22 | we're doing.
- I mean, it's not as detailed and micro as, you know, the
- 24 | watchman's going to stand here and this guy's going to go here,
- 25 but we'll identify, you know, curve numbers, like hey, we're at

Curve 401-402, it's a dangerous curve, we need to -- we're going to need extra watchmen there.

We -- I actually talk about even customer/guest safety and people that come to the job site because of the undercutter, the nature, it's actually mesmerizing when you're watching the undercutter because nobody's seen it, and then you -- I've had guests come out to where we -- you know, we go over that with them again and say, look, you're going to see the undercutter running, it's going to be noisy, you can't hear, don't start wandering out this way with the undercutter.

We talk about the requirement that you need to have tap men with the undercutter. Two tap men, two gang watchmen. We're supposed to -- unlike any other unit, you'll see we don't just put watchmen on one side of the undercutter unit, we put watchmen on two sides of the undercutter unit because you got figure that unit's over 1,000-some feet long with 40 cars running, with the undercutter running and the noise level alone, you have to have that many watchmen and that much protection while that thing's running to keep these guys safe. And that's -- that's normal practice from Day 1 when I took charge of the undercutter unit. We've done that from Day 1 and we're going to continue to do that to keep our men safe.

Q. Thank you. And just for clarity for the record, your reference to "40 cars" isn't a -- a quantity value but a description of a type of car?

- 1 A. That is correct. Yes. It's a manufacturer's name. A MS40
- 2 | is made by Plasser America. They're what they call a ballast
- 3 hopper. The designation -- they actually hold 60 cubic yards, so
- 4 | I don't know why they call them 40 cars, but it's -- the un --
- 5 | O. It's --
- 6 A. Right, it's the --
- 7 Q. It's the metric system?
- 8 A. The metric system, yeah. They're made in Europe. So, when
- 9 the undercutter is cutting, the foul ballast that we're screening
- 10 | is actually going into that 40 car and they're transferring the
- 11 stone forward, all the way up to a slinger car -- what we call the
- 12 | slinger. And that's also in there; the slinger locations and the
- 13 | importance of when we -- we -- 2 Track, on the inside track, we
- 14 have to have foul time to cast pulls.
- 15 Now, you think about this, we got a 40-foot long conveyor
- 16 over the center track, we're going to pivot it out, and then we're
- 17 | going to start shooting spoils off on the right-of-way, so we have
- 18 to have foul time to do that. There's areas -- and identified
- 19 areas that we can cast in and areas that we can't cast in, and
- 20 make sure that's clear with the undercutter foreman and
- 21 specifically the operators of that slinger car so they know where
- 22 | they're casting and where they're not.
- 23 And then you got to worry about curves, too, because you get
- 24 in curves, you don't want to off balance the cars. And that's
- 25 another concern, so.

- 1 Sorry about that.
- 2 Q. No, that's fine. So, we're talking a lot about the
- 3 undercutter operations and the removal of foul ballast and the --
- 4 A. Right.
- 5 0. -- transference of that material. But then it's our
- 6 understanding that the undercutter was not operating on Tuesday
- 7 morning.
- 8 A. You are correct.
- 9 Q. It was not even on the tracks but back in the yard and
- 10 awaiting --
- 11 A. Correct.
- 12 Q. -- the day. So, what work was being performed out there that
- day was a welding gang, in conjunction with a rail gang.
- 14 A. Right.
- 15  $\parallel$ Q. And they were doing their typical type of work. Was there
- 16 any other work being performed that day at the location?
- 17 A. Yes, surfacing. Our surfacing unit was surfacing also.
- 18 Q. And they were actually working that day?
- 19 A. Um-hum.
- 20 Q. And so, they work, I don't want to say independently, but
- 21 separated from the rail distressing and welding?
- 22 A. Absolutely. Yes.
- 23 Q. They would have their own foremen?
- 24 A. Yeah.
- 25 Q. Watchmen?

- 1 A. Correct.
- 2 Q. Supervision?
- 3 A. Yes.
- 4 Q. They were some distance away from the welding distressing
- 5 operation?
- 6 A. To my knowledge, absolutely. Yes, they were.
- 7 Q. A couple miles --
- 8 A. Within -- yes, with -- a couple miles easily.
- 9 Q. A site-specific work plan, are there -- is there one for the
- 10 undercutter operation and then one for the distressing and -- and
- 11 | welding, et cetera?
- 12 A. No, it is for the whole operation. And when -- we do include
- 13 the hazards with each operation. And specifically, rail
- 14 distressing because that -- that is a -- that is a -- what's the
- 15 | word I'm looking for? I mean, everything we do on the railroad is
- 16 at risk, I would say. Absolutely. It's the nature of our
- 17 | business and what's why we have rules, regulations and policies
- 18 that we're supposed to follow to keep us safe.
- 19 The hazards that we identify, especially with rail distress,
- 20 | is threading rail in and out, especially on the inside track with
- 21 the -- a speed swing.
- 22 For those of you who ain't familiar with the speed swing,
- 23 speed swing has high rail gear and rubber tires, so they put it on
- 24 | high rail gear, and it's got a boom, so think like a miniature
- 25 crane. They'll put a roller or we'll put rail tongs. We actually

1 use a roller, so just to give you an overview of how the rail 2 distressing gang works -- you want me to go through that?

MR. PAYAN: Yes.

BY MR. STEARN:

1.3

Q. I mean, if you think it -- sure.

A. Yeah. I mean, so you understand what they're -- so, they come out. The first thing we do in the morning, we have to watch neutral rail temperature. Neutral rail temperature for Amtrak, according to the MW1000 is 95 to 115. And you have to do what -- so, they'll come out. First thing we want to do, we're doing 2,000-foot strings; 2,000 foot on the east rail, 2,000 foot on the west rail. The pads, clips and insulators and all the OTM is laid out ahead of time. Think like we're -- like a factory, in a car, and that's kind of the way I look at our production unit; we're -- we're a -- we're a big moving factory, so everything has to happen in step to get us to that goal.

They'll come in first thing in the morning. They'll cut the rail and they'll -- we'll do what they call pitch and tote (ph). So, you got two rails, we'll cut the rail and then we'll lay it to the inside of the track. And why we do that is because as ambient temperature heats up during the day, the rail's going to expand. So, as that rail expands, it gives it somewhere to go. We don't want to lay it on the outside on the inside track because we don't want to endanger the safe passenger trains. Lay it on the inside, they let the rail run.

While it's laying on the inside, we'll back the -- the speed swing will be set before that, so he -- the speed swing boom first thing in the morning and then we'll grab whatever, east or west rail, it doesn't matter, and we'll start threading that rail out and we'll lift if off the bolsters, and they'll start laying it in there.

1.3

We'll -- the gang will go -- so, they're stretched out over 2,000 feet; typical rail gang. So, they're walking along the track, they're walking along picking up -- picking up old pads, putting them in bags, removing the clips, so they'll get all the pads replaced. Speed swing gets to the end, he'll take that rail and then he'll -- after they lay the new pads in, they'll take that rail and he'll thread that new rail in. The men will separate themselves to go along. They'll start putting the insulators down, and they'll start pre-setting the -- we use what they call Pandrol E-clips. Think of like a pretzel. It looks like a pretzel. They'll start pre-setting them in the bolsters, which they attach into. Everything will be pre-set.

There's a -- behind them, there's a clipper, and it's a -- a roadway maintenance machine, and that clipper, what it does, it comes along on both rails at the same time and it squeezes the clips on, so it's squeezing clips. Now, before you start squeezing the clips, we have to run heat to the rail, and that's dependent on what they call the coefficient of expansion, which is ambient air temperature minus actual rail temperature, divided by

the coefficient of expansion, and then that will them how many inches. And also, you got to take the length of the rail in account; that will tell you how many inches to remove from the other end of the string, because what you're doing, you're counting for expansion or contraction, depending on the weather. Says that you need to remove three -- remove three inches, he'll go back with the math and he'll -- then he'll lay quarter points over the 2,000 feet.

So, he'll take 2,000 feet, divide it by 4, he'll mark quarter points. And as -- as he's heating the rail, you'll -- you'll have a foreman at the end of the string and you'll have a foreman about in the middle of the string, and what he's doing, he's talking to the rail heater saying put more heat to it. Vibrate. And the vibration actually helps the rail move. And he'll watch the quarter point. And once they meet, that quarter point's expansion, whether it's an inch or two, they're clipping it up, and then they get to the next quarter point, all the way until we get to the end.

And then what they're essentially doing, they did the math, they're heating it and they're trying to close that gap. Once they get that gap within an inch, is where the welding gang comes in. The welding gang is set there, and that weld gang will drop their weld. They'll weld it, make it CWR, grind it, put their initials on it, log their paperwork, string's done. Time to move to the next string.

2.0

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So, there's definitely -- you know, it's -- you get over
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 2
    2,000 feet, you got 20, 25 guys, two foremen, you got multiple
 3
    pieces of equipment, and you know, it -- it can be a lot at times,
    but that's why we make sure we got enough watchmen, that's why we
    do whistle tests, that's why -- all of that is supposed to be
 6
    done. And at any time, if anybody feels unsafe, they are supposed
 7
    to stop, we'll clear, we're re-brief, and we'll go out there. I
 8
    mean, it's -- that's the way it's supposed to go. And that's the
 9
    way I expect it to go as their manager. And that's -- I hold --
10
    and that's why I hold my managers and my supervisors accountable
11
    for. So, it's rail distress in a nutshell.
12
         It's a lot.
    Q.
         It is a lot, absolutely. And --
1.3
14
         It's not just beating on spikes with a hammer?
    0.
15
         No. Absolutely not. Spikes would -- I think spikes would be
16
    easier with wood ties because you don't have to worry about
17
    putting pads on and insulators, you just spike it. Use a spiker
18
    and put it in.
19
         So, back to the SSWP.
20
    Α.
         Yeah.
21
         Is there a lot involved in, you know, that drafting up and
22
    bringing all these factors together to put it in some type of a --
23
    a written format that's -- can be, you know, communicated?
                It's not any pre-written, pre-formatted form at all.
24
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It's -- it comes straight from me and my team is what drafts that

and put what we feel is essential to keep our guys safe in that.

And then we send it out for review.

I mean, it take -- it could take -- some jobs, smaller jobs like a 55-hour outage, we can do -- I can sit down and do in a day or two. Sometimes it's taken me a week or two to write it, depending on the complexity of the job. There's a lot of other factors involved in that with other departments that we have to consider and I have to get answers from before I can put it in -- put it in an SSWP. And it takes a lot of collaborations interdepartmentally to make sure that we're -- got the correct information in that.

- Q. And so, once you feel comfortable with all the information that you've solicited from all different areas --
- 14 A. Right.

3

5

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16

- 15 Q. -- it's sent out for review. Who -- where does that go?
- immediate supervisors, and the AD -- the division engineer of the territory that we're working in. The APEs, the ADEs of ET, the ADEs of B&B, any production managers or managers at my level it

Goes to the safety department, and it also goes to my -- my

- 20 goes to. So, they all get sent safety -- liaisons get a copy of
- 21 | it, also; I send it to them, and they -- they're able to review
- 22 it. And I have got feedback from safety liaisons multiple times,
- 23 | like, hey, you know, maybe you should look at that, or I think you
- 24 may be missed this. And I was like absolutely, thank you. And
- 25 | that's why -- that's why I send it out; because I want input from

1 everybody. We're human. Nobody's infallible. Not even in this

- 2 room. So, you want to make sure collaboratively that we're all
- 3 looking at something and we're not missing anything. We got the
- 4 most comprehensive SSWP that we can put out to our men to help
- 5 keep them safe.
- 6 Q. So -- so, after the SSP has been put together is -- like a
- 7 | final product you can say, if you will, and then sent out for
- 8 review, comment could come back that would make adjustments to
- 9 that?
- 10 A. Yeah.
- 11 ||Q|. Is there a final approval process? Is there a final stamp
- 12 | that -- or is it something that could continually evolve
- 13 throughout the project?
- 14 A. It could continually evolve throughout the project. The
- 15 | final say ultimately would rest with me, as far as what I see in
- 16 | it. As a manager of the operation.
- 17 Now, that has changed. There is an approval flow and process
- 18 | that was recently put out by Amtrak, I would say in the last
- 19 | couple weeks, that they're making the actual approval chain
- 20 matrix. I've still got to get into that myself and see what --
- 21 | the way we're going to do it. But yes, in previous history it
- 22 ended up to me as the manager and the technical expert for that
- 23 | job to say okay, we're good to go. And whenever -- but when I
- 24 actually receive it back, when there's no more further comments
- and no more further edits, then we're there.

1 Ο. Okay. Great. 2 MR. STEARN: Thank you. Nothing further for me right now. 3 MR. PAYAN: All right, thank you. BLE? 4 5 MR. FIELDS: No questions, thank you. 6 MR. PAYAN: Okay. Dr. Hoepf? 7 DR. HOEPF: Thank you. 8 BY DR. HOEPF: 9 James -- vou go by JP? 10 Yeah, JP's fine. Α. 11 Thanks. Appreciate you coming in and talking to us today. 12 Pretty interesting description of the rail distressing, so thanks 13 for, you know -- learn a little bit every day here. 14 Kind of get ahead of the group, my question to you I was 15 going to ask -- and go ahead and see, can you kind of walk us 16 through your railroading career? Just, you know, the positions 17 you held and all that? 18 Sure. Absolutely. I was hired September 14, 2009 into the 19 BMWE as a B&B mechanic. I hired into there. I went to a military 20 career fair in Philadelphia. That's after I got out of the 21 service; I was the Navy CB Instruction Battalion. Served in Iraq. 22 So, after my tour in Iraq, I was hired into B&B. Handed them my 23 résumé, hired me into B&B. While in B&B, I worked towards becoming a B&B foreman. 24 Got

my B&B foreman's (indiscernible), got my B&B's inspector

(indiscernible). From there, while I was doing that, I was -- started using post-9/11 G.I. Bill to go to school to work on getting a degree while I was at work at Amtrak. I completed --

In 2011 I was promoted into TLS as a TLS equipment engineer in the management. So, I worked on the mechanic -- the mechanical side of equipment. And that was with the T -- track laying machine, I was equipment engineer, so I was in charge of making sure that equipment was repaired, in charge of the mechanics, making sure it was safe.

While doing that, I finished my Bachelor's degree. Another opportunity come along. Well -- okay, back up. During that time is when Amtrak decided to bring -- bring the undercutter back into service after 12 years. I was tasked with making -- putting the undercutter together as the equipment engineer, which included looking at the electrical, mechanical, all the engineering drawings, working with the mechanics to do a retrofit and literally bring the undercutter out of the weeds. They gave me a year to put it together. Gave me \$1 million budget. It was finished on time and underbudget. The undercutter was ready to go to work, plus all its associated pieces.

Now, once that was completed, I was given another opportunity. They said hey, who better to go out with the undercutter then the guy who was in charge of putting it together? I mean, I -- we put over five miles of wiring in that undercutter, so I could tell you where ever box that had a -- got a hiccup, I

could tell you what was going on with it. And they asked me if I wanted the opportunity to come to track side to learn the track side of the undercutter. I was -- said absolutely, let's do it.

I went with the undercutter. Spent the first two years with it, from inception. It was a learning experience for everybody involved for the first two years. And I'll be honest with you, they started us on an inside track and a curve with the undercutter for the first time out the door after 12 years with none of us being experienced. So, it -- we was nervous. Everything went fine.

Then I got another opportunity to go back to roadway equipment to become the senior manager of roadway equipment, to do their capital overhaul programs on the undercut -- on the entire maintenance of way fleet. I was there for a while. The undercutter, when I was gone, they never really found another manager to come in and take -- to actually direct the undercutter, to be the --

Before that, let me back up, the undercutter kind of worked in conjunction with the TLM for a couple years, but they wanted to separate the units because they -- you know, they Big Brother watching us, kind of keeping an eye, making sure we're doing okay, and they said, okay, it's time to split you guys. Well, when that happened, I got a call from the acting director at that time, John Pielli, asking me what I thought about coming out and managing the whole operation. Never scared of a challenge, I said absolutely.

- 1 | So, I come back with it. So overall, I've been with the
- 2 undercutter for five years now. And that's where I'm at today.
- 3 So, that's how I ended up where I started and how I got to
- 4 where I'm at.
- 5 Q. Okay, thanks.
- 6 A. Sure.
- 7  $\mathbb{Q}$ . I appreciate it. It -- it kind of helpful to know where
- 8 people are coming from, you know.
- 9 A. Um-hum.
- 10 Q. So, it -- so, as far you know, planning work and everything,
- 11 | I mean, is -- you just do that for the undercutter? Or do you do
- 12 | that for other work, too?
- 13 A. No, I do that for -- I have another production unit,
- 14 Independent Track South right now. And Mr. Cavanaugh, correct me
- 15 | if I'm wrong, I'm the only manager that has two separate units
- 16 that over -- that manages and oversees two separate units.
- 17 Besides himself, of course, where he has everything, so --
- 18 Q. Okay.
- 19 A. -- heavy is the head that wears the crown over there.
- 20 Q. Okay. Okay. I mean, but so your title is still -- your
- 21 official --
- 22 A. Still manager.
- 23 Q. -- title is manager of undercutter?
- 24 A. Yeah, manager of engineering production is my --
- 25 Q. Thank you.

- 1 A. -- official title.
- 2 Q. Oh, okay. Okay. Engineering production. But so, managing
- 3 | the undercutters are like one of your --
- 4 A. Yeah, one of my primary --
- 5 Q. -- primary functions, but you've got another one?
- 6 A. Yes. And with them guys, we're doing the positive train
- 7 | control, PTC, split B-rails up and down the Northeast Corridor.
- 8 And they're doing good on that. Them guys are good -- they're a
- 9 great bunch of guys.
- 10 Q. Okay. All right. Great, thank you. Just trying to get an
- 11 | idea here.
- 12 A. Yeah.
- 13 Q. So, you know, you're -- you're planning out this project, and
- 14 | so you're actually the guy who is writing the site-specific work
- 15 plans?
- 16 A. Um-hum.
- 17 Q. You're at your office, you know, drafting this up, and okay.
- 18 | So, I mean, what kind of, you know, walk -- walk me through the
- 19 | hazard identification process for that. You know, we're kind of
- 20 just focused on the safety bit here.
- 21 A. Yeah. The -- the hazard assessment, we look for any things
- 22 that will hurt your eyes, pinch your fingers, take your limbs off,
- 23 | maim or kill you. It's -- the hazard assessment worksheet is --
- 24  $\parallel$  is -- I wish I had one so I could show you. It would be easier to
- 25 answer that for you. We try to cover -- try to cover anything

that could hurt you.

1.3

Like, for instance, there's a safety rule about throwing water bottles on the right of way. Why? Because when a train's doing 110 and comes by, the water bottle can fly up and hit a guy. So, I'm saying, hey, do not leave trash and debris around. Clean up at the end of the day. Or, I mean, things like that. Making sure you're wearing gloves. Making sure you're wearing hearing protection. Making sure you're wearing your hard hat. Watch -- you got uneven ballast, you got high shoulders, you got loose -- loose shoulders.

We -- with the undercutter, not only are we undercutting,
we -- we do ditching and grating of roads. We clean out drainage.
So, I have bulldozers running. I have front enders load -- front
end loaders running. I have excavators running. We're -- we're
cleaning out culverts, so I'm talking about not walking in a
ditch, not going --

I mean, I've even put on there walking in the woods. Some guys -- because we -- we put Port-o-Johns out there, but there's been cases a guy's walking out in the woods and getting ticks on them and stuff, and making sure that they have even the spray, that they're spraying down with DEET to make sure that they're not getting ticks or spiders or fleas on them.

That's just some of the -- I mean, just some of the things off the top of my head.

Q. Yeah.

- 1 A. I mean, it gets -- it gets more detailed than that.
- 2 Q. Okay. I mean, that's -- that's helpful, though I mean --
- 3 there. So, what kind of training did you have for, you know,
- 4 completing this site-specific, you said, support plans?
- 5 A. I was mentored when I come into the track department. I was
- 6 mentored by my senior management and my fellow peers. They --
- 7 they would show me, you know, they would show me what they had
- 8 done before for different projects, and I -- I would actually
- 9 write one.
- 10 When I first started doing them, I was nervous as can be
- 11 | because I -- I was -- I didn't want to forget anything, and I
- 12 | would write it and I would have one of my peers review it for me,
- 13 and they would review it, and then I would send it -- I would send
- 14 | it to like Joe, and Joe would review it, and that would be the
- 15 | first step in writing the SSWP. And they would say okay, let's
- 16 looks good, or change this or you misspelled that or you forgot
- 17 | about this hazard. Then I would get it all together and then I
- 18 | would send it out again. But as far as formal training, there was
- 19 | no formal -- actual formal training or class that you sit in and
- 20 they tell you how to write an SSWP.
- 21 Q. Um-hum. Um-hum.
- 22 A. So --
- 23 Q. I got you.
- 24 A. -- on-the-job -- on-the-job training.
- 25 Q. Got you. Got you. So, whose -- like, who's your supervisor?

- 1 I mean, who do you report to? Who reports to you? I guess you've
- 2 | talked a bit about who reports to you already, but I mean --
- 3 A. Yeah.
- 4 Q. -- just who's your --
- 5 A. I report to Joseph Cavanaugh, whose sitting in the room with
- 6 | us to my right. And he reports up to vice president of
- 7 | engineering maintenance Andrew Keith. That's my direct chain in
- 8 command.
- 9 Q. Okay, I got you. I got you. And then, yeah, you've been --
- 10 so, whose directly under you then?
- 11 A. Directly under me would be assistant production engineer
- 12 Patrick Palmer and assistant production engineer Simon Schaffer.
- 13 And then also assistant production engineer Shane Campbell, who we
- 14 | just promoted into management and he's actually with my
- 15 | Independent Track South group. That's what I hired him in for.
- 16 Q. Okay. Okay, I got you. Thanks. Just trying to connect some
- 17 dots there.
- 18 A. Yeah.
- 19  $\|Q$ . Okay. So -- so, you drafted your site-specific work plan.
- 20 You send it out. Did you send it out to the safety department?
- 21 A. Yeah.
- 22 Q. So, like is that just like an email to --
- 23 | A. Yeah, it's a -- it's a mass email that goes out to everybody.
- 24 | It says, please -- please review. And I put -- literally put in
- 25 the email, please review and advise if any changes are needed. I

- 1 | send it out and wait for replies to come out. And that's done --
- 2 I do that anywhere from two to three months ahead of time. I even
- 3 have --
- 4 Q. Okay.
- 5 A. -- a kickoff meeting a month ahead of time --
- 6 O. Uh-huh.
- 7 A. -- in case any issues arise that we have to change anything.
- 8 Q. Okay. And so, as far as like this -- that mass email, do you
- 9 have specific contacts in the safety department that, you know,
- 10 | you include in there? Or do you just have like a
- 11 | safetydepartment.amtrak or something where it gets --
- 12 A. Oh, no, it -- it would be direct contacts. Back in the day,
- 13 | it would have been like Archie Manning. Now, I would send it to
- 14 Kristen Leese. Like, I look at the -- I got to look at the new
- 15 | matrix who we're supposed to send it to. That -- that could have
- 16 changed, so I haven't dug into that yet because I actually got to
- 17 | write another one coming up for a 55-hour outage in Paoli, so that
- 18 | will be the first time that I do it with the new way that they
- 19 | want to do it. But before, it's just me knowing the contacts.
- 20 | Like, it would be Archie Manning. It would be -- he's getting
- 21 | ready to retire, give me a second here. Harry Dunky (ph). I
- 22 | would send it to Harry. Harry would look at it, review it for me.
- 23 | And Harry always had a lot of comments for me. I would have
- 24 expected that.
- 25 Q. Got you.

- 1 A. Yeah.
- 2 Q. So, it would kind of just depend on how many comments you get
- 3 and who you email it to? I mean --
- 4 A. No, the comments --
- 5 Q. Do you always get comments?
- 6 A. No, comments doesn't determine who I email it to. Comments
- 7 helps me readjust it.
- 8 Q. No --
- 9 A. I send it out specific people who needs to be on it -- who
- 10 needs to be aware of it and see it.
- 11 Q. Right. Right. I'm just saying, do you typically get a lot
- of comments from the safety department? Or do you -- or do you
- 13 | just -- it just kind of depends on the situation?
- 14 A. When I first did them, absolutely, I got comments all the
- 15 | time. But as I've got better at them, I've actually got emails
- 16 back saying great job, and this is the way we should do these.
- 17 And yeah.
- 18 Q. Um-hum. Yeah.
- 19 A. Comments here and there and -- but not -- I don't get as many
- 20 | comments because I'm even more thorough than I was before.
- 21 Q. Yeah.
- 22 A. And that's the whole part of bringing my other guys, you
- 23 know, bringing my experienced -- my supervisor has almost 40 years
- 24 on the railroad, Mike Roden (ph.) and he -- there ain't much you
- 25 | don't put past that fellow. So, and he -- he's -- he might -- I

- 1 | might be his manager, but him as a supervisor, sometimes I call
- 2 | him my boss because he's -- I respect his time and his tenure on
- 3 the railroad. He's been there. He's done that. He's seen it.
- 4 So, he knows what -- you know, he helps me make sure that I'm not
- 5 missing anything, also.
- 6 Q. Got you. Okay, has anybody ever suggested that you issue
- 7 | speed restrictions?
- 8 A. No. The only speed restriction I put in there is what's
- 9 required by NORAC, and that's the 80 mile an hour slow-by for TLM
- 10 and undercutter.
- 11 Q. Okay. And what's -- why do you slow down trains for TLM and
- 12 undercutter?
- 13 A. TLM and undercutter is because of the nature of the machines
- 14 and how loud the operation is. Just auditory, it's very loud.
- 15 | Visually, it's distracting. That's from the rule. And the way
- 16 | the rule reads, that's the reason they give for that. So, it's up
- 17 to the MW foreman. Actually, in the rule it says it's up to the
- 18 MW foreman in charge as to whether we put an 80 mile an hour
- 19 | slow-by up. It's not a directive, it's a suggestion. So, even if
- 20 | I told the -- even if I went out there and I told my foreman,
- 21 | don't put the 80 mile an hour slow-by up, it doesn't matter what I
- 22 | say. He's the qualified employee. If my M&W foreman says he
- 23 | wants the 80 mile slow-by with the undercutter, according to the
- 24 | rule, it wouldn't no matter what transportation dispatch says, he
- 25 gets it. So. And I haven't found a foreman yet, and even myself,

- when we're working with the undercutter, I want that 80 mile an hour slow-by.
- Does it make a difference with trains running? At the end of the day, whether you get hit with a 10 mile an hour train versus
- 6 Q. Yeah. So, you said, you know, it's because the undercutter

110, no. But if it's there, we're going to use it.

- 7 is loud.
- 8 A. Um-hum.
- 9 Q. Can you -- can you elaborate on why that's -- why that's a
- 10 hazard?
- 11 A. Yeah. I mean, it's a big giant mining machine. It's got a
- 12 big chain with five fingers running around at a couple thousand
- 13 RPM. Think about a tunnel, it uses the same chain that they use
- 14 | in coal mines, and it just -- it's -- I mean, it's taking
- 15 | ballast and it's throwing it and then -- and it's got a shaker box
- 16 that goes brrrr and there's screen shaking and stone and us
- 17 | setting here; I would have to scream at the top of my lungs for
- 18 Steve over here to even hear me.
- 19 Q. Got you. Got you. So, why is the loud noise a hazard?
- 20 A. Why is it a hazard? Because you need to be able to hear
- 21 | if -- you need to be able to hear horns, whistles, if
- 22 | somebody's -- if your tap man's hollering at you. Well, your tap
- 23 man's supposed to be there tapping you, and that's just in case
- 24 he, for some reason, he doesn't hear the horn or he's distracted,
- 25 | we even put the tap man there, said hey, pay attention to what

you're doing. That's for the operators themselves, because the operators are engrossed in the operation of that undercutter. If we -- if that undercutter, when it comes to undercutting, because think about this; you're undercutting a track that's already to its correct geometry. It's already been accounted for. When the undercutter comes in there and we're taking all that old ballast away, we're lifting up the whole track structure and we're starting to undercut, you take that ballast away, them undercutter operators are watching. There's two arms, we call them C1 and C2, and the ballast is flowing back into the track, and what they're trying to do is maintain cross-level on that track. If we get more than six inches out of cross-level, and we're only inside the track, more than six inches out of cross-level, and you look at Plate C at Amtrak, we could have train hits. And then we're not talking -- we're talking hundreds of people, and plus everybody that's on the ground. So, it's imperative that them operators are paying attention to what we're undercutting.

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And it does -- with the undercutter, you can't go oop, I got -- I got six and a half inches across so let's hurry up and correct it in two seconds and put it back; it takes anywhere from 50 to 100 feet to make that correction to get it back. Because if you do a quick correction like this with the -- well, you got a surfacing gang behind you, and now you're going to start derailing regulators and derailing the maintenance and way equipment, because they're going to -- you're going to have what they call --

- 1 | well, it's a cross-level issue, the technical name, it escapes me
- 2 | right now, but -- short work is what you'll get, and then you can
- 3 put them on the ground. Not to mention endangering trains.
- 4 Q. Right. Right. I'm -- and I appreciate the, you know, the
- 5 knowledge of the undercutter. What I'm kind of trying to get at
- 6 is so undercutters are loud and --
- 7 A. Um-hum.
- 8 Q. -- it makes sense to impose speed restrictions, you know.
- 9 A. Yes.
- 10 Q. And but why is not applied to other noisy construction
- 11 requirements?
- 12 A. That's a good question. I can't answer that for you.
- 13 Q. So, seems like it would make sense?
- 14 A. Umm --
- 15  $\|Q$ . I mean, I'm just -- I'm not asking for the Amtrak official
- 16 position, I'm just asking as -- as somebody whose got some
- 17 experience at trying to mitigate risk, you know, it works in this
- 18 situation, you know, why not other loud noisy construction
- 19 requirements?
- 20 A. Well, I mean, honestly that's up to Amtrak. I can't say
- 21 | whether it would actually work in other environments or not. The
- 22 rail gang is totally different from the undercutter. The noise
- 23 | hazard is not as much as the undercutter. Yeah, they're at times
- 24 are running rail saws, they do have gang watchmen there. They
- 25 | will have occasional tap men. I just -- I mean, that's a good

- 1 question. I don't know how to answer that for you.
- 2 0. Yeah.
- 3 A. Why -- why wouldn't it apply to --
- $4 \mid Q$ . I'm not trying to put you on the spot.
- 5 A. Yeah.
- 6 Q. You know, I'm -- I'm just, you know, we're --
- 7 A. I don't want to answer you -- I don't want to answer your
- 8 question with a question, but yeah, why -- I mean, why wouldn't
- 9 you have an 80-mile slow-by for a big undercutting unit? But at
- 10 | the end of the day, if we're following the rules and doing what
- 11 | we're supposed to do, does it matter? I don't think it actually
- 12 matters.
- I mean, if -- let's -- let's look at this way; all right,
- 14 | we're out there, we're undercutting, we don't have an 80 mile an
- 15 | hour slow-by. Train's running at 110. No matter what, because of
- 16 the noise hazard, I'd have to have a certain amount of watchmen
- 17 and a certain amount of tap men and protection out there. Eighty
- 18 | mile an hour slow-by, am I going to have a difference in watchmen
- 19 | because the train's running 110 versus 80? No. Because that
- 20 | space -- the watchman is based off noise hazard and your -- your
- 21 distance that you can see. How many seconds in the clear you got.
- 22 So, the 80 really doesn't change anything.
- 23 Your back with the rail distress gang. It -- I don't see how
- 24 that changes any. The train, yeah, it's doing 80 but it's -- it's
- 25 all about sight distance at the end of the day. How much sight

- 1 distance you got before the train. I mean, if a train's running
- 2 80, maybe I need one or two less watchmen, maybe I don't because
- 3 of the noise hazard. If they're running 110, then yeah, we got
- 4 to -- we put out more watchmen. The whole point of having
- 5 watchmen out there and having 15 seconds in the clear is -- or
- 6 | being in the curves, is depending how many -- that dictates how
- 7 many watchmen that you need in that area to protect your guys and
- 8 give them time to clear the track.
- 9 So, I -- I don't see -- and that's why I was struggling to
- 10 | answer your question, because I don't see how at the end of the
- 11 day that really is going to affect that -- how that's going to
- 12 affect the work group.
- 13 Q. Okay. So, let me -- let me recap and see if I hear what
- 14 | you're saying. If I'm going at 50 miles an hour versus 100 miles
- 15 | an hour, or I guess to be more precise 110 versus 80 --
- 16 A. Fifty and a hundred is definitely a speed difference.
- 17 Q. -- you could -- you're saying that you could mitigate the
- 18 | additional risk of the speed by having more watchmen because by
- 19 extending the number of watchmen you're going to be able to get
- 20 | that extra warning and --
- 21 A. Yeah.
- 22 Q. -- essentially, they're going to be able to -- you're going
- 23 to be able to maintain that 15 seconds?
- 24 A. Yeah.
- 25 Q. It's just going to take more watchmen to do it then if it's a

- 1 slower speed?
- 2 A. Absolutely.
- 3 Q. So, they could slow it -- they could slow down trains, but
- 4 then you probably would just have less watchmen? You would have
- 5 | the same --
- 6 A. There you go. Exactly.
- 7 Q. Okay.
- 8 A. You got it.
- 9 Q. Okay.
- 10 A. Yeah.
- 11 | Q. I mean, I -- I see what you're saying from a -- from a risk
- 12 mitigation perspective.
- 13 A. Um-hum.
- 14 Q. It's -- it's, I guess a couple different ways to look at it.
- 15 A. Yeah.
- 16 Q. So, just to be clear, there's been no instructions from
- 17 Amtrak management to you to issue speed restrictions?
- 18 A. No.
- 19 Q. Okay.
- 20 A. No, we don't -- the only speed restrictions we issue, and I
- 21 | don't issue speed -- well, I can. I'm MW1000 qualified, but then
- 22 again, I need the physical characteristics of the territory to
- 23 actually put that speed restriction on.
- 24 Q. Um-hum.
- 25 A. Is when it comes to track standards and specifications, if

- something doesn't meet class, and which class is specific to speed of the train, that's when a speed -- we can put a speed
- restriction on. But that would --We had an incident Bridge to Grove, we were working on Number 5 1 Track Bridge to Grove last year. One of foremen noticed that 6 the adjacent track had a lot of pump in it when trains were going 7 over it, so he put a speed restriction on it then. Went over 8 there, took measurements, seen how far everything was dipping, 9 blah, blah, resulting in a 30 mile an hour speed 10 restriction. Called dispatch. Put a 30 mile an hour speed 11 restriction on it. Called division, said hey, you got a problem 12 out here, you need to come fix it. And if you don't come and fix 13 it, I'm not going to lift my 30 mile an hour speed restriction. 14 So, they come out and they fixed it, and then he lifted the 30
- 16 Q. I got you. I got you.
- 17 A. They do -- and I don't know if anybody's tell you this [sic],
- 18 | we do put whistle boards up in advance of the watchmen.

mile an hour restriction -- speed restriction.

19 O. Um-hum.

- 20 A. Now, whistle board placement is determined upon -- and that's
- 21 on the foreman. The foreman asks us for characteristics. It's
- 22 depending on the gradient of the railroad. It's dependent on the
- 23 | sight distance. It's dependent on the train speeds. It's
- dependent on the type of train, and you know, a passenger versus a
- 25 | freight train. In our -- your NORAC book, in MW1000 you have

breaking distance charts, and the foreman decides where to place the whistle boards.

Now, there is a requirement with whistle boards, if you have five or more for an hour or more, you're supposed to put whistle boards out. That whistle board, what that does, it gives that advanced watchman -- it's like adding an extra layer, saying, hey, advance watchman, here comes a train. That locomotive is supposed to be hitting his horn, letting him know he's coming, so that give -- he knows to start, oh, okay, here he comes, start looking. So, that gives you a little added layer of protection.

- So, I don't know if anybody said that to you or not about whistle boards.
- 13 Q. No, I -- I appreciate the, you know, the purpose there.
  - While you're talking about the watchmen, is there any requirements as far as watchmen go? Like, let's say that I've got a watchman specifically stationed with like a noisy piece of equipment --
- 18 A. Um-hum.

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- Q. -- do you need to have another watchman, you know, adjacent to that watchman because they're -- because of their positioning next to noise -- I mean, could you have -- could the first watchman in a series of watchmen be positioned next to some noisy equipment? Or do you need to have a guy, an advanced watchman in
- 24 front of -- in front of him?
- 25 A. No. All right, for instance, say we're working in a curve.

We're going to -- the foreman's going set the watchmen out. So, he's going to have his advanced watchman, he's going to have the regular watchman, and he's going to have the gang watchman. The gang watchman by rule is not supposed to be found on the track at any time for any reason unless it's doing an on-the-job briefing, and if that's the case, they have to agree to where to go and agree where his pre-determined place of safety is.

Now, the watchman stands there. What we do do, and I stated this earlier, with the undercutter we put a tap man there. And what a tap man is, his sole job is him and the gang watchman are -- they're direct communication. He's listening for that gang watchman. And when that watchman blows a horn, it's just like this, he goes hey, clear up, let's go.

The watchmen are spaced according to sight distance and according to whistle distance. Not horn distance, it's whistle distance. So, they go in the morning, they -- they do a whistle test, that's okay. There's nothing wrong. But as soon as they fire up all that equipment, they need to do it again, and if they can't hear each other with the whistle, then you need to add more watchmen, all right. And then if that's -- if you get all the watchmen out, you got the gang watchman, and everybody acknowledges, and as far as putting another watchman with the watchman, I don't see where that that would work. That's why we put a tap man with the guys, too, if it deems is necessary. And we actually have two tap men with the undercutters; one with the

1 operators on the left side and one with the right side.

As far as the rail gang, no, they're stretched out. That gang watchman was with the welding truck. And that is the normal way of setting up -- I mean, it's the normal way of setting up watchmen. I mean, the watchman does -- shouldn't -- the watchman doesn't need a tap man to tell him that the train's coming; that's what his job is. That's what he's there to do, is watch for trains and protect people. And I'll go on record saying we're lucky it's only one guy and it's not 10, because his job is to protect that gang from getting hit by trains. It could have been

- 12 Q. Okay. So -- so, just to be clear, so there's no issue with
- 13 the guy at the tip of a work group be in position -- the watchman
- 14 be in position to noisy equipment, that -- that doesn't --
- 15 A. No. His job --

10 people.

- 16 Q. There was no problem with him being --
- 17 A. He shouldn't even be looking at the equipment. His sole job
- 18 | is to do this every three seconds (indicating) looking for a
- 19 | train. Every three seconds. If you can't hear them, you need to
- 20 be able to see them.
- 21 Q. Um-hum.

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- 22 A. So, that's why he's going this (indicating). I mean, if we
- 23 | all just stand there and look forward and we're dependent on
- 24 somebody to blow the horn and listen to them, well, with the
- 25 | equipment on -- you know, the horns on the equipment, you're never

- 1 going to hear them. You got to use both of your senses; you got
- 2 to hear them and you got to see them. And I ain't going to say
- 3 you can smell them sometimes, but if they got dragging breaks you
- 4 | will, but that's after they pass you, so.
- 5 Q. Okay. So -- so, just to be clear on the, you know, on the
- 6 position here, we're talking about a -- if you've got a watchman,
- 7 | let's say by -- let's say there's a bunch of equipment and you --
- 8 you know, over here somewhere, and this is where the work is
- 9 being -- you know, the work is being done --
- 10 A. Yeah.
- 11 Q. -- in a certain area, there doesn't need to be anybody to the
- 12 | north of him to -- to --
- 13 A. Oh, yeah there does.
- 14 Q. -- to this watchman of incoming train?
- 15 A. Yeah, absolutely.
- 16 O. There does need to be someone?
- 17 A. Yeah, Yeah, but advance watchman -- you got to have an
- 18 advanced watchman on the north side and the south side.
- 19 Especially in the territory working on two tracks. Any -- 261,
- 20 any time, any direction, and especially on the inside track
- 21 because you have what we call the double bubble.
- 22 Q. Right.
- 23 A. So, the train -- this watch -- advance watchman here, right,
- 24 | train's coming by him. He sees the train, he signals to the --
- 25 | he's signaling, saying hey, a train's coming. All these watchmen,

4.5

1 including the gang watchman are all putting their banner up.

Q. Um-hum.

- 3 A. The train gets down this way, passes this watchman, once this
- 4 | watchman determines that there's nothing coming north and there's
- 5 | nothing coming south, he will then lower his banner, and then they
- 6 will lower their banners in succession back towards the north.
- Now, if he's standing here, we have a train running --
- 8 because looking at your diagram, we have a train running
- 9 northbound, but at the same time there's a chance that there could
- 10 be a train running southbound, so until -- and when double bubble
- 11 | situation, here he comes. He's coming -- he's coming north, well,
- 12 | all of a sudden okay, he clears him, but that's why he's there
- 13 because oh, hey wait a minute guys, we got another one coming
- 14 | southbound. Keep him -- keep your banner up, start sounding the
- 15 horn again.
- 16 Q. Um-hum. Um-hum. Okay, I got you. So, if there was no
- 17 | watchman -- if you were to go to a job site, let's just say you
- 18 were just doing some operational testing or something and you
- 19 | would see that there's no advanced watchman there, that would
- 20 be -- you would be whoa, whoa, whoa this -
- 21 A. And I would -- I would find the foreman, tell him to blow the
- 22 horn and clear the tracks and we're going to start re-briefing and
- 23 | I'm going to find out what in the heck is going on. But yeah, I
- 24 mean, absolutely. Yeah, I just -- I don't play when it comes to
- 25 safety.

- 1 Q. Okay.
- 2 A. I just -- I don't do it.
- 3 Q. Okay. So, that's the foreman's job to make sure that you got
- 4 that --
- 5 A. Absolutely --
- 6 Q. -- watchman in charge of the --
- 7 A. -- that's that foreman's job.
- 8 Q. -- in charge of the --
- 9 A. He's -- yeah, he's the guy placing them. But I also rely --
- 10 rely on the foreman. I rely on the supervisors out there if they
- 11 | notice anything. And also rely on my APEs to identify any
- 12 hazards.
- 13 Q. Okay.
- 14 A. Unfortunately, I can't be there all the time.
- 15 Q. Right. Okay, well thanks. I think that clears it up for me
- 16 in terms of who --
- 17 A. Okay.
- 18 Q. We kind of talked about this advanced foreman, so the --
- 19 A. railroad.
- 20 Q. -- you know, the advanced foreman is that --
- 21 A. Yeah, they're --
- 22 Q. -- they're in advance of where the work is being done?
- 23 A. Right.
- 24 Q. So that they can --
- 25 A. So, that yeah, your gang's here, well he's -- he's the

- 1 advanced watchman and he's an advanced watchman, too.
- 2 Q. Right. Right.
- 3 A. Everything in-between is the work gang, so they're both
- 4 considered advanced watchmen on the north and south.
- 5 Q. Right. So, this would be advance --
- 6 A. Yeah.
- 7  $\mathbb{Q}$ . -- this would be --
- 8 A. An advance.
- 9 O. And this would be --
- 10 A. The guy --
- 11 Q. -- you would have a guy like maybe here and here?
- 12 A. Yeah.
- 13 Q. The equipment.
- 14 A. Gang watchman for the gang.
- 15 Q. Gang watchman.
- 16 A. If needed. Depending on what they're doing.
- 17 Q. Okay. Okay. All right, thanks a lot.
- 18 A. Yeah.
- 19 DR. HOEPF: That's -- I'll regroup here and pass it back off
- 20 to Ruben.
- 21 THE WITNESS: Roger that.
- MR. PAYAN: You doing okay? You need a break? Or you want
- 23 to --
- 24 THE WITNESS: Nah.
- 25 MR. PAYAN: -- keep going?

- 1 THE WITNESS: I'm good.
- 2 MR. PAYAN: All right.
- 3 THE WITNESS: Keep going.
- 4 BY MR. PAYAN:
- 5 Q. Is there a plan for when you're -- when you have your
- 6 undercutter gang out there, do they work several days or several
- 7 miles ahead of the surfacing gang?
- 8 A. Yes.
- 9 Q. What's the separation from them?
- 10 A. Well, I'll separate them by two weeks. I'll start the
- 11 undercutter. Let him -- if everything's going good, we don't hit
- 12 | bad mud spots, and the thing don't break down on us, we general --
- 13 I generally try spacing them about two weeks. Once the surfacing
- 14 gang comes in, remember we're cutting inside an interlock, and
- 15 | anytime we go, so I need a night or two to get in the interlock
- 16 and clear it and get into the out of service to start working.
- 17 | Surfacing will start. Two weeks later I'll start the rail
- 18 distressing gang two weeks behind them, depending on where the
- 19 throttle's at with the undercutter and with surfacing. And we
- 20 just keep advancing along.
- 21 Q. Okay.
- 22 A. And try not to catch each other.
- 23 Q. Yes.
- 24 A. Now, my -- the first tamper in my surfacing unit -- I know we
- 25 | didn't talk anything about surface -- his sole job as a tamper is

- 1 to come behind the undercutter and get initial lift in line for
- 2 the undercutter so it reduces the risk for our ballast regulators
- 3 and the rest of the equipment and the rail gang to reduce them
- 4 from derailing if we got to move any equipment in the gang. So,
- 5 | he's doing the initial lift in line, getting everything lined up,
- 6 getting it to a --
- 7 And plus, we have to run ballast trains on -- in on that.
- 8 So, if you ever seen the track behind the undercutter, it looks
- 9 like a snake. It's just -- it's crazy, so that's why we get them
- 10 tampers in there and we start getting it all lined back out so
- 11 | it's safe for ballast trains to come in there and start dropping
- 12 stone, because we got to drop -- we have to dump stone in advance
- of the surfacing unit so they have something to actually put the
- 14 lift from the track and get it to final geometry.
- 15  $\mathbb{Q}$ . So, is the regulators part of the surfacing gang or the
- 16 undercutter gang?
- 17 A. Yeah, part of the surfacing gang.
- 18 Q. So, they're closer to the two weeks behind the undercutter?
- 19 A. Yeah, plus two weeks behind the undercutter.
- 20 Q. Okay. And your SSW, does that specify like -- like in our
- 21 case here, there was a Form D taken out. Is that specified on the
- 22 SSW how you're going to --
- 23 A. How you're going to take the Form D out?
- 24 Q. Yeah.
- 25 A. No, that's -- it doesn't specify how you take a Form D out.

- 1 The foremen are qualified. They know that. They're supposed to
- 2 know that.
- 3 Q. Okay.
- 4 A. Even the dispatcher knows it.
- 5 Q. Okay. But it -- like in -- in like this certain -- in this
- 6 case, there was a Form D; is that for the whole project? Several
- 7 days long? Or is it renewed every day?
- 8 A. Daily.
- 9 Q. Okay.
- 10 A. Form D is daily. The RWIC will take it out; whoever we
- 11 decide in the morning that's going to be the RWIC. Usually,
- 12 | that's determined -- I know ahead of time if we're going to stay
- 13 late and work overtime. I'm constantly watching the production
- 14 | numbers and our footage to see where we're at, to see if we need
- 15 | to stay late or, you know, work the weekend, so we'll just --
- 16 | whatever -- whatever foreman's going to be there the longest we'll
- 17 make the RWIC and he'll take the track out. And then the -- so,
- 18 say the undercutter, so the surfacing foreman will get his
- 19 | briefing from the RWIC. He'll become the EIC, employee in charge,
- 20 | for surfacing. And the same thing with the rail gang, and we'll
- 21 do -- he'll become the EIC. And they'll work under his direction
- 22 and his out-of-service in his Form D.
- 23 Q. Okay.
- 24 A. For any time during the day, say that foreman needs to leave,
- 25 | well, then we have to stop, clear the tracks, everybody has to be

- 1 | re-briefed. They have to do a transfer of authority form, and
- 2 they have to do a Form O, and they -- the off-going foreman has to
- 3 | call the dispatcher and cancel his Form D, and the new foreman's
- 4 qot to get issued a new Form D. They got to make sure they go
- 5 over the form and ask -- the form asks from, you know, what's your
- 6 track conditions? Are the men clear? And all that. And then
- 7 | they would restart again. So, there's been times that we have
- 8 done multiple Form D's in a day, depending if something -- you
- 9 know, if the foreman has something happen with his family, we're
- 10 | not -- I'm not going to force him to stay out there; he needs to
- 11 go take care of business at home because his head obviously ain't
- 12 going to be in the right place if we leave him.
- 13 Q. Okay. So, how about -- how about once your Form D's out
- 14 there, your workers are out there, the conditions change. Say
- 15 | when you're displacing the rail -- I don't know this, this is
- 16 accurate, but say the speed swings are -- are moving, do you
- 17 provide adjacent protection on the -- or protection on the
- 18 adjacent tracks?
- 19 A. Yes. At all times.
- 20 Q. For your --
- 21 A. That's what the watchmen do.
- 22 Q. But for your-- like for the speed swings when you're
- 23 displacing rail?
- 24 A. Um-hum.
- 25 Q. And then, so that -- the speed swing or the -- the cranes are

- 1 part of the surfacing gang?
- 2 A. No, part of the rail distressing gang.
- 3 Q. Rail distressing gangs, thank you.
- 4 A. Um-hum.
- 5 Q. They -- they take their own protection? Or they check in
- 6 with the RWIC and he takes the adjacent tracks out? Or --
- 7 A. No.
- 8 Q. -- slows them down or whatever?
- 9 A. The RWIC takes the out-of-service we're working in 2 Track
- 10 out.
- 11 Q. Um-hum.
- 12 A. The EIC foreman provides foul for his work unit. So, the
- 13 | foreman --
- 14 Q. Okay.
- 15 A. -- of rail distress is the one that is getting fouls for the
- 16 rail distress unit for the speed swing.
- 17 Q. Okay.
- 18 A. So, before we start threading rail, the foreman will call and
- 19 | get foul either on the adjacent track. Once he receives foul
- 20 | time, then we'll start threading the rail. If we have to give
- 21 | foul time back, and most importantly he's applying the shunt
- 22 strap, too and then they're verifying that the shunt -- verifying
- 23 | that it shunting.
- And another thing, an added thing we do with our equipment,
- 25 on my surface equipment especially, we actually -- we have them

- 1 write on the inside of the windows what track is what, because
- 2 when you're working all day you might forget that this is --
- 3 O. Um-hum.
- 4 A. -- 2 Track and that is 1 Track, so it's easy to just to look
- 5 at the window and go, okay, that's 1 Track or. He'll say 1 Track
- 6 is hot, 3 Track we have a foul on, and they all have radios in
- 7 their equipment so they're listening to the foreman. I have a
- 8 radio, when I'm out there I'm listening to the communication. The
- 9 supervisors are listening to the communication. The foremen are
- 10 listening to the communication. And it's kind of like a system;
- 11 | we're backing -- we're backing each other up, listening to make
- 12 | sure that he's -- that you're hearing that dispatcher say, yeah,
- 13 | we confirm a shunt on Number 2 Track at Mile Post Blah, Blah,
- 14 | Blah. You're okay to foul. Or -- and then, the foremen -- and
- 15 they still start. Then the foremen get on the radio and say, hey,
- 16 speed swing operator A1, 2, 3, 4, we have a foul, you're ready to
- 17 start threading rail. Let's get going. So, they'll start
- 18 | threading rail. We'll go until it's time to give up foul.
- 19 Q. Okay. So, the actual gang that's going to do the fouling is
- 20 | the one that provides and verifies their own protection?
- 21 A. Absolutely.
- 22 Q. Okay. That -- that's -- how about changes to the SSWP once
- 23 | you start working; is there a mechanism or procedure to -- if
- 24 you -- to identify a new hazard or something?
- 25 A. If we do identify a new hazard, that we actually take care in

- 1 turn with the guys because we have monthly safety meetings. If
- 2 | it's something that requires immediate attention that puts anybody
- 3 | at risk or danger, we'll actually stop the gang, gather everybody
- 4 together, and we'll cover that. Kind of like a debrief at the end
- 5 of the day.
- 6 O. Um-hum.
- 7 A. If it doesn't require, depending on severity because there's
- 8 different situations, and I don't want to try to -- try to take
- 9 everything and put it one basket, depending on what it is, if it
- 10 requires a stop and re-brief, we're going to stop and re-brief.
- 11 | If it's something that we can talk about at the end of the day
- 12 we'll do it. If it's something I can talk about at a safety
- 13 meeting, we'll do it at the safety meeting.
- 14 As far as like re-editing the SSWP then sending it out to the
- 15 other 50 people I send it to, if it doesn't affect them, then no,
- 16 I wouldn't. But it was something that directly affected them,
- 17 | absolutely. I would re-edit the SSWP, send it out. And I even
- 18 pick up the phone and call somebody, you know, the ADEs or the --
- 19 of that territory and let them know, hey, this is what's going on.
- 20 Q. Okay. So, it -- it is a living document --
- 21 A. Absolutely.
- 22 Q. -- that can be modified? Okay.
- 23 A. Yeah.
- 24 Q. My last question, you're a manager of -- of this big
- 25 production gang.

- 1 A. Um-hum.
- 2 Q. If you had to characterize the people under you, their
- 3 experience, is it a lot of new people? A lot of old hands? A
- 4 mixture?
- 5 A. I would say -- I don't want to say 50/50. I want to say
- 6 there's more -- there's -- it's majority of them more younger guys
- 7 than there is old -- old hands that's in the unit.
- 8 Q. Um-hum. Okay.
- 9 A. So, and that -- unfortunately, that's -- that's what it is.
- 10 A lot of these guys -- I mean, they -- they get in the unit. They
- 11 | like -- and they stick there, and that's where they make money, so
- 12 | they don't like leaving unless they have to. So. Yeah, I mean,
- 13 | it is younger. And it always -- it always concerns me. And you
- 14 know, Amtrak's talking about -- we're talking about getting two
- 15 more undercutters and full units. I mean, to say that I'm not
- 16 | nervous about that? I mean, I'm 100 -- my force accounts 125 men.
- 17 You think about that. I got to hire -- we got to hire about 250
- 18 to cover that, and they're probably going to be new hires. So,
- 19 | it's going to take -- we're going to have to make sure they're
- 20 | trained and they're done -- everything's done properly to keep
- 21 them men safe. So.
- 22 Q. You -- you feel confident there's going to be enough
- 23 experienced people to spread the wealth with the new guys?
- 24 A. To spread the wealth with the new gangs? Yeah. I -- no,
- 25 | yeah. By the time -- listen, well as you all know, government

- 1 | organizations, me being in the military, does not move at a fast
- 2 pace. We move at a snail's pace. So, by that time we'll have
- 3 enough experienced guys ready to get that going. I'm sure.
- $4 \mid Q$ . Well, good.
- 5 A. And I'll probably have some grey hair here by then if I ain't
- 6 got -- getting it now. My wife says I'm getting white hair.
- 7 Q. Well, good.
- 8 MR. PAYAN: Well, thank you. I'm going to go around the room
- 9 one more time and --
- 10 THE WITNESS: Okay.
- 11 MR. PAYAN: -- just ask, FRA?
- 12 MR. HURLEY: Nothing from FRA.
- 13 MR. PAYAN: Amtrak?
- 14 BY MS. LEESE:
- 15 Q. JP, just one question for you. So, the equipment that was
- 16 | right with the rail gang, I believe it was two speed swings, a
- 17 | welding truck, and the heater -- ground heater --
- 18 A. Yes.
- 19  $\mathbb{Q}$ . -- for the cart?
- 20 Was there, as you're going north, kind of around that curve
- 21 on the north end --
- 22 A. No, when -- there's curves on the south end.
- 23 |Q. Yeah. Well, I think -- it looked like as you got all the way
- 24 up there --
- 25  $\|A.\|$  Once you get past the signal north where the actual trains

- 1 stop, there's a curve up there.
- 2 Q. Okay.
- 3 A. But that's -- that's 15, 20 cat poles away.
- 4 Q. Yeah. Did you have any other groups working up that end --
- 5 A. No.
- 6 Q. -- working like -- when you're saying these other groups,
- 7 | they were --
- 8 A. No, the surfacing unit was all the way around the curve. If
- 9 you -- if you look at the territory of -- between Bowie and Grove,
- 10 there's actually a point where the tracks and -- where the tracks
- 11 | will -- three tracks will split. Two will go off to the left, and
- 12 one track actually cuts off to the right. Cuts off to the right
- 13 and there's a big island in-between. That's where the surfacing
- 14 unit was working.
- 15 Q. Okay.
- 16 A. They were, I think, close to two miles away.
- 17 Q. Okay.
- 18 A. From them.
- 19 Q. So, you wouldn't have any people beyond the group what was
- 20 out there --
- 21 A. No. That group --
- 22 O. -- further north that was --
- 23 A. -- right there.
- 24 Q. Okay.
- 25 A. Yeah. They're behind, so.

1 Ο. Okay. 2 Yeah, they're -- and to note, the -- when the undercutter 3 finished, that work force, I actually took that work force and I 4 split them in half, and I took half the guys and put them on the 5 surfacing to supplement watching and I took the other half of the 6 guys and I put them with rail, just so we could ensure we had 7 enough watchmen, because they had said, hey, I -- you know, it's getting kind of tough, surfacing's getting spread out and we need 8 9 more watchmen, and we're like absolutely. I said, them 10 undercutter guys, we'll send them down there. And you know what, 11 when surfacing gets done, I'm going to take all the surfacing guys 12 and I'm going to send them back there with rail to help them out. 1.3 So, we should have plenty of people to do work and plenty of 14 people for watching. And I do that because it helps them out. 15 And I mean, distressing rail is back breaking work. Especially now, it's going to get hotter. It's hot out there, 16 17 there's no trees. Them guys -- them watchmen need relief, they 18 need water, and we're going to rotate them guys out. And that's the way I set the project. That's my production line. 19 That's how 20 I want to do it. When -- okay, front end's doing great, but once 21 the front end's done, let's go back and help our buddies. 22 they're done, let's go back and help them. And then we'll all 23 come to the end together, so.

MR. LEESE: That's all I have.

25 MR. PAYAN: All right, thank you.

- 1 Mr. Stearn?
- 2 MR. STEARN: No, nothing further.
- 3 MR. PAYAN: All right. Mr. Fields?
- 4 MR. FIELDS: No, nothing. Thank you.
- 5 MR. PAYAN: All right, Dr. Hoepf?
- 6 BY DR. HOEPF:
- 7 Q. I just wanted to follow-up on this -- this watchman
- 8 discussion just a little bit more.
- 9 A. Sure.
- 10 Q. So, I presume that the watchmen are supposed to out in
- 11 position before any work starts?
- 12 A. Absolutely.
- 13 Q. Okay. So, I'm just trying to get an idea. Let's say that
- 14 | I'm -- I'm doing some welding and I'm, you know, standing right
- 15 here, and the track speed is 110 miles an hour -- I'm horrible at
- 16 mental math so I'm not even going to try to do it -- but --
- 17 A. Okay.
- 18  $\mathbb{Q}$ . -- help me get an idea, is there like a thumbnail of -- and I
- 19 | can't just have watchmen next to me; I'm going to have to have an
- 20 advanced watchman or maybe, I don't know maybe two to my left and
- 21 | right to -- to make it safe for me to be working.
- 22 A. Um-hum.
- 23 Q. I mean, is there like a railroad estimate of how many cat
- 24 poles they've got to be out to, you know, to get that 15 second
- 25 warning?

- 1 A. Yeah, on the back -- when everybody goes to RWP class to get
- 2 | a card, it has the sight distances and the number of cat poles
- 3 coinciding to sight distances between cat poles and the territory
- 4 we were working in, it's 265 feet. That changes as you go to the
- 5 | northeast. That card, if you're in straight tangent track, it
- 6 | will tell you how many cat poles sight distance you need. So, you
- 7 do the -- I'm not great at mental math either myself; I got to
- 8 kind of write stuff down and -- but you -- that's what you have
- 9 that card for there, and that's what tells you.
- 10 Q. Okay.
- 11 A. But, it's up to the foreman because if you're in the curve,
- or the tracks speeds, or the gradient, that they're supposed to
- 13 make that determination; sound, audible, everything we discussed
- 14 | before. That's -- determines how many watchmen --
- 15 Q. Okay.
- 16 A. -- you need.
- 17 Q. So, you've got a little table that you can use to --
- 18 A. Yeah.
- 19 Q. -- for tangent tracks --
- 20 A. Here --
- 21 Q. -- to give you that 15 seconds?
- 22 A. -- yeah, here, I'll show you. Yeah. Here you go.
- 23 Q. Okay. So, at 110 miles an hour, it says 2,420 feet.
- 24 A. Um-hum.
- 25 Q. Which is 9.5 poles.

- 1 A. Yeah.
- 2 Q. What's -- there's Poles 1, there's Poles 2.
- 3 A. Yeah, that's the differences depending on the territory
- 4 you're in.
- 5 Q. Okay. So, for this particular territory near Bowie, which --
- 6 | you looking at Poles 1 or Poles 2?
- 7 A. See down here, 1, New York to Washington, approximately --
- 8 Q. Oh.
- 9 A. -- 265 feet. New England Division, approximately 175 feet.
- 10 So, there's your 2. See how they correlate?
- 11 Q. Okay, I got you. I got you. So -- so, how do I interpret
- 12 that 9.5?
- 13 A. Nine and a half cat poles. So, you're sitting there, you're
- 14 | looking at cat poles, you go one-, two-, three-, four-, five-,
- 15 | six-, nine and a half. At the half add another watchman.
- 16 Q. Okay. I'm sorry, I'm kind of slow here. But so, I'm here,
- 17 I'm out at the welding truck. I'm going to need to have
- 18 | watchmen --
- 19 A. Um-hum.
- 20  $\mathbb{Q}$ . -- 9.5 cat poles away?
- 21 A. No, that's your sight distance. You need to have -- to
- 22 | maintain 15 seconds in the clear, you need 9-1/2 poles sight
- 23 distance based off of speed. It's not telling you how many
- 24 | watchmen you need, it's telling you that's how many -- that's how
- 25 many poles that you need in the clear to -- to make -- to ensure

- 1 | that you got 15 seconds before a train gets to you. This is only
- 2 | a guideline. It's not a rule. It's saying, hey, generally if
- 3 you're in tangent track and you're working for New York to
- 4 Washington, and the train speeds in the area is 110, a train will
- 5 travel -- will travel 9-1/2 cat poles or will travel 2,420 feet in
- 6 15 seconds.
- 7 Q. Uh-huh.
- 8 A. So, that's 9-1/2 cat poles away at a minimum, which is just a
- 9 suggestion. We should always go above that, but at a minimum in
- 10 tangent track you need to have 9-1/2 cat poles sight distance
- 11 | because in 2,420 feet, in 15 seconds he's going to be on you.
- 12 BY MR. HURLEY:
- 13 Q. 2,420 feet is not enough. That does not account for
- 14 | clearance time.
- 15 A. True. So, and this is what we tell our guys, too; that's
- 16 | till you get to the work site. If it takes you 20 seconds to
- 17 | clear, you need 35 seconds in the clear.
- 18 Q. It's usually 10 seconds over that.
- 19 A. Yeah. That's what I'm saying. That's just -- it's just a
- 20 quideline, it's not law or --
- 21 Q. Yeah, you could -- well, the regs require that you're in the
- 22 clear 15 seconds prior to the train reaching your position.
- 23 A. Um-hum.
- 24 Q. So --
- 25 A. Yeah, I ain't going to argue with the FRA.

1 BY DR. HOEPF:

- 2 Q. Okay, so that's -- so that card is not really about how many
- 3 watchmen you need then?
- 4 A. No.
- 5 Q. Okay.
- 6 A. No, it's just -- no, it's not.
- 7 Q. Okay. So, just -- I mean, which -- what's your take on --
- 8 | let's just assume it's tangent track, let's say it's clear
- 9 visibility, you know, and let's say it's 110 miles an hour track,
- 10 | I mean, how many -- like how many advanced watchmen do I need
- 11 out --
- 12 A. Well, you only need -- well, you need to advanced watchmen;
- 13 one on the north, one on the south, and then you would fill in.
- 14 Depending on the sight distance, sometimes you only need one
- 15 | watchman, and he -- he is the watch -- he is the watchman and the
- 16 advanced watchman. If you're a straight tangent track and you
- 17 | got, I don't know, you got miles of sight as far as you can see,
- 18 you only need one watchman. I mean, you can --
- 19 Q. It doesn't matter if it's 110 miles an hour, you would just
- 20 | need watch -- one watchman?
- 21 A. Right. The train could be doing 180, you would only need one
- 22 watchman. I mean, from the time you see the train you're going to
- 23 start counting one one thousand, two one thousand, three one
- 24 | thousand, you know, and you're watching how long it takes for your
- 25 | quys to clear, and you're taking that into account. But you know,

1 you're setting there counting.

I do that as a manager. When I go out there and I hear them

3 | blow the horn, I'm going one one thousand, two one thousand, three

one thousand. I'm watching to see when that train gets there, and

5 | if it's anything below 20, I'm like okay, I go find the foreman, I

6 say, hey, I just counted that. You need to put another watchman

7 | out. You need either another gang watchman or you need another --

8 or we need to move the advanced watchman up or something. So.

9 Q. Okay. Okay. And so, are the -- is this like -- is this in

10 the site-specific work plan? Or is this kind of like up to the

11 | foreman to, you know --

12 A. No, that's -- that's up the foreman. He's a qualified

13 foreman. That's -- and we're all qualified. They're trained and

14 | that's part of his job responsibilities and duties is to know

15 that. And that's why he has --

16 Q. Okay.

17 A. -- that's why he's qualified, has physical characteristics,

18 NORAC, MW1000.

19 Q. Okay. Okay. So, the -- so, site-specific -- and thanks, and

20 | we'll look at it later, but so the site-specific work plan is not

21 | into that level of detail? It's more such just watchmen will be

22 needed and then the foremen know how to use --

23 A. Yeah.

24 | O. -- the watchmen?

25 A. Right.

```
Okay. Okay.
 1
    Ο.
 2
         DR. HOEPF: I think that's all I've got.
                                                    Thanks, JP.
 3
         THE WITNESS: All right. No problem.
         MR. PAYAN: All right. I think we're in the home stretch.
 4
 5
    I'll open it up; any -- any follow-up questions?
 6
    (No response.)
 7
         MR. PAYAN: No? All right.
 8
         BY MR. PAYAN:
 9
         Before I let you go, I always -- we always like to kind of
10
    pick your brain a little bit. Is there -- is there, based on what
11
    you know of this accident, and if you had redo button, are there
12
    any suggestions that you think of that would -- that could --
1.3
    either a rule, training that would -- that would change the
14
    outcome of what we're here for?
15
         To be honest with you because I wasn't there, and I know
    that's why we're all here today, just to figure out what exactly
16
17
    happened, so I'm not going to assume what happened, all I'm going
18
    to say, if we -- we follow the rules, we do what we're taught, we
19
    ask questions, we participate in job briefings, when we do what
20
    we're supposed to do every day and what we harp on every day, it
21
    should have never happened. It shouldn't have happened. I mean,
22
    that's -- I -- that's why I'm so upset about it. It shouldn't --
23
    it should not have happened.
24
    Ο.
         Um-hum.
```

25

Α.

We --

```
1
    Q.
         Okay.
 2
         We are given the tools by Amtrak to be efficient in our job.
    It's as simple as that.
         How about FRA; do you think the regulations are -- are
    0.
 5
    adequate for RWP?
 6
         FRA? Oh, yeah.
 7
         Yeah. You don't have to say that just because he's here.
    0.
 8
         No, if -- look. I've met many FRA guys.
                                                    They don't play any
 9
    games.
10
    0.
         Okay.
11
         MR. PAYAN: Fair enough. Well, you have my business card.
         THE WITNESS: Um-hum.
12
13
         MR. PAYAN: If you think of something, I hope you feel
14
    confident enough --
15
         THE WITNESS: Yeah.
16
         MR. PAYAN: -- share with us.
17
         THE WITNESS: Absolutely.
18
         MR. PAYAN: We're always looking for new stuff.
         THE WITNESS: Um-hum.
19
20
         MR. PAYAN: And any -- nobody has anything else, we'll --
21
    it's 2:48, and we'll go off the record.
          (Whereupon, at 2:48 p.m., the interview was concluded.)
22
23
24
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## CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: AMTRAK WORKER FATALITY

BOWIE, MARYLAND APRIL 24, 2018

Interview of James Miller

ACCIDENT NO.: RRD18FR006

PLACE: Linthicum, Maryland

DATE: May 2, 2018

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.

Elaine M. LaRosee Transcriber