

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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MAINTENANCE-OF-WAY EMPLOYEE
FATALITY, BNSF RAILWAY, MIDWAY
SUBDIVISION, MINNEAPOLIS,
MINNESOTA ON MAY 25, 2015

Docket No.: DCA-15-FR-011

* * * * *

Telephone Interview of: DOUGLAS ADAMS

Wednesday,
July 1, 2015

The above-captioned matter convened, pursuant to notice.

BEFORE: RICHARD HIPSKIND
Investigator-in-Charge



I, Douglas Adams, have read the foregoing pages of a copy of my testimony given during an interview in the accident investigation of the construction gang foreman employee fatality on BNSF Railway Company on May 25, 2015, at about 11:38 a.m. in Minneapolis, MN and these pages constitute a true and accurate transcription of same with the exception of the following amendments, additions, deletions or corrections:

<u>PAGE NO:</u>	<u>LINE NO:</u>	<u>CHANGE AND REASON FOR CHANGE</u>
<u>14</u>	<u>7</u>	<u>"AND" instead of "in"</u>
<u>32</u>	<u>6</u>	<u>provide "WARNING" for</u> <u>Word Missing</u>

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

Date: July 21, 2015

Witness: [Redacted Signature]

APPEARANCES:

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National Transportation Safety Board

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GEORGETTA GREGORY, Chief, Railroad Division
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BOB BEATON, Ph.D., Chief, Human Performance and
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GEORGE LOVELAND, Vice General Chairman
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THOMAS JULIK, Safety Inspector - Track Division
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DALE JOHNSON, Safety Inspector - Track Division
Federal Railroad Administration

KEVIN WILDE, General Director, System Safety
BNSF Railway

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I N T E R V I E W

1
2 MR. HIPSKIND: Good afternoon, everyone. My name is
3 Richard Hipskind, and I am the investigator-in-charge and the
4 track group chairman for NTSB for this accident.

5 We are conducting a telephone interview on July 1, 2015,
6 with Mr. Douglas Adams who works for the BNSF Railway Company or
7 BNSF.

8 This interview is in conjunction with NTSB's
9 investigation of an employee fatality in Minneapolis, Minnesota,
10 on May 25, 2015. The NTSB accident reference number is DCA-15-FR-
11 011.

12 Before we begin our interview and questions, let's go in
13 the order I suggested and introduce ourselves. Please give your
14 name and spell your last name and please identify who you are
15 representing and your title. I would remind everybody to speak
16 clearly and loudly enough so we can get an accurate recording.
17 I'll lead off.

18 Again, my name is Richard Hipskind. The spelling of my
19 last name is H-i-p-s-k-i-n-d. I am the investigator-in-charge and
20 the track group chairman for the NTSB for this accident.

21 MR. NARVELL: Rick Narvell, N, like in Nancy, a-r-v-e-l-
22 l, with NTSB, and I'm a human performance investigator in
23 Washington, D.C.

24 MR. BEATON: Bob Beaton. Spelling is B, as in boy, e-a-
25 t-o-n, chief of the Human Performance and Survival Factors

1 Division at NTSB.

2 MR. HIPSKIND: Georgetta.

3 MS. GREGORY: This is Georgetta Gregory, G-r-e-g-o-r-y.
4 I'm chief of the Railroad Division at the NTSB.

5 MR. LOVELAND: George Loveland. Last name,
6 L-o-v-e-l-a-n-d, BMWED, Vice General Chairman.

7 MR. JULIK: This is Thomas Julik, with FRA. Last name
8 is spelled J-u-l-i-k. I'm a safety inspector in the track
9 discipline.

10 MR. JOHNSON: Good morning. I'm Dale Johnson,
11 J-o-h-n-s-o-n, and I also am the track safety inspector for in
12 the Track Division.

13 MR. WILDE: Kevin Wilde, W-i-l-d-e, representing BNSF
14 Railway. I'm general director, system safety.

15 MR. HIPSKIND: And, Mr. Adams, would you introduce
16 yourself for the record?

17 MR. ADAMS: Douglas Adams, last name is spelled
18 A-d-a-m-s. My title is director of rules and field support for
19 BNSF Railway.

20 MR. HIPSKIND: Okay. Thank you, everybody.

21 And, Mr. Adams, do you mind if we proceed on a first-
22 name basis?

23 MR. ADAMS: That is fine.

24 MR. HIPSKIND: Okay. Thank you, Doug. First off, Doug,
25 do we have your permission to record our discussion, our interview

1 with you today?

2 MR. ADAMS: Yes.

3 MR. HIPSKIND: And do you wish to have a representative
4 with you at this interview?

5 MR. ADAMS: I have Kevin Wilde in the room with me from
6 BNSF. I don't wish for any other representative.

7 MR. HIPSKIND: Okay. Thank you.

8 INTERVIEW OF DOUGLAS ADAMS

9 BY MR. HIPSKIND:

10 Q. Doug, please give us the highlights of your career. In
11 other words, how long have you worked in the railroad industry,
12 the different positions you have held leading up to your current
13 title and then please explain your duties and responsibilities
14 with your present position.

15 A. Well, I've been in the railroad industry since 1979,
16 started as a brakeman/conductor/switchman. Held that position
17 until which time I took a position as a train dispatcher. From a
18 train dispatcher, I assumed positions as a transportation
19 trainmaster at various locations. From there I moved into the
20 operating rules department, and have had or held various operating
21 rules positions up until this point in time. My current position
22 is director of rules, field support, with BNSF. My responsibility
23 includes maintenance of our rule books, timetables, special
24 instructions, with primary responsibility for the maintenance-of-
25 way operating rules.

1 Q. Okay. Thank you, Doug.

2 MR. HIPSKIND: And before we go any further, I want to
3 explain that BNSF offered and sent out a pre-read document prior
4 to this interview which I want to identify as Item 1, and also
5 there are four other BNSF handouts, and they will be identified as
6 follows: There is a handout entitled Adjacent Track Protection
7 Rule Changes, and that will be Item 2. There is a MWOR -Adjacent
8 Control Track Protection Rule Review which is Item 3, and a recent
9 handout called Fouling Track, and it is identified as Item 4 and
10 also I believe a handout, the rule is effective or the change is
11 effective July 1, is entitled Form B Operator Briefing, and it is
12 Item 5. So as we go through our questions and whatnot, I
13 understand people will be going back and forth, but please use
14 that as your reference.

15 BY MR. HIPSKIND:

16 Q. So with that said, Doug, I want to give you the floor so
17 that you can go over the concepts of some of the safety and
18 operating rules to give us a better understanding of applicable
19 rules for the preparation and protection of maintenance-of-way
20 employees working on or about the tracks, and to also give you an
21 opportunity for you to address or pull into the discussion the
22 issuance of the various handouts mentioned if you care to do that.

23 A. Okay. Thank you, Dick. Again, my name is Douglas
24 Adams. I will work my way down through the items that you
25 provided in a pre-read in the sequential order in which you've

1 identified them.

2 So starting with Item 1, this is a pre-read document
3 that BNSF provided and, our position, a summary of maintenance-of-
4 way operating rules that we feel are applicable to the Midway Sub
5 incident.

6 Starting with Rules 1.1 and 11.4, these are our rules to
7 establish our job safety briefing requirement expectations with
8 BNSF. They essentially tell us what's required of our employees
9 in regards to conducting thorough job safety briefings before
10 beginning work, before beginning new tasks, any time working
11 conditions change. There's emphasis that the briefings must
12 include types of authority or protection that's in effect when
13 needed.

14 We go a little bit further into a number of other items,
15 but at minimum, pertinent to this particular incident, discussion
16 about tracks that may be fouled; determination of any adjacent
17 tracks if they're present at the work location; also determination
18 of adjacent controlled tracks, which is a separate definition by
19 regulation, if any of those conditions are present at the work
20 location; procedures to arrange for on-track safety for adjacent
21 tracks if that's necessary or pertains to the location; and nature
22 of work performed, to be performed and the characteristics of the
23 work location. So those are some minimum expectations that we
24 expect to be discussed in the job safety briefing prior to
25 performing work any time a new task is performed or when

1 conditions change.

2 The next rule that is referenced is our maintenance-of-
3 way Rule 6.3.1, and most specifically Part B, that part that tells
4 our employees that the employee-in-charge must ensure that
5 equipment and employees do not foul or occupy track until
6 authority is received.

7 Next we have listed Rule 6.3.2. This is there just to
8 have a factor due to the flatcars that were located on the track
9 with the track panels, that protection needs to be provided to
10 protect access to the track on which those flatcars were located.

11 And we have Rule 12.1.1 regarding occupying adjacent
12 tracks, specifically that part that requires that you establish
13 on-track safety as necessary to protect against trains and on-
14 track equipment passing on an adjacent track.

15 And finally Rule 12.1.2, Fouling Adjacent Tracks. That
16 part specifically states you do not foul adjacent tracks with
17 roadway maintenance machines unless working limits have been
18 established on the adjacent track.

19 So I'd like you to please note that neither of the
20 Chapter 12 Rules that I referenced are specific to adjacent
21 controlled track or adjacent controlled track protection. In
22 order for that recently implemented regulatory change and the
23 associated rules to be triggered, there must be two or more
24 roadway workers present, one or more of which must be on the
25 ground engaged in that common task with on-track, self-propelled

1 roadway maintenance machines, and the on-track, self-propelled
2 roadway maintenance machine must be occupying a track next to a
3 controlled track with track centers between the two tracks of 19
4 feet or less.

5 In the Midway Sub incident, all of these conditions were
6 not present, as there were no on-track roadway maintenance
7 machines present that were occupying the track; and therefore,
8 it's our position that the focus of this incident should be
9 centered around the quality of our job safety briefings, the need
10 for a thorough risk assessment to determine whether there's a need
11 for authority or protection before fouling any track. So we don't
12 feel it's really unique to an adjacent track. It's really more
13 centered around the necessary authority protection that's
14 necessary before you foul any track, single track or multiple
15 tracks.

16 In this situation, if you were to consider just one
17 small change in the situation, and that being if the track panels
18 were located on rubber-tired semi-truck trailers that were parked
19 in near proximity or similar proximity to a main track, a single
20 main track, and that was the only piece of this situation that
21 were to change, we believe that the very same exposure was present
22 and there was a need for a risk assessment to take place to
23 determine whether or not there was concern for fouling that track.
24 So in that case, adjacent track would not have any relevance to
25 the situation.

1 So again, it kind of takes us back to our belief that
2 the focus really needs to be around the quality of job safety
3 briefings, a risk assessment before fouling any track, not
4 necessarily specific to adjacent tracks. And we feel that mixing
5 the discussion about fouling track with the recently implemented
6 adjacent controlled track protection creates some confusion
7 regarding the implementation and understanding of that recent
8 regulation.

9 With that, I'll move on to Item Number 2, listed in the
10 pre-read. This was a rule change briefing that was issued on June
11 3 of 2014 in advance of the rule changes associated with the
12 regulation changes pertaining to adjacent controlled track
13 protection. We issued it roughly one month in advance to try to
14 give our employees an advanced look at it, opportunity to discuss
15 and review the rule changes that were associated with it, that
16 went in -- to be in line with the regulation that took effect on
17 July 1 of 2014.

18 It was a high level overview reviewing some of the rule
19 changes and pointing towards the general orders that were issued
20 that actually implemented the rules changes that were associated
21 with that regulatory change.

22 I'd like to point out in that briefing, that we tried to
23 point out, once again, that any time a machine will or may foul an
24 adjacent track, working limits need to be established on the
25 adjacent track to protect that condition. That's irregardless of

1 any adjacent controlled track protection that may or may not be
2 triggered.

3 On September 29 of 2014, Item 3, Rule Review was issued.
4 This was a document that was issued to help our employees further
5 understand when the adjacent controlled track protection
6 requirements were triggered, and you'll note that there's a
7 flowchart that kind of steps you through the conditions that you
8 need to consider to make a determination of whether adjacent
9 controlled track protection is necessary.

10 Again, you'll note that the requirements for one or more
11 roadway workers on the ground, the on-track, self-propelled
12 equipment, the roadway workers being engaged in a common task with
13 that equipment and the track centers of 19 feet or less, would all
14 be conditions that would trigger that adjacent controlled track
15 protection, but again were not present in the Midway Sub incident.

16 Item 4 is a fouling track rule change briefing that we
17 just recently issued, which are changes that will become effective
18 on July 1 of 2015. This is intended to clarify or help our
19 employees better understand the meaning of fouling a track beyond
20 just that imaginary plane that extends at a point 4 feet from the
21 nearest rail of any track. It's to emphasize the need in that
22 risk assessment that needs to occur during the job safety
23 briefings, that you must give consideration to the type of
24 activity that's taking place, the type of equipment that's being
25 used, type of material that might be handled that is within that

1 4-foot window or in such proximity that it could become within
2 that 4-foot window, to avoid it being struck by any movement that
3 would occur on that track. Again, this is for any track. It's
4 not unique to adjacent tracks.

5 The definition of fouling track in our glossary is the
6 primary change and it is now much more consistent with the
7 definition for fouling track in the federal regulation, again with
8 emphasis on a risk assessment to determine if a track could be
9 fouled, not just simply the thought of 4 foot, an imaginary plane
10 of 4 feet.

11 And then finally Item 5 is a rule change briefing
12 related to Form B's and some blocking requirements that we are
13 implementing for dual control switches within Form B limits.
14 While this may be related because a Form B could be a method of
15 authority or protection that would be used on a track, if your
16 risk assessment were to determine that you may foul that track or
17 will foul the track, this briefing is really more about the
18 blocking of dual control switches within the limits of a Form B to
19 help us avoid unintended incursions into Form B limits at an
20 intermediate point.

21 By that I mean if a employee-in-charge grants permission
22 to a train through Form B limits and then at some midpoint within
23 those Form B limits there's a dual control switch that the control
24 operator may use to change the route of the train which would now
25 be inconsistent with the permission that was granted by the

1 employee-in-charge, we will reduce the likelihood of that taking
2 place and reduce the likelihood of an incursion into Form B limits
3 without permission.

4 Q. Doug, is there more or are you at the conclusion there?

5 A. The only thing I guess to add would be in terms of the
6 adjacent controlled track protection rule changes, as I noted in
7 June, we issued a general order in a briefing to announce the
8 changes that would be effective with the July 1 regulatory
9 changes. In January of this year, we made a few adjustments to
10 some of those rules based on some feedback that we had received
11 from our employees to help clarify the understanding and
12 expectation of those rules. And then in -- well, effective April
13 1 of 2015, a new maintenance-of-way operating rule book was issued
14 which contains all those changes within that rule book.

15 So just as a little bit of an outline where those rule
16 changes took place. Once again, those are pertinent to the
17 adjacent controlled track protection regulation and associated
18 rules, not necessarily directly associated with this incident.

19 Q. Okay. This is Dick Hipskind. Doug, I want to clear
20 some things up. On the pre-read document, Item 1, as the language
21 in those rules is listed by number and by content of the language
22 in the rule, has any of that language for that set of rules in the
23 pre-read, is it the same as it was prior to the FRA rule change?
24 So let's just assign -- was it the same in May of 2014 through to
25 the date of the accident, May 2015? Is that --

1 A. No, there was some -- I'm sorry.

2 Q. No, go ahead, please.

3 A. There were some adjustments made to some of those rules
4 required by the regulatory changes that were components -- minimum
5 expectations by regulation in the job safety briefing that are
6 required by the regulatory changes specific to determination of
7 adjacent controlled tracks, which is a term that was newly
8 introduced with those regulatory changes. So some of that
9 information was inserted into, for example, 11.4 of your job
10 safety briefing.

11 Q. Okay. And can you speak to each -- I guess what I want
12 to know is the nuance of where you had to change wording so that
13 we're kind of dialed in on what was it before and then what was
14 the change or the improvement that you guys did with the language
15 in the rule?

16 A. Well, for example, 11.4, prior to the regulatory change,
17 there was an expectation that there'd be a determination of any
18 adjacent tracks. By definition, the federal definition, adjacent
19 track is a track with -- next to a track with track centers of
20 less than 25 feet. With the new regulation changes, a new term
21 was introduced, that being an adjacent controlled track,
22 definition being a track next to a track with track centers of 19
23 feet or less. And so in our 11.4 job safety briefing, we had to
24 add the requirement that the roadway workers in their job safety
25 briefing discussion would make a determination of any adjacent

1 controlled tracks that were present at the work location in
2 addition to any adjacent tracks that were present.

3 Q. Okay. Well, let me kind of say that my way and see if
4 we're on the same page. So if I'm working on a track, performing
5 whatever task, and there is a track adjacent to me, I should think
6 of that adjacent track as it's either controlled or it is not
7 controlled. If it's not controlled, I don't have to take extra
8 precaution if the track center is greater than 25 feet, and if it
9 is a controlled track, I need to do something in terms of
10 protection of the adjacent track if the track centers are less
11 than 19 feet.

12 A. That is one piece of the equation, but the adjacent
13 controlled track protection requirements, again, are triggered by
14 controlled tracks with track centers of 19 feet or less. You also
15 have to have self-propelled, on-track equipment present on the
16 occupied track which is next to that adjacent controlled track.
17 You also have to have one or more workers of a workgroup on the
18 ground engaged in a common task with that self-propelled, on-track
19 equipment in order to trigger the requirements of the adjacent
20 controlled track protection regulation and associated rules.

21 So making a determination whether or not one or more of
22 those adjacent tracks is a controlled track and the track is 19
23 feet or less is one of the things that needs to be given
24 consideration in the job safety briefing.

25 Q. Okay, Doug. Thank you for that, and that kind of

1 explains -- going back to one of the handouts. Give me a second
2 to pull it up. That's why BNSF chose to put out the one handout
3 that spoke to the changes in the adjacent track rule. And I
4 think, to my way of thinking, that kind of explains why you went
5 to that diagram that said all of these elements need to be
6 present, and if they aren't, then you don't engage adjacent
7 controlled track protection or, another way to say that is, you
8 don't need to engage it.

9 A. That is correct. It was our effort to help our
10 employees through a flowchart or to help them to go down through
11 that decision tree, if you will, to understand whether all of the
12 conditions were present that triggered the requirements of the
13 adjacent controlled track protection, independently of the
14 longstanding requirement that any time you're going to foul a
15 track or have the probability of fouling a track that you need to
16 establish authority or protection on that track, and that's any
17 track, independent of whether or not it's an adjacent track or an
18 adjacent controlled track.

19 Q. Okay. I think I believe I understand that better.

20 I want to switch gears here a little bit and I want to
21 talk about not the rules per se or the language, but some of the
22 concepts that you brought up was the quality and content of the
23 job briefing, the risk assessment piece that's expected, I think,
24 in the job briefing. And so with that, what I want to know is how
25 do you guys tackle -- I know it's pretty fundamental to just have

1 language and rules and you go into a training environment with a
2 group of employees and you read it off and then ask if there's any
3 questions. But how do you tackle the piece where you're trying to
4 assess or you're trying to impart to the employee good risk or
5 hazard identification skills?

6 A. Well, through our training interactions with our
7 employees, we emphasize that while that imaginary line of 4 feet
8 from the nearest rail is a point at which you must have authority
9 or protection on any track before you foul that track, that it's
10 very important that you take into consideration things such as
11 your level of experience, the type of activity that's taking
12 place, type of material that may be handled by a piece of
13 equipment, the activity of the equipment itself and how it may
14 move into a position where it would become beyond that 4-foot
15 imaginary line, all of those things need to be discussed and given
16 consideration to be certain that our risk assessment is sufficient
17 to avoid incident, realizing there's some subjectivity to that,
18 but again relying upon the expertise and the experience of our
19 field employees, that they take all of those things into account.

20 And then finally we instill upon them that, you know, if
21 you're in doubt, safety is always the course that we want to take.
22 So if you're in doubt, then establish the authority or protection
23 or seek further counsel before you engage in the activity to
24 ensure that we're not going to foul the track.

25 Q. Okay. Thank you, Doug. I noticed that in the

1 definition of fouling track, you indicated that you had gone back
2 and reworked some of that language, and I want to see if I'm
3 understanding this correctly. So I'm noticing the word proximity,
4 and the reason I want to talk about that for a minute is it seems
5 in our previous discussion there's always been this kind of
6 yardstick aspect to either regulatory language or some of the
7 rules that are put out there in training about being on or about
8 tracks, like, for example, the 25-foot track centers in a certain
9 situation, a 19-foot track center or less in another situation.
10 And now I see the introduction of the word proximity, and I recall
11 that you just said that some of this is subjective in nature. So
12 can you help us to understand what you guys were going after when
13 you introduced the word proximity or has it been there in the rule
14 language all the time?

15 A. We borrowed the term proximity directly from the
16 regulation for fouling track. Our current definition of fouling
17 track is simply within 4 feet of the nearest rail, our concern
18 being that with that simple definition, that employees may not be
19 as mindful as we would like in the discussion about probability or
20 could or potential as we may wish. And so the change in the
21 definition is to help clarify or instill that expectation that
22 beyond just that plane of 4 feet from the nearest rail, we need
23 for you to give consideration to again the type of work activity,
24 the conditions that may result in you moving people or equipment
25 or loads handled by equipment beyond that 4-foot margin.

1 So again, the definition has been expanded to help try
2 to instill that concept and it's very similar to that which is
3 provided by the regulation.

4 Q. Okay. And again allow me the latitude to switch gears
5 again. Tell me, if you can, Doug -- I'm not entirely sure that
6 you're involved in field training on the rules, but can you give
7 us kind of a brief overview of two things: One, how should we
8 think about the maintenance-of-way employees? And I want you to,
9 if it's different in the three different departments --
10 production, construction and then line maintenance on the division
11 level -- how is that accomplished on an annual basis and what kind
12 of follow-up is there in the expectation of monitoring the
13 application of the training?

14 A. I can only speak at a high level to the training. I'm
15 not directly involved in the training activity itself.
16 Maintenance-of-way operating rule qualification is initially
17 provided to our employees in what I believe is about a week-long
18 training session, and then annually, there is a requalification
19 requirement for all employees who are maintenance-of-way operating
20 rules qualified in order to maintain that qualification.

21 So we have an annual requalification program. Topics
22 vary. Obviously those that are required for annual review by
23 federal regulation are included and other topics as we see
24 necessary based on activities the previous year, you know, level
25 of questions, areas of concern, we'll use as areas of focus.

1 For example, the adjacent controlled track protection
2 rules being something new and obviously some complexity with those
3 rules, those were part of the requalification program here in the
4 past year. I don't believe there's anything that's different for
5 the individual subgroups, if you will, within engineering being
6 structures versus signal, et cetera.

7 Q. Okay. Thank you for taking us through the overviews of
8 all this.

9 MR. HIPSKIND: In deference to or out of respect to
10 everybody else that's on the call, I want to give up my time for
11 right now and, Mr. Narvell, will you take over with your comments.

12 MR. NARVELL: Great. Yes. Thank you, Dick.

13 BY MR. NARVELL:

14 Q. And, Doug, thank you for that very good explanation. I
15 just had a couple for now and then I'll turn it over to Dr. Beaton
16 on this first round. On the 12.1.1, that rule that was on the
17 Item 1, Doug, I'm looking at the sentence that says, "When working
18 on a track, establish on-track safety as necessary." Do you see
19 those two words there "as necessary" to protect?

20 A. Yes.

21 Q. I don't want to assume here. Would that also include
22 being cognizant of any kind of loads? Would that be inclusive as
23 far as the loads that might or could or should be in the proximity
24 of the track protection area?

25 A. Yes.

1 Q. Okay. And then jumping down, still on this number 1
2 document, on 12.1.2, Fouling Adjacent Tracks, I see the word boom
3 here. Was there ever any consideration given to inserting
4 specifically forklifts, since they're used quite a bit in the rail
5 industry, or was that an assumption?

6 A. Well, actually in the new -- along with the glossary
7 term change for fouling track that takes effect on July 1 --

8 Q. Okay.

9 A. -- we've also made some adjustments to some of that text
10 to make it less specific to a piece of equipment that has a boom
11 and more general in terms of any equipment, any component of that
12 equipment or any load that's being handled by equipment would
13 qualify as a need to provide protection or authority before
14 fouling the track.

15 Q. Okay. Great. On document number 3, which is the
16 adjacent controlled track protection, on my page 2, it talks about
17 roadway workers ceasing work, et cetera, and it says, "No. If the
18 employee-in-charge determines in the job safety briefing that no
19 workers, equipment or material will foul the track." And just to
20 be clear here, and I think it's pretty obvious, the new rule
21 briefing which is dated 25 June of this year, does talk about --
22 and it's effective today, by the way -- that's more specific in
23 there I see, correct, and that was by design where it says
24 material handled could be struck?

25 A. Yes, that is correct.

1 Q. Okay. Great. So it's a tightening up, if you will, or
2 more of a clarification?

3 A. Absolutely, that is our intent to better clarify the
4 risk assessment need and the need to provide authority or
5 protection could you foul.

6 Q. Okay. Just two more real quick and I'll pass it along.
7 There was mention a minute ago from Mr. Hipskind about workers and
8 some of the training they get and you also indicated that you were
9 speaking of training as a high level, and that's fine, but if you
10 know the answer to this question, I'll go ahead and ask it. Are
11 MOW employees at BNSF taught or trained in the specific principles
12 of hazard recognition and risk mitigation?

13 A. Yes.

14 Q. Okay. All right. And the last one I have now deals
15 with the concept of Approaching Others, or AO. Is this -- is AO
16 part and parcel of the training for essentially the peer-to-peer?
17 Is that the understanding or am I missing that?

18 A. I'm not prepared to answer that question.

19 Q. Okay. All right. Very good. That's all I have for
20 now. Thank you.

21 A. Thank you.

22 DR. BEATON: Hey, Dick, this is Bob. I'm looking at
23 your order in which people are going to ask questions. I'm
24 assuming that Thomas will go next, then Dale and then John and
25 then George?

1 MR. HIPSKIND: Yes, and this is Dick Hipskind. I did
2 get temporarily cut off there but thank you, Dr. Beaton. Thomas,
3 if you're ready? And then after Thomas, if Dale, if you'll pick
4 up when Thomas is finished.

5 MR. JULIK: Yes, thank you, Richard. This is Thomas
6 Julik with FRA.

7 BY MR. JULIK:

8 Q. So, Doug, you had mentioned previously or just a little
9 bit about the job safety briefings. Can you discuss a little bit
10 more as far as what's the circumstances in which there would be
11 the expectation for a worker to re-brief throughout the course of
12 a workday?

13 A. A re-briefing expectation would be any time that the
14 task or work changes, conditions change.

15 Q. So if a worker moved to a new location to perform a
16 second task throughout the day, would that be a circumstance in
17 which re-briefing would be expected?

18 A. Yes. There would need to be a re-briefing to review the
19 conditions for that location which may be different from the
20 previous.

21 Q. Okay. Thank you. You had mentioned --

22 A. (Indiscernible) --

23 Q. Sorry. Go ahead.

24 A. No, go ahead.

25 Q. Okay. I'm looking at the adjacent track protection rule

1 overview labeled as Item Number 3 on page 2. It shows an example,
2 second from the bottom here, discussing adjacent controlled track
3 protection -- or, excuse me, adjacent controlled track protection
4 is required any time a boom is out of the cradle. And in there it
5 discusses any time that the boom will foul the track, whereas when
6 you look at the other rules here under 12.1.2, it discusses when
7 the load may foul the track. Can you discuss a little bit as far
8 as I guess some of the understanding between those two? It, in my
9 eyes, appears to be somewhat be in conflict. Can you clarify that
10 a little bit?

11 A. Sure. That was an attempt to clear up some confusion
12 that we dealt with quite a bit since the regulatory change where
13 our employees have somehow adopted the belief or had heard that
14 any time that a vehicle that's equipped with a boom and it's near
15 a track, whether it's occupying a track or not, triggers the
16 requirements for adjacent controlled track protection. So it's an
17 effort to educate them on just to the fact if a boom is out of the
18 cradle or deployed on a vehicle in itself does not trigger
19 adjacent control track protection requirements.

20 Q. Okay. So how should one understand the difference then
21 as far as when the track maybe fouled under those circumstances if
22 you've got a boom-equipped vehicle next to an adjacent or next to
23 a track?

24 A. Well, again there's some proximity that needs to be
25 taken into consideration. The type of work activity needs to be

1 taken into consideration. The type of load that may be handled by
2 that boom or that piece of equipment needs to be taken into
3 consideration. Those are all things that need to be reviewed and
4 be included in the risk assessment, and if there is concern that
5 there is a probability that the track would be fouled, then
6 authority or protection would need to be established to protect
7 against that condition. But again, it's not as simple as the boom
8 being out of the cradle automatically triggers a requirement for
9 protection or authority.

10 Q. Okay. I think that's all I've got for you right now.
11 Thank you, Doug.

12 MR. JOHNSON: Doug, at this time, this is Dale Johnson,
13 and I'm going to pass on my questions at this time.

14 MR. ADAMS: Okay. Thank you.

15 MR. HIPSKIND: George, if you'll pick up the
16 questioning.

17 MR. LOVELAND: Sorry about that. I was trying to find
18 my mute button.

19 BY MR. LOVELAND:

20 Q. Doug, this is George Loveland. Can you hear me?

21 A. Yes, I can, George.

22 Q. Okay. Just a question I have is, it sounds like a lot
23 of this hinges on like what Thomas was just talking about there,
24 for example, the boom out of the cradle, it all hinges on a risk
25 assessment and hazard recognition, and you said that there is

1 training in the field on this. Do you know what that training is?
2 The reason I ask is just because I'm not familiar with it and I
3 would like to get familiar with it.

4 A. There is discussion in our rules training about
5 requirements for authority or protection when you're going to foul
6 a track. And as a part of our Approaching Others program, that's
7 a concept that we instill in our employees, that discussions take
8 place in terms of auditing the work and determining the need when
9 there is a requirement or a need for authority or protection.

10 Q. Or it kind of just segues into a couple of different
11 things in reference to things like -- that's just like, okay, this
12 is -- we're going to talk about each risk assessment, hazard
13 recognition. There's nothing specifically like that? It just
14 segues like into Approaching Others and then in your job safety
15 briefings when you establish authority or whatever. Is that what
16 you're saying?

17 A. Well, again, I'm not directly involved in our training
18 program, so I'm not sure that I can speak in detail to what is
19 involved specifically in that training.

20 Q. Okay. That's all the questions and concerns I had.

21 MR. HIPSKIND: Dr. Beaton please.

22 DR. BEATON: Okay. Thank you.

23 BY DR. BEATON:

24 Q. And, Doug, thank you for taking the time to walk all of
25 us slowly through these issues. I have a few questions. I'd like

1 to start kind of general and then I'll drill down to some
2 specifics. But in the general context, would it be fair to
3 characterize your initiatives with these rule updates as trying to
4 ensure that maintenance-of-way workers get sensitive to performing
5 risk assessments?

6 A. Yes.

7 Q. And is it the case that your re-definition of fouling
8 the track is consistent with that initiative, that is, you've
9 redefined what it means to foul a track, in particular, changing
10 it to a 4-foot limit as a way to make an obvious trigger for
11 maintenance-of-way workers to see that close clearance and then do
12 a risk assessment?

13 A. Yes. Again, the 4-foot margin remains unchanged;
14 however, the glossary term is expanded in an effort to instill the
15 concept of you need to think beyond just that 4-foot margin to
16 give consideration to activity which could result in the
17 equipment, load handled by the equipment, or an individual moving
18 within that 4-foot margin.

19 Q. Okay. And I appreciate the 4 foot hasn't changed, but
20 the other words in this definition sort of give emphasis to the
21 need for employees to do a risk assessment when they see an open
22 and obvious trigger like a close clearance, close to another
23 track.

24 A. That is our intent. That is correct.

25 Q. Okay, good. With that in mind, the term adjacent

1 controlled track that is keyed on the definition of 19 feet or
2 less. I assume, and I'd like you to clarify for me or at least
3 provide me some background context or color -- what's driving the
4 rules for adjacent controlled track as opposed to adjacent track?
5 You have a nice little flowchart that lists several conditions
6 that are trigger events and if all of those are met, then adjacent
7 controlled track proceedings are put into effect, but what's the
8 safety intent here? What are you trying to accomplish?

9 A. Well, the adjacent controlled track term was introduced
10 with the new regulatory change and took effect July 1, 2014. My
11 understanding, that was based on a FRA study over a period of a
12 number of years, a number of fatalities occurred, and the
13 intention of that change was to prevent roadway workers on the
14 ground from being struck by movements occurring on the adjacent
15 controlled track when they may be distracted by the activity
16 they're engaged in associated with the on-track, self-propelled
17 equipment that they're occupying.

18 Q. Okay. So is it fair to say that this adjacent
19 controlled track rule is rather specific and is not intended to be
20 generalized to kind of the safety initiatives or the safety
21 emphasis that you might ascribe to the fouling track policy that
22 you have?

23 A. Yes.

24 Q. Okay. Let me just be very clear on this adjacent
25 controlled track rule. There are three conditions that

1 instantiate this rule and I think I heard either you or someone
2 else earlier say that we didn't have those conditions. I just
3 want to make sure that I understand what conditions we either had
4 or didn't have for this adjacent controlled track rule to take
5 effect. One condition is that the track-to-track centers are less
6 than 19 feet. Is that applicable in this Midway Sub incident?

7 A. The fact that there was an adjacent track is a condition
8 that existed in the Midway Sub incident; however, the adjacent
9 controlled track protection requirements are not applicable
10 because all of the conditions that trigger that regulation were
11 not present, specifically the fact that there was no self-
12 propelled, on-track equipment occupying a track next to that
13 track.

14 Q. Okay. So just to be clear, one of the conditions to
15 trigger this adjacent track is that the track-to-track centers
16 have to be less than 19 feet. That was the case in this Midway
17 Sub incident, right?

18 A. That is correct, yes.

19 Q. All right. The second condition is that the workers on
20 the ground have to be engaged in a common task. And did we have
21 workers on the ground engaged in a common task?

22 A. Well, to be clear, the workers on the ground must be
23 engaged in a common task with self-propelled, on-track equipment
24 occupying the track and, again, there was no on-track, self-
25 propelled equipment involved in this incident; therefore, not

1 applicable.

2 Q. Okay. So it sounds like, then, that this third criteria
3 is the only one that clearly wasn't met in order for this adjacent
4 controlled track rule to take effect, and that was on-track
5 equipment. I appreciate that on-track equipment has a particular
6 definition for the types of equipment for which the forklifts
7 would not fit that definition of on-track equipment.

8 A. Correct.

9 Q. Okay. So while two of the three conditions may have
10 been conceptualized as relating to this controlled or adjacent
11 controlled track definition, the one condition wasn't met and
12 therefore is it BNSF's policy that if one-third of the conditions
13 don't apply, that there's no further consideration of this safety
14 policy to take effect?

15 A. Well, for that particular safety policy, it would not be
16 applicable because all the components or conditions are not met.
17 However, the issue at hand, again, is the potential or probability
18 of fouling a track and the need for authority or protection to be
19 in place to prevent that or protect against that condition.

20 Q. All right. Let me just try to be clear on BNSF's
21 philosophy here with applying these safety rules. Would it be the
22 case that as the director of rules that you would say that this
23 rule is irrelevant because one of three conditions were not met
24 and therefore you would eliminate consideration of this entire
25 rule?

1 A. I would agree with that. I would also add that one of
2 the methods to provide protection, adjacent controlled track
3 protection is the use of a lookout, and a lookout is not effective
4 to protect against equipment that would foul a track, suddenly
5 foul a track; in this case, the track panels that fouled the
6 track. A lookout is intended to provide for roadway workers on
7 the ground to move to a predetermined place of safety before the
8 arrival of a movement on that track, and it would not be effective
9 for protection against track panels that would now become foul of
10 a track.

11 Q. I just want to go back and try to rectify what I'm
12 understanding is BNSF's approach to the applicability of its
13 safety rules. You started out by saying that you're interested in
14 getting people to do a risk assessment, and if I was a
15 maintenance-of-way worker and I looked at this situation and I
16 said two-thirds of the conditions for adjacent controlled track
17 apply here, what would be your expectation? Should those
18 maintenance-of-way workers summarily dismiss that rule or should
19 they seek some counsel or should they have a job safety briefing
20 to discuss the probabilities involved?

21 A. My expectation would be, if in doubt, that they would
22 seek counsel or in the absence of counsel, they would certainly
23 take the safe course, but it would not be my expectation that they
24 employ this particular rule, set of rules for adjacent controlled
25 track protection. Once again, it would be for authority or

1 protection on any track, not specific to an adjacent controlled
2 track.

3 Q. Okay. All right. Thank you. Thank you for that. I
4 have a couple more here. On job safety briefings, standing policy
5 is that when conditions change or when a job changes, you'll have
6 a job safety briefing and there's some guidance as to the contents
7 of those safety briefings. When we have a gang, maintenance-of-
8 way gang that is assigned to multiple short-term jobs throughout
9 the day, what is your expectation for the number of job safety
10 briefings that should take place?

11 A. Each and every time the work changes, the conditions
12 change, we instill in our employees that that is a time to pause
13 the work and to re-brief on the conditions to ensure there's a
14 clear understanding of the work to be performed and the necessary
15 protections are in place, the risk assessments are completed, et
16 cetera. So while I can't give you a definitive number, but it's
17 each time the task changes, a new task is being performed or the
18 conditions change.

19 Q. So let me help you out. If I have a gang and I have
20 five jobs for them to do throughout the day and each job is
21 performed at a different location within the limits of a yard,
22 would I expect them to have five job briefings, one at the
23 beginning of each of the new tasks or would one job briefing at
24 the beginning of the day be sufficient?

25 A. I would expect there would be an individual briefing at

1 the beginning of each task in order to sufficiently and
2 effectively identify the conditions associated with that task.

3 Q. Okay. When we have maintenance-of-way workers that are
4 under the auspices of a certain set of safety rules and
5 regulations and company policies, would we expect other workers in
6 the yard to be aware of those safety rules and regulations and
7 policies? For example, if I was a train engineer, would I know
8 what the maintenance-of-way workers safety expectations are?

9 A. Not necessarily. There's a different set of rules for
10 those different crafts of workers; however, those rules are
11 interlaced in such a fashion that they function with one another.
12 For example, if there's a method of authority or protection
13 established to protect the maintenance-of-way workers, there are
14 rules that pertain to the train and engine employees that are
15 related to that that would ensure that they stop at a location,
16 not to enter the work zone limits of the maintenance-of-way
17 employees.

18 Q. So would we expect a train and engine employee to be
19 aware of adjacent track rules and policies or even the adjacent
20 controlled track rules and policy?

21 A. No, not in that level of detail.

22 Q. Okay. Does BNSF take a view that each craft is working
23 in a vacuum and doesn't interact with one another or does BNSF
24 recognize that crafts oftentimes interact, particularly within the
25 limits of a yard, and they have to, for lack of a better word,

1 coordinate or communicate or interface with one another?

2 A. No, we do not expect them to operate in a vacuum. We
3 encourage that they interact with one another. It's just that we
4 have rules that are applicable to different employees in order to
5 ensure that they have the knowledge necessary to perform their
6 jobs.

7 Q. So if you knowingly expect the different crafts to work
8 together, why is it that the crafts would not be prepared to
9 understand, if you will, the constraints on the other crafts? Why
10 wouldn't a T&E crew understand the safety policies for a roadway
11 worker gang?

12 A. There's a considerable amount of knowledge that needs to
13 be possessed by different workers in the railroad industry and I
14 don't see that it's necessary that someone in the train and engine
15 craft, for example, would need to fully understand the
16 expectations or requirements surrounding adjacent controlled track
17 protections that are directly related to work that is performed by
18 the maintenance-of-way craft.

19 Q. Okay. I won't continue with this beyond one more
20 question. I have a T&E crewmember moving a locomotive within the
21 limits of a yard and a utility worker serving as a conductor. We
22 understand that a crew such as this would have responsibilities to
23 maintain a safe lookout, particularly for hazards on the track.
24 Would understanding adjacent track policies for roadway workers
25 have been any benefit to this T&E crew at the Midway Sub incident,

1 where they may have anticipated or done their own risk assessment
2 and assessed the probabilities that their track may have been
3 fouled if one of the track plates went astray?

4 A. I don't believe so. Had a method of authority or
5 protection been established, then that would have prohibited the
6 entry of that movement into those working limits or at the very
7 least been under the direction of the employee-in-charge of the
8 working limits.

9 Q. Okay. And whose responsibility would it have been to
10 establish those working limits?

11 A. The employee-in-charge of the maintenance-of-way
12 workgroup.

13 Q. And how would he have done that?

14 A. It could have been established in a variety of ways.
15 This particular track is what we consider centralized traffic
16 control and therefore a method of authority would have been track
17 and time, which would inhibit the entry of movement into those
18 track and time limits unless permitted by the employee-in-charge
19 of that track and time authority. A Form B is another method that
20 could have been used.

21 Q. And that would have involved the employee-in-charge
22 contacting the dispatcher or the yardmaster?

23 A. Yes, that would be the employee-in-charge working
24 through the control operator to establish a method of authority or
25 protection.

1 Q. Is there any indication that there was trouble
2 communicating with the control center on the day of the Midway Sub
3 incident?

4 A. Not to my knowledge.

5 Q. And the control center was staffed and up and
6 functioning?

7 A. To my knowledge, yes.

8 Q. Can you confirm that?

9 A. To my knowledge, yes. I haven't any of those details.

10 Q. Is there any safety policies that would encourage or
11 provide direction for employees-in-charge to contact the control
12 center to establish track and time?

13 A. Our rules provide for the establishment of authority
14 such as track and time and, through the training process, our
15 employees are trained how they would acquire such an authority or
16 protection.

17 Q. Do you happen to know if this employee was recently
18 efficiency tested on contacting the control center to request
19 track and time or --

20 A. I do not.

21 Q. -- fill out Form B?

22 A. I do not.

23 Q. Okay. Doug, again I appreciate all your candid answers
24 and your help here.

25 DR. BEATON: I'm going to yield the rest of my time and

1 I'll turn it back to Mr. Hipskind.

2 MR. HIPSKIND: Thank you, Dr. Bob. Ms. Gregory, and
3 when you're done, if you'll please pass it on to Mr. Kevin Wilde.

4 MS. GREGORY: I'll be happy to. Thank you. This is
5 Georgetta Gregory again for the record.

6 BY MS. GREGORY:

7 Q. Doug, I just have a couple of questions, and
8 understanding that you aren't in charge of training, are you
9 responsible for helping to develop the initial and annual rules
10 refresher courses? Are you involved in that exercise?

11 A. Not directly, no.

12 Q. Okay.

13 MS. GREGORY: So, Dick, if we could put a pin in that, I
14 have some training questions that we should probably follow up
15 with the appropriate BNSF officer when we get done here.

16 BY MS. GREGORY:

17 Q. Doug, do you have knowledge of the BNSF rules compliance
18 for efficiency testing program?

19 A. Yes.

20 Q. Are there specific paths developed for the testing,
21 coaching, and mentoring of maintenance-of-way employees?

22 A. Testing, yes, I would say there are, yes.

23 Q. Do you know if there are any specific tests that have
24 been developed to test specifically for fouling tracks?

25 A. We do have tests that pertain to the acquisition of

1 authority or protection where required, yes.

2 Q. And does that -- could you be a little more specific in
3 regards to fouling the track? What I'm looking for is if there
4 are any structured tests that would help determine if there's
5 additional coaching or mentoring or training needed for
6 maintenance-of-way employees to determine if they truly understand
7 fouling a track and what protections are required.

8 A. Yes, we have tests that are specific to authority or
9 protection that is required for fouling the track and the
10 requirement for mentoring or coaching if there is an exception
11 identified for those process.

12 Q. Okay. Excellent. And then your handout, I think it's
13 handout number 3, the one that has a little chart in it -- I
14 thought I had the right -- with the flowchart for how to determine
15 if adjacent controlled track protection is required. If you could
16 just help me understand, as I read these flowcharts, in the
17 accident that we're investigating there in Minneapolis, under
18 these flowcharts, adjacent controlled track protection was not
19 required. Am I reading those charts correctly?

20 A. That is correct, yes.

21 Q. And that is because there was not any on-track, self-
22 propelled equipment in the workgroup. Is that correct?

23 A. That is correct.

24 Q. With the revised rule about fouling track, that rule now
25 would require some form of on-track protection. Is that

1 assumption correct as well?

2 A. Yes, it always did. We've only just made the attempt in
3 the glossary term definition of fouling the track to further
4 clarify the considerations that must be given in the risk
5 assessment.

6 Q. Okay. Correct. I just wanted to make sure that I had a
7 good understanding of those.

8 MS. GREGORY: And with that, I'm going to yield to Kevin
9 Wilde. Thank you.

10 MR. WILDE: All right. This is Kevin Wilde.

11 BY MR. WILDE:

12 Q. And, Doug, I have a couple questions for you. My first
13 question is surrounding your example that you gave when you
14 opened, about the single track and the semis loaded with track
15 panels positioned near the track in a similar manner as what
16 occurred in the incident there at Minneapolis Junction. And when
17 you gave that example, you talked about there needed to be a
18 similar risk assessment of the potential or proximity or
19 possibility of the main track being fouled. That's correct,
20 right?

21 A. That is correct.

22 Q. Okay. And so with that, basically what I think you're
23 saying is that you always have to consider your proximity to a
24 track before you can potentially foul it no matter if there is
25 one, two, three, four or five tracks, correct?

1 A. That is correct. While there was an adjacent track
2 present in this situation, the point being that regardless of a
3 single track or multiple tracks, that same risk assessment must
4 occur and the same authority or protection must be established as
5 necessary.

6 Q. Okay. Well, thank you for that. So that being said
7 then, it would be fair to say that adjacent controlled track
8 protection is simply a subset or a specific requirement when a
9 certain set of conditions occur but there's always a risk
10 assessment of fouling the track?

11 A. That is correct.

12 Q. All right. I have one other question. In Item 2, the
13 document identified as Item 2, you talked about the -- you
14 mentioned that any time a machine will or may foul an adjacent
15 track, working limits must be established on the adjacent track to
16 protect that condition. I just wanted you to point out in the
17 document that was under "Important Point to Remember" on page 2,
18 correct?

19 A. That is correct.

20 Q. All right.

21 MR. WILDE: Dick, I'm finished with my questions at this
22 time.

23 MR. HIPSKIND: Okay. This is Dick Hipskind. Doug, are
24 you good to go?

25 MR. ADAMS: Yes.

1 MR. HIPSKIND: All right. And if everybody else can
2 hang with me here, first off, Kevin, let me do a couple pieces of
3 business. We have talked about hazard recognition and some
4 training and whatnot, and I understand that Doug is not the BNSF
5 expert to talk about course materials and whatnot, but I would ask
6 on behalf of the investigation and the other investigators, if,
7 Kevin, if you can think about providing me for distribution to
8 everybody else, any course materials or any, maybe, PowerPoint
9 slides from modules, that maybe deal with guidance to the
10 employees on risk assessment, hazard mitigation, those kinds of
11 topics, I think that would be helpful for us.

12 And a second point that Georgetta brought up, I think
13 after the interview, we probably need to talk about if there is
14 another individual on the training side that we want to talk to.

15 MR. WILDE: BNSF is agreeable to both those requests.

16 MR. HIPSKIND: Okay.

17 BY MR. HIPSKIND:

18 Q. Doug, back to you for a couple of things. I heard
19 somebody use the acronym AO, and do you know what that is on the
20 BNSF property and can you explain a little bit about that?

21 A. Yes, it's the acronym for our Approaching Others
22 program. Essentially it's a program to encourage our employees to
23 openly interact with one another, approach one another with -- in
24 a respectful fashion about any safety concerns, risks, or
25 exposures that need to be discussed and guarded against.

1 Q. Okay. And do you think that at times that gets to be
2 tricky business, understanding all the interrelationships between
3 a workgroup, especially a workgroup that stays together for a long
4 time, that business of, you know, kind of reaching out to a fellow
5 employee and the perception that that other employee might be
6 thinking, oh, you're telling me that I'm doing something wrong.
7 So if any of that -- what I said is of a concern, can you give me
8 an idea of how do you deal with that? I mean, how do you
9 encourage it? How do you deal with it? How do you bring it to a
10 higher level than historically what it's been?

11 A. Well, I think that's somewhat of the core of the program
12 itself, is to help people understand the importance and the
13 benefits of not allowing yourself to fall victim to thinking that
14 you don't need to openly discuss concerns, risks or exposures with
15 employees that may be junior in tenure with you or people that may
16 have less experience in a particular task or work activity than
17 you. There's always benefit in having those discussions with one
18 another, and it's our effort to attempt to encourage those kinds
19 of interactions by our employees.

20 Q. Okay. And along that same line, I'm going to push that
21 concept a little bit. Rather than me as an employee observing and
22 commenting on somebody else and maybe they're not adhering to the
23 strict guidelines of a rule or a procedure, has BNSF also
24 encouraged employees, especially during the job briefing process,
25 to bring out their shortcomings? For example, if I really don't

1 know how to do a particular task, in the job briefing, do I have
2 an obligation to make others aware, to make the employee-in-charge
3 aware, if I am lacking in experience with a machine or if I don't
4 know all the nuances of a particular territory or the operation
5 that I'm in? Is there an expectation -- does BNSF address this in
6 the training or in the rules that says I, the employee, with that
7 lack of knowledge, experience, or understanding of an area, do I
8 need to bring that to other people's attention for their
9 assessment?

10 A. We do not address that specifically in our rules.
11 However, that is very much the culture in which we are encouraging
12 that those kinds of discussions would occur and that our employees
13 are comfortable with having those kinds of discussions because
14 there is obviously a tremendous safety benefit in those types of
15 interactions.

16 Q. Okay.

17 A. So that is part of our Approaching Others training and
18 efforts. They're ongoing.

19 Q. Okay, Doug. And again, out of respect for my fellow
20 investigators, I'm going to cut my line of questioning and pass it
21 back to Mr. Narvell, and I'm watching the clock here, and I know
22 I've got to do a closing piece with you, but before I forget, I do
23 want to thank you for all your input thus far.

24 A. Thank you.

25 MR. NARVELL: Thanks, Dick. This is Rick Narvell. I

1 have no further questions.

2 MR. HIPSKIND: And, Thomas, for FRA.

3 MR. JULIK: Yes, I've got a couple of follow-up
4 questions here.

5 BY MR. JULIK:

6 Q. Doug, you stated that the actions which were taken on
7 the day of the incident were always against BNSF rules when it
8 comes to hazard protection on that track. I mean, can you expand
9 on that just a little bit?

10 A. Well, for clarification, I did not state that the
11 infractions that took place always -- were expected. What I was
12 meaning to say is our definition of fouling track has always been
13 within 4 feet of the nearest rail and our rules have always
14 required that any time you're going to foul a track, that you have
15 authority or protection to protect that condition. That has not
16 changed. It's just that our glossary term has been expanded to
17 help instill the concept or the understanding in our employees
18 that a risk assessment must include consideration for probability
19 of fouling beyond that 4-foot plane.

20 Q. So if I'm working as a worker and I'm assessing the risk
21 of an activity I'm about to engage in, how is one to determine the
22 probability that they may foul that adjacent track or what would
23 your expectation be in that?

24 A. Well, again, you have to give consideration to
25 experience level, how familiar the operator of the equipment is,

1 the experience level of your entire workgroup, possibly weather
2 conditions. There are all kind of conditions that come into play
3 that could vary those decisions ultimately through the risk
4 assessment that occurs during the job safety briefing.

5 Q. In addition to things such as mechanical malfunction or
6 operator error or shifting loads?

7 A. Yes.

8 Q. All right. Thank you.

9 MR. JULIK: Dick, I have no further questions at this
10 point.

11 MR. HIPSKIND: Okay. Dale, any follow-up?

12 BY MR. JOHNSON:

13 Q. I just -- I guess for Doug or Kevin, moving forward
14 after this incident, what can I expect as an inspector out there?
15 Anything I can expect to witness or discussions taking place with
16 employees that might be different, moving forward from the outcome
17 of this incident?

18 A. Well, we would like to see that our employees are taking
19 the quality of the job safety briefing seriously and going beyond
20 just the thought of the 4-foot plane and giving consideration to
21 that probability, proximity, and all those conditions that could
22 result in them fouling the track. So we're hopeful that you'll
23 see some better activity in regards to that risk assessment that's
24 occurring in the job safety briefings.

25 Q. Okay. Well, thank you very much, Doug.

1 MR. JOHNSON: I have no further questions.

2 MR. HIPSKIND: And, Mr. Loveland, if you can ask your
3 questions and when you're done, please pass off to Dr. Beaton.

4 MR. LOVELAND: Okay.

5 BY MR. LOVELAND:

6 Q. Just a quick follow-up here, Doug, on Approaching
7 Others, which I don't think anybody would disagree is a really
8 good thing and hopefully everybody's doing that, but in the
9 Approaching Others program, is that just for union employees to
10 use with each other or does that include supervisors and managers
11 in with that, the whole program?

12 A. The Approaching Others is applicable to all employees
13 within our company.

14 Q. Okay. And in the Approaching Others program, is there
15 anything in there, any provisions for discipline?

16 A. No.

17 Q. Okay.

18 MR. LOVELAND: That's all the questions I had. Thank
19 you, sir. Mr. Beaton.

20 DR. BEATON: Okay. Thank you. Just a couple quick
21 questions for Doug or Kevin. I'll direct them to Doug, but Kevin,
22 if you want to chime in, please feel free to.

23 BY DR. BEATON:

24 Q. We've talked a lot about risk assessment. Dick has made
25 the request that BNSF provide any materials that you have about

1 the training of risk assessment. But I just want to get your
2 take, and I know -- I'm looking at 11.4, the Job Safety Briefings,
3 and there's a menu of topics. Do you consider risk assessment to
4 be a formalized procedure that you can actually teach or train
5 your workers and then observe it and measure it being done
6 correctly or poorly and is it the sort of thing that an FRA
7 inspector could come and observe and do an assessment on or is it
8 an informal process?

9 MR. WILDE: Well, this is Kevin Wilde. I'll take that
10 question, Dr. Beaton.

11 So we're attacking this in two ways. One is the formal
12 job safety briefing process where we lay out minimum expectations
13 of what should be covered in a safety briefing and we audit those
14 briefings, but we're also looking at this through our Approaching
15 Others lens, and we've taken training materials out to our
16 employees that describe how you identify risk. In fact, we've
17 even -- and you'll see this in the materials that we provide to
18 the investigation later, that we actually describe looking at
19 exposures from your knees to the ground, your knees to your
20 shoulders and your shoulders above, and we actually have that as
21 part of the training program for them to understand that and see
22 exposure in many different ways. That is probably not auditable,
23 and it's really trying to teach a technique of risk
24 identification.

25 That's a short answer to a much longer discussion we

1 could have once you get the materials.

2 DR. BEATON: Right. Okay. Well, I do appreciate that,
3 and my reaction is excellent. And when we do have some follow-up
4 discussions, I'll share with you some other approaches to those
5 ergonomic zones of concern that I've had experience with, but I'm
6 very pleased to hear all of that.

7 BY DR. BEATON:

8 Q. One other question and, Kevin, this may be directed to
9 you as well. I want to just go back to the adjacent controlled
10 track rule and the conditions under which it gets triggered, and I
11 did hear you, Kevin, when you asked the question and made the
12 point that this is really a subset of the more general adjacent
13 track rule. But this rule, what makes it so specific is the on-
14 track equipment, and I know you have -- you're using the
15 regulatory definition of what is on-track equipment. However, you
16 know, wouldn't you agree that there's other sorts of equipment
17 that's used on the wayside that can, in fact, cross and get on the
18 track?

19 Is there any concern about the highly constrained focus
20 of this adjacent controlled track set of triggers and is there --
21 are there other rules that might, in fact, cover other wayside
22 conditions where workers with maybe not equipment with trucks on
23 it but equipment that can roll across the rails might foul the
24 track and you'd want to be concerned with those?

25 A. Well, this is Doug Adams again, and I guess I would

1 respond to that in that the adjacent controlled track protection
2 rules and regulation were intended to prevent roadway workers on
3 the ground from being struck by movements that are occurring on an
4 adjacent controlled track when those individuals are engaged in
5 and potentially distracted by on-track roadway equipment. We have
6 rules and procedures in place to protect machines or loads handled
7 by machines or employees that are just merely fouling any track
8 independent of adjacent controlled track protection, and we
9 believe that those are adequate.

10 We don't want to mix the two because, once again, one of
11 the means to provide protection for adjacent controlled track
12 situations and protection for the roadway workers on the ground is
13 the use of a lookout. We don't want our employees to now believe
14 that you could use a lookout to provide protection for a piece of
15 equipment or a load being handled by equipment on any track
16 because a lookout would be ineffective in protecting that
17 condition. So we really need to be careful not to mix those two.

18 Q. Okay.

19 A. They are related but they're independent of one another.

20 Q. Okay. All right. Good. That helps me understand not
21 only the background but the application for this adjacent
22 controlled track policy. All right. That's all the questions I
23 have and, gentlemen, again, thank you for -- both of you for your
24 candor and your time today.

25 MR. HIPSKIND: Thank you, Dr. Beaton. Ms. Gregory

1 please.

2 MS. GREGORY: Yes. I have no further questions, but I
3 also want to express my gratitude for the wealth of information
4 that's been shared today. Thank you very much, gentlemen.

5 MR. HIPSKIND: All right.

6 BY MR. HIPSKIND:

7 Q. Doug, I want to tie a few things together and get your
8 reaction, and I'm just going to speak for myself. I understand
9 that in the work that you have to do with the language pertaining
10 to various rules, from time to time you have to react to the
11 regulatory environment, and as they change, as they move, as they
12 provide interpretations, you have to be pretty nimble and not only
13 anticipate but be sure that the timing of the changes that you
14 make are there at the right time for the right people. Is that
15 fairly accurate?

16 A. Yes, that is. I would agree with that statement.

17 Q. Okay. And so I don't want my FRA brothers to take this
18 the wrong way, but, Doug, I suspect that in the real world you
19 have conversations with other individuals on other railroads where
20 they have the same kind of job position to deal with safety rules,
21 being nimble, reacting to regulatory things, and I just want to
22 get a flavor for are the other Class 1 railroads -- is this
23 business about regulatory changes and interpretations, and let me
24 just lump in there adjacent controlled track rules, regulations,
25 is somewhat of a hot topic among you and maybe some of your other

1 people in the same positions on other railroads? I mean, is this
2 something that you're aware that they're aware of?

3 A. Well, I frequently have discussions with partners in the
4 industry about regulations and associated rules. I will say that
5 the recent changes to the regulation associated with adjacent
6 controlled track protection have seemed to be especially
7 challenging for the industry, and I think a part of that is due to
8 the confusion between necessary protection for any track versus
9 the intent of this regulatory change which was meant to protect
10 roadway workers on the ground from movements on an adjacent
11 controlled track.

12 Q. Okay. And the last -- and so everybody understands, I
13 will poll everybody to see if there's any follow-up, but I just
14 want to briefly talk about real world applications of my toolkit
15 and what I can and can't do to get exclusive track occupancy
16 protection on an adjacent controlled track. Sometimes my work
17 will be on an adjacent track and maybe I'll have on-track
18 equipment on that track I'm working on, maybe it'll be something
19 more like the incident that we're investigating, but here's
20 something I want to get your reaction to.

21 It's been made fairly clear to me that when we're
22 talking about adjacent controlled track, main track, you know,
23 trains moving up and down it, that a lookout can't stop those
24 trains. It's just not sufficient for the protection of the work
25 gang or those who may be moving on that track, a train, set of

1 light engines, a passenger train. Is that part of it correct?

2 A. Yes, the purpose of a lookout is to provide sufficient
3 warning for roadway workers to move to a predetermined place of
4 safety prior to the arrival of the movement that's occurring on
5 the track. Obviously a lookout would be ineffective in providing
6 protection for material that becomes foul of a track because,
7 again, it's used to warn roadway workers to move to a
8 predetermined place of safety and would be ineffective in stopping
9 a movement occurring on a track from striking material that is now
10 foul of the track.

11 Q. Okay, I get that. And short of taking the track out of
12 service, which is fairly draconian, the other two options I have
13 is simply calling the dispatcher, the yardmaster, whoever is in
14 control of that controlled track, and getting some kind of track
15 and time. Then I can, no matter what happens, all these various
16 hazards and what might go wrong, I know that a train isn't going
17 to or should not come into my work limits because I do have a
18 track and time established.

19 And my other comment is the Form B can be used and I can
20 kind of sort of self-dispatch and have a conversation with trains
21 or at least they should have before they enter my work limits. I
22 get that. But one of the things I want to bring out in this
23 discussion is I think one of the policies about using a Form B is
24 that I have to plan my work and then work the plan, and what I
25 mean by that is I have to set up that Form B the day before, the

1 night before. Is that part of it correct?

2 A. That is correct, in order for that information to be
3 available to all the train crews at the time that the Form B would
4 become effective.

5 Q. Okay. So if I'm bouncing around and going from task to
6 task and point is that if I end up working on a track adjacent to
7 a controlled track, if I haven't set up that Form B and planned
8 for it the night before, I'm really down to pretty much one
9 option, call the dispatcher, call the yardmaster, call whoever's
10 in control of that track and get track and time?

11 A. If we're talking about adjacent controlled track
12 protection, then the other option is a lookout. If we're talking
13 about protection for fouling that track with equipment, loads
14 handled by equipment, et cetera, then, as you say, a method of
15 exclusive track occupancy would be utilized for controlled track;
16 in the case of adjacent track that is not controlled, then you
17 would render that track inaccessible.

18 Q. Okay. All right. That's all I have.

19 MR. HIPSKIND: And I'll just ask the group, does anyone
20 have follow-up, and just announce your name and ask your question.

21 Okay. Hearing none, I will go ahead and proceed to do
22 the closeout piece and, if everyone will be patient, I'll go
23 through this as quick as I can.

24 BY MR. HIPSKIND:

25 Q. Doug, again --

1 MR. HIPSKIND: Is there a question?

2 BY MR. HIPSKIND:

3 Q. Okay. Doug, we've jumped around. We've talked about an
4 awful lot of things. Is there anything that you'd like to add or
5 change about our discussion today?

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

7 Q. And are there any questions that we should have asked
8 but we didn't ask?

9 A. No.

10 Q. Okay. And do you have any suggestions for preventing a
11 reoccurrence?

12 A. None other than we've discussed in this call.

13 Q. Okay. And is there anyone else who we should interview,
14 you know, that -- I'll probably be talking with Kevin about maybe
15 talking to somebody on the training side, but is there anyone else
16 that you think might be of benefit to the investigation?

17 A. No, other than those that Kevin may direct you to.

18 Q. Okay.

19 MR. HIPSKIND: And I will follow up, Kevin, with an
20 email with my contact information and, Doug, you can -- you'll get
21 that from him, and let's go through the mandatory briefing items.

22 BY MR. HIPSKIND:

23 Q. Doug, is it your understanding that we discussed that
24 the purpose of the investigation is to increase safety, not to
25 assign fault, blame or liability?

1 A. Yes.

2 Q. Okay. And do you understand that NTSB cannot offer any
3 guarantee of confidentiality or immunity from legal or certificate
4 actions?

5 A. Yes.

6 Q. That a transcript or summary of the interview will go
7 into the public docket?

8 A. Yes.

9 Q. I think we've already covered that we afforded you the
10 option of having a representative and you --

11 A. That is correct.

12 Q. All right. Doug, do you have any other further comments
13 or questions?

14 A. I do not.

15 Q. All right.

16 MR. HIPSKIND: And with that, I will conclude the
17 interview and, Mr. Narvell, if you will attend to the recorder.

18 MR. NARVELL: Will do.

19 MR. HIPSKIND: Okay. Are we off the record?

20 (Whereupon, the interview was concluded.)
21
22
23
24
25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: MAINTENANCE-OF-WAY EMPLOYEE
 FATALITY, BNSF RAILWAY, MIDWAY
 SUBDIVISION, MINNEAPOLIS,
 MINNESOTA ON MAY 25, 2015
 Interview of Douglas Adams

DOCKET NUMBER: DCA-15-FR-011

PLACE:

DATE: July 1, 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.

Kathryn A. Mirfin
Transcriber

EXHIBITS

- Item 1. Safety and Operating Rules Excerpts
- Item 2. Rule Change Briefing: Adjacent Track Protection Rule Changes
- Item 3. Rule Review: Adjacent Controlled Track Protection
- Item 4. Rule Change Briefing: Fouling Track
- Item 5. Rule Change Briefing: Form B Control Operator Briefing

1.1 Safety

Safety is the most important element in performing duties. Obeying the rules is essential to job safety and continued employment.

Empowerment

All employees are empowered and required to refuse to violate any rule within these rules. They must inform the employee in charge if they believe that a rule will be violated. This must be done before the work begins.

Job Safety Briefing

Conduct a job safety briefing with individuals involved:

- Before beginning work
- Before performing new tasks
- When working conditions change

The job safety briefing must include the type of authority or protection in effect.

11.4 Job Safety Briefings

Conduct a job safety briefing before any roadway worker or equipment fouls a track. A job safety briefing is not complete until each roadway worker is informed of the method of on-track safety that will be applied and the procedures that will be followed.

Roadway Work Groups

In the job safety briefing, discuss information related to on-track safety with roadway workers who will foul the track.

In addition to other safety issues, minimum on-track safety information must include:

- Designation of the employee in charge
- Method of on-track safety being applied
- Track limits and time limits of authority
- Tracks that may be fouled
- Determination of any adjacent tracks
- Determination of any adjacent controlled tracks
- Operational controls of movements on adjacent tracks, if any
- Procedure to arrange for on-track safety on adjacent tracks, if necessary
- Means of providing a warning when a lookout is used
- Designated place of safety where roadway workers will clear for trains, which may be between the rails on a track within established working limits and during which time no movements are permitted by the EIC
- Identification of any roadway maintenance machines in the work group that will foul the track
- Designated work zones around machines
- Safe working and traveling distances between machines
- Nature of the work to be performed and the characteristics of the work location

Conduct follow-up job safety briefings when:

- The working conditions or procedures change,
or
- The method of on-track safety is changed, extended, or about to be released.



Lone Workers

At the beginning of each shift, each lone worker must participate in a job safety briefing with his or her supervisor or other designated employee. The job safety briefing will include the lone worker's planned itinerary and the procedures that will be applied to establish on-track safety.

Lone workers who cannot contact their supervisor or designated employee must verify the method of on-track safety with:

The train dispatcher, if communication with the dispatcher is necessary to establish on-track safety (Track and Time, Track Warrant, Track Permit, Track Bulletin Form B).

or

One of the following, if communication with the train dispatcher is not necessary to establish on-track safety (inaccessible track, individual train detection):

- For signal employees, the Signal Call Center Desk
- For telecommunications employees, the Telecommunications Network Operations Center
- For all other employees, the Network Operations Center (NOC) Maintenance Desk

When all communication channels are disabled, conduct the job safety briefing as soon as possible after communications are restored.

6.3.1 Track Authorization

The following authorize MW on main tracks:

- Rule 6.14 (Restricted Limits)
- Rule 9.15 (Track Permit)
- Rule 10.3 (Track and Time)
- Rule 14.0 (Track Warrant)
- Rule 15.2 (Protection by Track Bulletin Form B)
- Rule 17.0 (Foul Time)

The following authorize MW on controlled sidings and other tracks where CTC is in effect:

- Rule 10.3 (Track and Time)
- Rule 15.2 (Protection by Track Bulletin Form B)

A. Confirmation of Limits before Granting Authority

After verbally requesting authority:

1. When limits can be granted as requested:
 - a. The train dispatcher or control operator must restate the limits to the requesting employee for confirmation.
 - b. The requesting employee must verify the limits restated by the train dispatcher or control operator are correct.
 - c. The train dispatcher or control operator will issue the authority with no change in the confirmed limits.
2. When limits cannot be granted as requested:
 - a. The train dispatcher or control operator must state limits that can be granted, and ask the employee if stated limits are usable.
 - b. If the changed limits are usable, the requesting employee must repeat the changed limits to the train dispatcher or control operator to verify understanding before the authority is issued.

If the authority issued is different than that discussed with the train dispatcher or control operator, the employee must not repeat the authority until a confirmation of the limits requested is identical to the issued authority.

B. Before Occupying or Fouling Track

The employee in charge must ensure that equipment and employees do not occupy or foul the track until authority is received. An employee requesting authority must be MWOR qualified and must tell the train dispatcher or control operator where the track will be initially occupied, fouled or the authority used as a method of protection.

When part of a work group, the EIC must have at least one other employee in the work group, MWOR qualified if available, read and understand the authority before equipment or employees foul the track.

MW employees must have information concerning any track bulletin Form B in effect that may overlap their authority before occupying the authority. After 12 hours have elapsed from the time Form B information was initially obtained, employees must verify if any additional Form B that may overlap their authority has been issued.

When receiving "joint" authority, contact each train and employee listed on the authority and determine the location of any working limits before occupying the overlapping portion of the authority.

If MW employees are unable to obtain authority and it is necessary to foul or occupy a main track, controlled siding or any track where CTC is in effect, flag protection must be established in both directions.

C. Authority Limits

When an authority includes only a portion of a CTC control point or Manual Interlocking, field signs (e.g. Track and Time Point, Release Point, etc.) may exist at the insulated joints to provide an identifiable reference for the authority limits. If no signal or field sign defines the authority limits, display a red flag between the work location and the insulated joint. The red flag must be displayed between the rails.

D. Multiple Work Groups

When two or more work groups use the same authority the EIC of the authority must have a Job Safety Briefing with each work group before allowing them to use the authority and must document the following on the "Multiple Work Groups Using the Same Authority" form:

1. Authority number
2. Name of each work group using the authority
3. Time acknowledgement received
4. Time authority limits are cleared

E. Working Limits

1. Working limits are considered to be established at the limits of authority when an authority is not "joint".
2. When a "joint" authority does not overlap another authority, working limits are considered to be established at the limits of the authority.
3. When "joint" authorities overlap, and working limits will be established within the overlapping portion of the authorities, red flags must be displayed to identify the working limits. The EIC of each overlapping authority must record the following on the Working Limits form when working limits are established in the overlapping portion of "joint" authorities:
 - a. Working limits
 - b. Name of the EIC of the working limits
 - c. At time
 - d. Clear time

4. When working limits overlap, designate only one employee as EIC of the overlapping working limits.
5. When an authority overlaps the limits of a Track Bulletin Form B, contact the EIC of the Form B and obtain permission before entering the Form B limits. Make all movements within the Form B limits under the direction of the EIC of the Form B. Red flags may only be displayed at the limits of the Form B and at main track junctions within the limits.
6. When authority is granted behind a train, contact a member of the crew of each train listed on the authority and advise when working limits will be established behind their train and that no reverse movements may be made until the EIC is contacted.
7. When multiple work groups use the same authority, all work groups will use the same working limits as the EIC of the authority. The EIC of each work group must document the working limits of the EIC of the authority. Use the working limits form for documentation.

F. Reporting Clear/ Releasing Authority

The EIC of an authority must verify that all employees and equipment using the authority are clear of the limits before contacting the train dispatcher or control operator to report clear or release a portion of the authority.

Track and Time, Track Permits, Track Warrants and Foul Time must be reported clear to the train dispatcher or control operator before time expires.

The EIC must request additional time before time expires. If the EIC cannot clear the limits of the authority before the expiration time, the authority is extended until the train dispatcher or control operator is contacted and the authority reported clear.

BNSF Supplemental Instruction

When track and time or track permit is granted by the control operator/train dispatcher in the same area as standing equipment (tied down train - no crew, cut of cars, etc.), job brief with the train dispatcher or control operator as to the location and status of the standing equipment.

If the standing equipment is a train waiting for a relief crew to arrive, the MW employee in charge must place a red flag:

- *On both ends of the standing equipment if the standing equipment will be inside working limits to be established. These flags will be in addition to the working limits flags and will be placed facing the head end and rear end of the train*
- or*
- *On the end of the standing equipment closest to the location the track will be occupied if the standing equipment will not be within working limits or working limits will not be established.*

6.3.2 Protection on Other Than Main Track

The employee in charge must ensure that equipment and employees do not occupy or foul the track until protection is established. An employee assigned the responsibility of yard movements must be notified of the work to be done.

To establish protection on a track other than a main track, controlled siding or other track where CTC is in effect, use one or a combination of the following:

- Line facing point switches to prevent access to the track. Switches must be properly tagged and effectively spiked, clamped or locked with an effective locking device.
- Place a red flag as outlined in Rule 5.4.7 (Display of Red Flag). Lock a derail capable of preventing access to the track where work will occur in derailing position near the red flag or with an effective locking device. The red flag must be placed at least 150 feet from the work location when the track speed is greater than 5 MPH or at least 50 feet from the work location when the track speed is 5 MPH or less.
- When remote control switches or derails, including those in a hump yard, are operated by a control operator or other designated employee, employees must establish protection as follows:
 - The employee requesting protection must notify the employee controlling the switches or derails that provide access from the hump to the track where the work will occur.

- After being notified, the switch controller must line any remote control switch or derail to prevent movement to the affected bowl track and apply a locking or blocking device to the control for that switch or derail.
- The switch controller must then notify the employee that protection is provided. Protection will be maintained until the switch controller is advised that work is complete and protection is no longer required.
- Place a flagman to hold all trains, engines and on-track equipment clear of the working limits.
- Establish discontinuity in the rail to prevent movement into the working limits. Place red flags 150 feet in advance of the working limits.
- Establish working limits on a main track, controlled siding or other track where CTC is in effect to prevent access to the track where inaccessible track protection is required.

Protection Within Car Shop, Repair or Engine Servicing Areas

Before establishing working limits, the roadway worker in charge must conduct a job safety briefing with the mechanical employee in charge of the Car Shop, Repair or Engine Servicing Area. When locomotives, cars or motorized on-track equipment are on the track where working limits will be established, the roadway worker in charge and the mechanical employee in charge must jointly establish safeguards to protect the working limits against other movements. The roadway worker in charge must notify the mechanical employee in charge when work is completed and working limits have been cleared.

Protection Within Intermodal Hub Facility

Before establishing working limits, the roadway worker in charge must conduct a job safety briefing with the intermodal ramp coordinator. When locomotives, cars or motorized on-track equipment are on the track where working limits will be established, the roadway worker in charge and the designated intermodal employee in charge must jointly establish safeguards to protect the working limits against other movements. The roadway worker in charge must notify the intermodal employee in charge when work is completed and working limits have been cleared.

Protection on Other Than Main Track with Train or Engine

When work is performed that does not require the employees to be in front or behind the train or engine, employees may establish protection by flagging the train or engine to a stop. Employees may then give the crew specific instructions to make all movements under the direction of the MW EIC as outlined in the System Work Train Policy in the System Special Instructions.

When work is performed in front of or behind a train or engine, employees may establish protection in one direction by flagging the train to a stop. Employees may then give the crew specific instructions to make all movements under the direction of the MW EIC. Protection must also be established in the other direction to prevent any unannounced movements onto the track segment being protected.

12.1.1 Occupying Adjacent Tracks

Before fouling a track adjacent to a track subject to train or on-track equipment movement, review this rule as part of the job safety briefing.

When working on a track, establish on-track safety as necessary to protect against trains and on-track equipment passing on an adjacent track.

To determine if authority or protection is required on adjacent tracks, the employee in charge must consider factors such as:

- Adjacent controlled tracks
- Roadway workers on the ground
- On-track equipment that will occupy the track
- Right-of-way conditions involved in reaching the designated place of safety
- Curvature of the track
- Sight distance
- Speed of passing trains or on-track equipment
- Spacing of roadway workers and equipment in the work group
- Background noise
- Risk of distraction
- Designated place of safety, which may be between the rails on a track within established working limits and during which time no movements are permitted by the EIC.

12.1.2 Fouling Adjacent Tracks

Do not foul adjacent tracks with roadway maintenance machines unless working limits have been established on the adjacent track. Before using a boom where an adjacent track may be fouled by the boom or load handled, working limits must be established on the adjacent track. Movements within the adjacent track working limits may only be permitted by the EIC.

Do not use a lookout to provide protection for equipment or material fouling an adjacent track.

Adjacent Track Protection Rule Changes

Investigation and research by the Federal Railroad Administration (FRA) of nine fatal incidents to roadway workers struck by trains or on-track equipment movements on adjacent tracks over a period of 13 years concluded:

- All of the incidents occurred on adjacent controlled tracks where the track centers were 15 feet or less.
- The majority (seven of nine) of the incidents occurred while the roadway workers were on the ground performing work while engaged in a common task with potentially distracting self-propelled on-track equipment (e.g., regulator, tamper, etc.).

As a result, the FRA recently issued changes to the Roadway Worker Protection regulations for adjacent track operations to become effective July 1, 2014.

BNSF has issued a General Order with several rule changes and four glossary terms added to the Maintenance of Way Operating Rules (MWOR), which will become effective July 1, 2014, to comply with the regulatory updates.

Summary of Changes: What Does this Mean to BNSF Workers?

- Job safety briefings (JSB) must include a review of adjacent track conditions, types of roadway maintenance machines that may be used, the nature of work to be performed and characteristics of the work locations.
- Large-scale construction and production gangs will no longer need adjacent track protection to continue working while a train is passing on an adjacent controlled track with track centers greater than 19 feet.
- However, work groups of any size will need to establish what will now be referred to as "adjacent controlled track protection" when one or more roadway workers is on the ground engaged in a common task with certain types of self-propelled on-track equipment (primarily roadway maintenance machines such as tampers and regulators, and generally excluding hy-rails that are not coupled to other equipment) on a track next to a controlled track with track centers of 19 feet or less. (Controlled track is a Main Track (MT), controlled siding, or other track where Centralized Traffic Control (CTC) is in effect.)
- "Adjacent controlled track protection" may be in the form of working limits (e.g., Track Bulletin Form B, Track & Time, Track Warrant or Track Permit), or may need to be established using a lookout. Track Bulletin Form B will continue to be the desired method for planned maintenance activities.
- When "adjacent controlled track protection" is required, roadway workers must be notified of the approach of a train or on-track equipment by the employee-in-charge (EIC) of working limits on the adjacent controlled track, or by a lookout, and must cease work and machine operations when a train or on-track equipment is passing the work location, unless:
 - The EIC of working limits on the adjacent controlled track instructs the train or on-track equipment to pass the work location at speed no greater than 25 mph (40 for passenger trains). There is no difference in this speed requirement for curves or tangent track.
- An example of where a lookout may need to be utilized for "adjacent controlled track protection" would be a foreman needing to check cross-level behind a tamper when there are no working limits established on the adjacent controlled track. In this case, the operator of a machine may need to dismount and serve as a lookout for the foreman while the cross level is being checked.



Summary of Changes (Continued)

- The distance from the end of on-track roadway maintenance machines that roadway workers on the ground must maintain (work zone) is increased to 25 feet, unless otherwise deemed necessary in a JSB. However, in most circumstances, roadway workers on the ground must remain a distance of 25 feet from the end of roadway maintenance machines when work is permitted to continue while a train or on-track equipment is passing the work location.
- Work meeting the definition of new glossary term "correctional repair," or work at locations where there is a qualifying "inter-track barrier," will not require "adjacent controlled track protection."
- Work groups who maintain roadway maintenance machines are also required to establish "adjacent controlled track protection" unless all work to be performed will be exclusively on the side of the machine that will prevent them from fouling the adjacent controlled track or no part of their body will extend beyond the rail nearest the adjacent controlled track.
- When a train is passing on a controlled track, roadway workers may not occupy the space between that track and another track with track centers of 19 feet or less.

Important Point to Remember: The definition of an "adjacent track" remains unchanged. Any time a machine will, or may, foul an adjacent track, working limits must be established on the adjacent track to protect that condition.

Note: This summary briefing is not all inclusive of the rule changes associated with the new regulation. The MW Training team is currently providing instructor-led training sessions for these rules changes. Please refer to the system General Order providing MWOR change details, and consult your supervisor with any questions.

Engineering

Adjacent Controlled Track Protection

The Federal Railroad Administration (FRA) recently issued changes to the Roadway Worker Protection regulations for adjacent track operations, which went into effect July 1, 2014. In conjunction, BNSF issued a General Order with several rule changes and four glossary terms added to the Maintenance of Way Operating Rules (MWOR) on July 1, 2014, to comply with these regulatory updates, as well as a rule change briefing to address these changes.

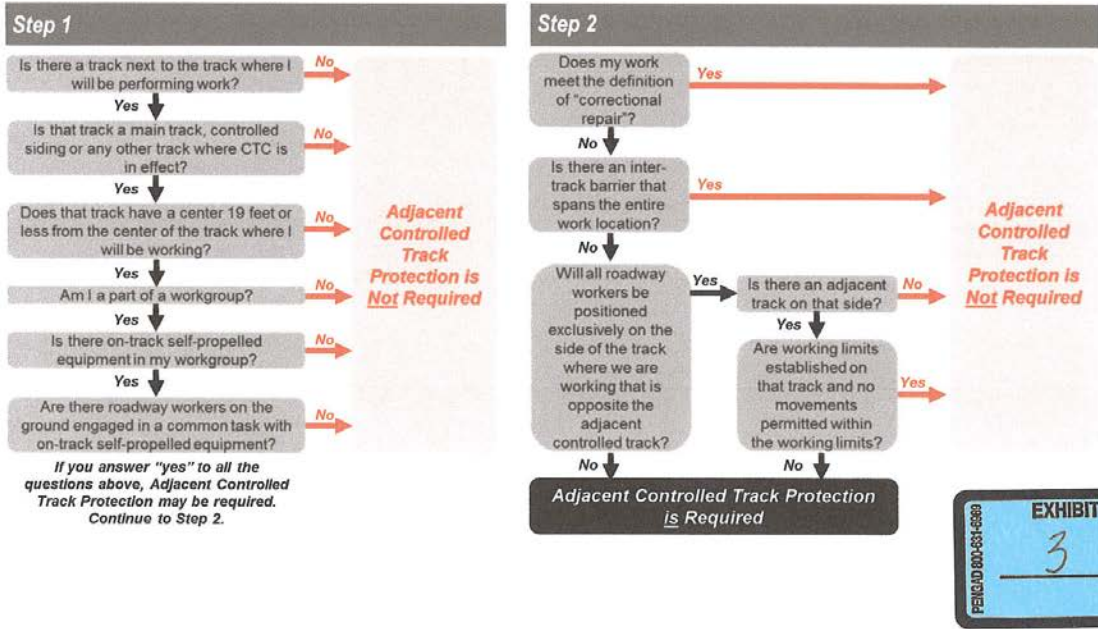
As a follow-up to that briefing, this rule review is being issued to help clarify aspects of those changes, especially regarding the question of when adjacent controlled track protection is required.

MWOR Rule/Glossary Changes	
<i>The following rules were amended:</i>	<i>The following Glossary terms were added:</i>
<ul style="list-style-type: none"> • MWOR 6.29.1 Inspecting Passing Trains • MWOR 6.52 Spacing of On-Track Equipment • MWOR 11.4 Job Safety Briefings • MWOR Chapter 12 Adjacent Track Operations 	<ul style="list-style-type: none"> • Adjacent Controlled Track • Correctional Repair • Inter-Track Barrier • Roadway Worker

Questions for Discussion

How do MW workers determine if adjacent controlled track protection is required?

The chart below is provided as a general guide to assist in assessing location and work conditions to determine if adjacent controlled track protection is required. Ask yourself the questions in step 1. If you answer yes to all the questions, then proceed to step 2.



How are job safety briefings affected by the rule changes?

The list of minimum on-track safety information to address in a job safety briefing was expanded to include a review of adjacent track conditions, types of roadway maintenance machines that may be used, the nature of the work to be performed and characteristics of the work locations.

Must MW workers determine if adjacent controlled track protection is required in TWC territory?

Yes. Tracks where adjacent controlled track protection may be required are designated as a main track, controlled siding, or any track where CTC is in effect, for which the track center is spaced 19 feet or less from the center of a track. (See below.)

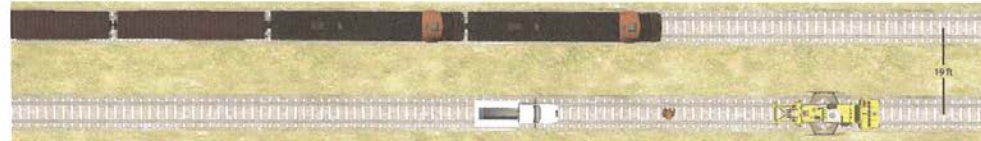


Must roadway workers cease work and move to a predetermined place of safety when a movement passes on an adjacent track governed by GCOR/MWOR 6.28?

No. If the employee in charge (EIC) determines in the job safety briefing that no workers, equipment or material will foul the track and that work can safely continue while movements pass on the adjacent track governed by GCOR/MWOR 6.28.

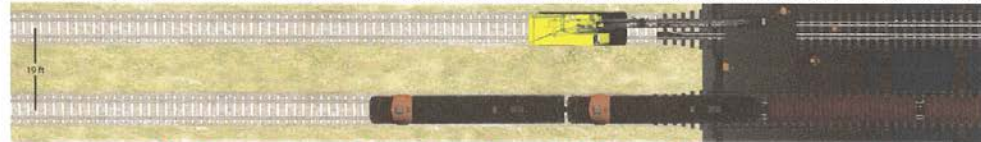
Does a signal maintainer working with a surfacing gang in the same working limits require adjacent controlled track protection?

Yes. If one or more roadway workers are on the ground engaged in a common task with certain on-track equipment, adjacent controlled track protection is required. (See below.)



Must roadway workers cease work while working under a bridge span when a train or on-track equipment passes on an adjacent controlled track?

Adjacent controlled track protection is not required when roadway workers are below the bridge structure and do not have the ability to foul the adjacent controlled track. The EIC must perform risk analysis to determine if a boom or load handled by the boom will foul any adjacent track and establish working limits on that track as necessary to protect the work activity. (See below.)



Is adjacent controlled track protection required any time a boom is out of the cradle?

Workers must perform a thorough risk analysis to determine if a boom or load handled by the boom will foul a track. Any time a boom/load handled by the boom will foul a track, working limits must be established on that track to protect the work activity. (See below.)



How is adjacent controlled track protection established?

Adjacent controlled track protection may be established in the form of working limits (e.g., Track Bulletin Form B, Track & Time, Track Warrant or Track Permit), or a worker may be positioned to warn of approaching movements on an adjacent controlled track. **Note:** Track Bulletin Form B will continue to be the desired method for planned maintenance activities.

Please note that rules and policies that are in effect at the date of issuance of this publication are subject to change. Contact Safety/Rules to determine validity before you use the information in this document at a later date.
09/29/2014

Engineering

June 25, 2015

Fouling Track

On July 1, 2015, the MWOR and MW Safety Glossary definition of **Fouling Track** will be amended. This change is designed to improve understanding and emphasize the importance of a thorough risk assessment regarding work activities that could result in the fouling of a track, which must be conducted during the job safety briefing before work is performed near any track.

The revised definition includes not only a roadway worker, equipment or material "within four feet of the nearest rail," but also any worker, equipment or material placed in such proximity to a track that the roadway worker, equipment or material could be struck by a movement on that track.

**Revised MWOR and MW Safety Glossary Term – Effective July 1, 2015:**

Fouling Track — The placement of an individual or an item of equipment, including material being handled by equipment, in such proximity to a track that the individual, equipment or material handled by equipment could be struck by a moving train or on-track equipment, or in any case is within four feet of the nearest rail.

The following rules will also be amended by general order to align with these glossary term revisions: MWOR 11.3, 11.4, 12.1.1 and 12.1.2.

Questions for Discussion **When must a job safety briefing be conducted?**

A job safety briefing involving all members of a work group must be conducted before beginning any task, and any time conditions change, to ensure a thorough understanding of the work to be performed. Work to be performed on or near any track requires a job safety briefing.

 What should be addressed in the job safety briefing specifically related to nearby tracks?

Employees' discussion must include the position of all workers on the ground, equipment and material in relation to any nearby tracks, an assessment of risk regarding whether the nearby tracks could be fouled, and the appropriate method of protection should the tracks be fouled.

Consider this scenario: A section gang is unloading a plug rail from a boom truck while the truck is positioned near a track on a right of way access road, or positioned on a track next to another track. What factors should be evaluated?

- What is the proximity to the track?
- Which side of the truck will the boom be operated on — the side opposite the track or nearer the track?
- What controls will we have in place to keep the material being handled from moving unexpectedly?
- What is the reach of the boom on this truck?
- What is the level of experience of the machine operator?
- Are there environmental conditions that could present problems, such as significant wind, inclement weather, sloping terrain, etc.?
- Could the track be fouled?

Please note that rules and policies that are in effect at the date of issuance of this Safety Briefing are subject to change. Contact Safety/Rules to determine validity before you use the information in this briefing at a later date.



Form B Control Operator Briefing

On July 1, 2015, **MWOR 15.1.2 Control Operator Briefing** will be amended to further increase the safe operation of trains where the possibility exists that a train's route could change through one or more dual control switches within Form B limits.



Before a Form B can be used for authority or protection, the amended rule requires the employee in charge to participate in a job safety briefing with the control operator when one or more dual control switches are within the limits of the Form B. The control operator must confirm that all dual control switches within the limits are lined and blocked for the desired route as determined in the briefing. While the Form B is in effect, the position of dual control switches within the limits may not be changed by the control operator without participating in a subsequent briefing with the employee in charge.

Effective July 1, 2015 — 15.1.2 Control Operator Briefing

When track bulletin Form B restriction limits contain dual control switches, the employee in charge of the Form B and the control operator will participate in a job safety briefing, including:

- What tracks will be occupied or fouled,
- Which, if any, of the dual control switches in the limits will be occupied or fouled,
- Routing requirements for movements within the limits.

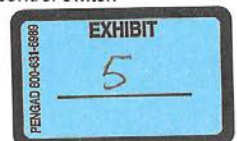
Before using the Form B for authority or protection, the employee in charge must ascertain from the control operator that dual control switches are lined for the desired route and blocks have been applied to prevent operation of those switches within the Form B limits.

These blocks may be removed only under one of the following conditions:

- To reposition dual control switches as determined necessary in a subsequent job safety briefing between the employee in charge and the control operator for specific movement of trains or on-track equipment. The control operator must reapply the blocks and advise the employee in charge when the blocks have been reapplied.
- Form B is made void.
- Form B has expired.

Questions for Discussion

- Is the employee in charge (EIC) still required to verify their Form B?**
Yes. The requirement to verify a requested Form B is unchanged. This rule change is specific to a required job safety briefing when dual control switches are located within the Form B limits.
- When must a job safety briefing with the control operator be conducted?**
Before using a Form B for authority or protection, the employee in charge (EIC) must participate in a job safety briefing with the control operator if one or more dual control switches are within the Form B limits and ascertain that all dual control switches within the limits are lined and blocked as determined in the briefing. Subsequent briefings must be conducted each time it is necessary for the control operator to change the position of a dual control switch within the limits while the Form B is in effect.



Questions for Discussion (Continued)

- ❑ **If the EIC contacts the control operator (train dispatcher) at 0600 to verify a Form B that goes into effect at 0830 and discussion regarding routing requirements occurs at that time, can the EIC assume the dual control switches will be blocked when the Form B goes into effect?**

No. The EIC is prohibited from using the Form B for authority or protection until specifically informed by the control operator that switch blocks have been applied to all dual control switches within the Form B limits. Applying the blocks too early limits the dispatcher/control operator's ability to effectively manage traffic. The control operator may instruct the EIC to call back nearer the effective time of the Form B for a job safety briefing at which time the position and blocking of switches can be confirmed.

- ❑ **Why is it important to block switches within Form B limits?**

The control operator must know the intended route for which permission will be granted by the EIC for train, engine or on-track equipment movements within the Form B limits. Based on this information, the control operator must apply blocking to prevent lining switches for different routes within the limits unless determined otherwise in a subsequent briefing. This helps to prevent unintended routing of movements into active Form B limits.

- ❑ **What if it becomes necessary for the control operator to change the position of dual control switches within Form B limits during the effective time of the Form B?**

A job safety briefing must occur with the EIC to determine that it is safe to remove the switch blocks and change the position of the dual control switches. Switch blocks must be reapplied to the dual control switches in the position agreed upon in the briefing. Once the movement is complete and it is necessary to reposition the dual control switches again, a job safety briefing must be conducted again before switch blocks are removed and dual control switches repositioned.

Consider this scenario: A Form B is in effect and all dual control switches within the Form B limits are blocked in the normal position. A couple of hours into the Form B effective time, the control operator wants to authorize a train movement from MT1 to MT2 within these Form B limits. What must occur?

1. A job safety briefing with the EIC to discuss which dual control switches need to be repositioned and the planned train movement, obtaining confirmation from EIC that it is safe to do so.
2. Reposition of the switches and reapplication of switch blocks to those switches as agreed upon in the job safety briefing. The EIC must receive confirmation when switch blocks have been reapplied.
3. Once train movement is complete and it is desired to return the switches back to normal position, another job safety briefing must occur as stated in steps 1 and 2. This briefing process must take place each time it is desired to change the position of dual control switches within Form B limits.

- ❑ **If the EIC does not have a job safety briefing with the control operator regarding switch position and blocking before the time a Form B is scheduled to be in effect, will the Form B still be in effect?**

Yes. The Form B will still be in effect at the scheduled time and the EIC must provide instructions for all movements entering the limits. However, no roadway workers or equipment may use the Form B as authority or protection until the briefing occurs.

- ❑ **Can the graphical display screen of Smart Mobile Client (SMC) be used to determine if switches are blocked within the limits of a Form B?**

No. Do not attempt to use the graphical display screen of SMC to ascertain the required application of switch blocks.

- ❑ **Does this rule apply to Remote Control Power Switches (RCPS)?**

Yes. RCPS are dual control switches.