Party Submission of
NORFOLK SOUTHERN RAILWAY COMPANY

in Response to the
National Transportation Safety Board, Office of Railroad, Pipeline and Hazardous Materials,
Final System Safety Group Chair's Factual Report
and
Final Survival Factors Group Chair's Factual Report

NTSB Accident Number RRD23LR007

Fatality of a Norfolk Southern Railway Company Conductor Occurring on March 7, 2023 at the Cleveland-Cliffs Steel Mill in Cleveland, Ohio

Submission Date: October 30, 2023

In accordance with 49 C.F.R. § 831.14, Norfolk Southern Railway Company ("Norfolk Southern") makes this submission of proposed findings to be drawn from the evidence and proposed probable cause. Norfolk Southern also offers its written comments on certain aspects of the System Safety Group and Survival Factors Group reports that were discussed during the parties' technical review. Norfolk Southern has not yet conducted a full investigation of the March 7, 2023, fatality, but makes this submission based on evidence developed by the National Transportation Safety Board ("NTSB") as part of the party process.

I. INTRODUCTION

Norfolk Southern conductor Louis Shuster was fatally injured on March 7, 2023, at about 1:08 a.m. when a dump truck being operated by Stein, LLC ("Stein"), employee, Ryan Hundley, struck him at a private grade crossing on the steel mill property of Cleveland-Cliffs Cleveland Works, LLC ("Cleveland-Cliffs") in Cleveland, Ohio ("Incident"). At the time of the Incident, Mr. Shuster was on the two-man crew of local Norfolk Southern Train 75B-106. He was riding the leading edge of a twelve railcar shove that was moving in a southerly direction toward the private grade crossing at 10 mph. Mr. Shuster was utilizing his lantern and it was illuminated as the train approached the crossing.

The private grade crossing was equipped with a stop sign and crossbuck facing the Stein dump truck as it approached the crossing in a southwesterly direction. Cleveland-Cliffs surveillance video shows that Mr. Hundley stopped the dump truck past the stop sign and crossbuck assembly for approximately 4 to 5 seconds as the train approached the crossing. The surveillance video also shows the train moving toward the crossing and the light illuminating from Mr. Shuster's lantern. Despite the train being in close proximity to the crossing, Mr. Hundley proceeded towards the crossing after stopping, causing the leading tank car of the shove

movement to strike the right front part of the dump truck as the dump truck entered the crossing, crushing the conductor between the tank car and the dump truck.

Members of the NTSB and others conducted an investigation of the Incident and have prepared, to date, two final reports, consisting of 1) a System Safety Group Factual Report, and 2) a Survival Factors Factual Report.

This submission is presented by Norfolk Southern in response to the findings of the NTSB contained in those two final reports. Norfolk Southern had previously submitted objections, suggested revisions and additions to the draft versions of the two final reports.[1] In addition, Norfolk Southern's David Gooden, Assistant General Manager Operation – Southern Region, attended a Technical Review with the NTSB and other parties on September 26, 2023 to review and provide comment on the draft reports. In creating the two final reports, the NTSB adopted some, but not all, of Norfolk Southern's proposed revisions. Here, Norfolk Southern addresses, among other things, its proposed findings that were not incorporated into the NTSB's two final reports.

II. PROPOSED FINDINGS AND PROBABLE CAUSE ANALYSIS OF THE INCIDENT

A. The Dump Truck Operator's Actions

The private grade crossing where this accident occurred was protected by a stop sign which was located on the crossbuck post at the crossing. Given the stop sign at the crossing and the fact that the train was in hazardous proximity to the crossing at the time Mr. Hundley approached, Ohio law required Mr. Hundley to stop and not to proceed until safe to do so. Compliance with the Stein training materials reminding its employees that trains have the right

[1] Norfolk Southern notes that its internal investigation is ongoing.

of way at grade crossings also required Mr. Hundley to stop and not to proceed until the train had cleared the crossing.[2]

Although Mr. Hundley said that he did not see the train on the tracks,[3] the NTSB found that despite the limited view he had through the obstructed windows of the dump truck, Mr. Hundley did not stop ahead of or parallel to the stop sign and did not lean forward to get a better view down the tracks.[4] He drove past the stop sign and then stopped and did not lean forward as he easily could have done, limiting his view down the tracks to the right to 38 feet.[5] The train was visible on the tracks and the conductor was using his properly illuminated lantern when the shove was approaching the crossing – one can see the lantern in the Cleveland-Cliffs surveillance video.[6] The NTSB determined that if Mr. Hundley would have stopped the dump truck with the front bumper parallel to the stop sign and then leaned forward, he would have been able to see 115 feet down the tracks to the right through the dump truck windows.[7] This would have allowed him to easily see the approaching train. Mr. Hundley's actions in 1) driving past the stop sign before stopping and 2) not leaning forward to get a better view down the tracks limited his view down the tracks to the right by 77 feet (115 ft. – 38 ft) or by 67% according to the NTSB's investigation.[8]

Based on this information, Mr. Hundley's actions were a probable cause of the Incident.

B. The Operation of the Norfolk Southern Train and the Condition of the Tracks and the Equipment Used Did Not Cause or Contribute to the Incident.

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[2] System Safety Group Report at p. 8.
[3] System Safety Group Report at p. 21
[4] System Safety Group Report at pp. 18, 20.
[5] System Safety Group Report at p. 20.
[6] Survival Factors Report at p. 8.
[7] System Safety Group Report at p. 15.
[8] System Safety Group Report at pp. 15-20.

The NTSB investigation found that the railroad track and the railroad equipment used were in proper working order and did not contribute to the cause or severity of the Incident.[9] There were no obstructions on the ground between the truck driver's view down the tracks and the approaching train.[10] Norfolk Southern also supplied the conductor with the proper Personal Protective Equipment as well as the lantern he was using at the time of the Incident.

The Norfolk Southern locomotive engineer properly performed the shove movement, proceeding at or below the maximum authorized timetable speed for the location.[11] There was nothing unusual about the communication between the engineer and conductor on approach to the crossing, and the engineer was following the conductor's commands.[12] The movement stopped 35 feet after the collision – less than one railcar length – demonstrating that the engineer was alert and responded quickly to the command from his conductor to stop.[13]

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[9] System Safety Group Report at pp. 29-30.

[10] System Safety Group Report at footnote 19.

[11] It is worth noting here that the October 24, 2023 Party Submission of the Brotherhood of Locomotive Engineers and Trainmen ("BLET") includes reference to alleged actions by the train's conductor that is not supported by the facts developed during the NTSB investigation. For instance, on page 6 of the BLET's Party Submission, the BLET engages in speculation:

> "As the train approached the highway/railroad grade crossing, the Conductor observed a dump truck approaching the highway/railroad grade crossing and come to a complete stop. With the dump truck stopped, the Conductor instructed the Locomotive Engineer to continue the movement."

With regard to the first sentence, no evidence was developed by the NTSB as to what the conductor actually saw. Further, the first sentence incorrectly implies that the train came to a complete stop after "the conductor observed a dump truck." This is not supported by a review of the Cleveland-Cliffs surveillance tape.

With regard to the second sentence and taking into account the inaccuracies of the first sentence, the BLET states that the conductor informed the engineer of the stopped dump truck, and instructed the engineer to proceed anyway.

This distortion of the facts improperly leads to the BLET's conclusion that the "train crew" failed to adhere to Operating Rule 120 in its probable cause analysis on page 10 of the BLET Party Submission. There was no evidence developed during the NTSB investigation to indicate that the locomotive engineer failed to adhere to Rule 120 or that the locomotive engineer knew that there was a dump truck approaching the crossing or stopped at the crossing. Consequently, the locomotive engineer did not fail to adhere to Operating Rule 120.

[12] System Safety Group Report at p. 22 and footnote 25.

[13] System Safety Group Report at p. 6 timeline.

Both the locomotive engineer and the conductor were experienced and extensively trained in accordance with applicable regulations and internal policy, including in the operation of a train and specifically shove movements. The locomotive engineer was a 24 year employee of Norfolk Southern at the time of the Incident. His training history documents his training on a variety of rules, including authorized speed, shove movements and safety critical rules, including testing on these topics in February 2023.[14] Norfolk Southern also regularly conducted efficiency tests of him on an assortment of tests given between September 2022 and February 2023.[15] Finally, he was a FRA-certified engineer on the day of the Incident.

Mr. Shuster had been working at Norfolk Southern for 19 years at the time of the Incident. His training was just as extensive as the locomotive engineer's training. Norfolk Southern trained him on safety critical rules, shove movements, communications, personal safety, and train movements many times in his career.[16] Like the locomotive engineer, Norfolk Southern efficiency tested him on an assortment of topics several times between September 2022 and February 2023. Mr. Shuster passed his most recent performance evaluation and knowledge assessment test evaluation on March 29, 2022 as required for recertification.[17] The Norfolk Southern train crew was experienced and more than adequately trained for the train movement that day.

C. Norfolk Southern Operating Rule 120

Norfolk Southern operating rules governed the crew's conduct at the time of the Incident. This included Operating Rule 120, titled "Cars Not Headed by an Occupied Engine over a Highway-Rail Grade Crossing," which was part of Norfolk Southern's training of Mr. Shuster

[14] System Safety Group Report at p. 9.
[15] System Safety Group Report at p. 9.
[16] System Safety Group Report at p. 11.
[17] System Safety Group Report at p. 11.

and governed Mr. Shuster's actions as the shove movement approached the private grade crossing. Being in charge of the safety of the train and the eyes and ears for the locomotive engineer during the shove movement, Mr. Shuster was required to follow Operating Rule 120 as the locomotive engineer is following his commands.

In this instance, the Cleveland-Cliffs surveillance video shows that the Stein dump truck approached the private grade crossing from the northeast with its headlights illuminated as the shove movement approached the same grade crossing on the railroad track in a southerly direction. The surveillance video shows that the dump truck stopped past the stop sign for about 4 to 5 seconds, and then proceeded to enter the grade crossing.

Given that the dump truck approached the private grade crossing and stopped as the shove movement approached the same grade crossing while Mr. Shuster was protecting the shove, Operating Rule 120(a) required Mr. Shuster to notify the engineer that there was traffic approaching the grade crossing and/or stopped at the grade crossing so that the engineer could stop the shove allowing Mr. Shuster to dismount the tank car he was riding, remain on the ground, and "warn traffic until the leading end has passed over the crossing." None of the exceptions contained in section (b) of the rule applies.

While Norfolk Southern has not yet completed its investigation, Mr. Shuster's actions may have been a probable cause of the Incident.

D. Lighting and Roadway Configuration

Lighting around the private grade crossing is the responsibility of Cleveland-Cliffs. The NTSB found that two of the four lamps of the overhead lamp light source near the crossing were not functioning at the time of the Incident. Norfolk Southern did not control or maintain this

light source. This was owned, controlled and maintained by Cleveland-Cliffs as evidenced by its post-accident actions to repair the light source and add additional lighting around the crossing.[18]

The angle of the roadway to the railroad tracks is also not controlled by Norfolk Southern. The roadway is owned by Cleveland-Cliffs and used by its employees and contractors. According to the post-accident actions of Cleveland-Cliffs, a concrete structure near the crossing was removed by Cleveland-Cliffs at Stein's request. After Cleveland-Cliffs removed the concrete structure, Cleveland-Cliffs then re-aligned the roadway leading to the crossing closer to 90 degrees to the track.[19] As these issues are not within Norfolk Southern's control, Norfolk Southern did not participate in these post-accident measures, nor was Norfolk Southern asked to participate by Cleveland-Cliffs or Stein.

E. Emergency Response Time

When discussing the emergency response procedures and process for the Incident in its Survival Factors Report, the NTSB seems to suggest that the emergency response protocols and policies may have resulted in a delayed emergency response time.[20] The emergency procedures and protocols were not established by Norfolk Southern. In fact, the emergency response measures are the sole responsibility of Cleveland-Cliffs to respond to emergencies on its property, like here. Thus, it is improper to hold Norfolk Southern responsible for any alleged deficiencies in Cleveland-Cliffs' emergency procedures, policies or protocols.

Assuming that Norfolk Southern was somehow responsible for any alleged deficient emergency response time for the Incident, no amount of emergency measures, even if followed perfectly, could have prevented the unfortunate death of Mr. Shuster. The Cuyahoga County Medical Examiner determined that unless there was an advanced medical professional like a

[18] System Safety Group Report at pp. 31-32.
[19] System Safety Group Report at p. 31.
[20] Survival Factors Report at pp. 10-14.

surgeon on site *immediately* after the accident, there was no chance for survival as the injuries included a transection of the right femoral artery.[21] No standard procedure or protocol in an industrial setting like this would include a surgeon at the ready for a potential emergency such as the one that tragically occurred on March 7, 2023. Consequently, emergency response procedure and response time could not have been a factor in Mr. Shuster's death.

F. Norfolk Southern's Attorneys did not Obstruct any Interviews of the Engineer.

Despite Norfolk Southern's objections, the NTSB included in its Survival Factors Report that "[Cleveland Police Department] AIU investigators advised that upon the arrival of the attorneys for the railroad, they were not permitted to speak with the train engineer."[22] The Survival Factors Draft Report included slightly different language: "Due to the arrival of attorneys from NS, the AIU investigators were unable to speak with the train engineer."[23] Any suggestion that Norfolk Southern attorneys interfered with efforts to interview the engineer or otherwise impeded the investigation is inaccurate and without merit.

Norfolk Southern objected to this language because no such thing occurred and proposed to the NTSB that the objectionable sentence in the draft report be changed simply to: "The AIU investigators did not speak with the train engineer." The revised sentence better reflects the facts without any suggestion of interference which Norfolk Southern adamantly denies. The fact is that although lawyers for Norfolk Southern did arrive on scene, none of them spoke to Cleveland Police or its Accident Investigation Unit. Had Cleveland Police requested to speak with the locomotive engineer, access would have been granted. None of the attorneys for Norfolk Southern prevented Cleveland Police or its AIU from interviewing the locomotive engineer. In

[21] Survival Factors Report at pp. 14-15.
[22] Survival Factors Report at p. 14.
[23] Survival Factors Draft Report at p. 14, lines 32-34.

the very least, the NTSB could have added a footnote to note Norfolk Southern's version of events.

G. Norfolk Southern's Safety Enhancements

The System Safety Group Draft Report indicated that "NS did not initiate any post-accident safety enhancements."[24] Norfolk Southern objected to this statement in the draft report because it has enacted post-accident safety enhancements. Consistent with Norfolk Southern's post-accident actions, Norfolk Southern proposed the following facts to be inserted in Section 14.0 of the final report:

> "NS issued a System Safety Notice[25] to all of its operating employees following the accident and conducted system-wide safety contacts discussing the accident."

The proposed revision is supported by the NTSB's statement at page 8 of the System Safety Group Report reflecting that Norfolk Southern issued a serious incident notice to its employees following the Incident. In the final report, the NTSB deleted the sentence from the draft report that "NS did not initiate any post-accident safety enhancements." However, Norfolk Southern's reported post-accident safety enhancement actions described above did not make it into the NTSB's final report. The NTSB commented on other parties' post-accident safety enhancements in Section 14.0 of the System Safety Group Report, but was silent about what Norfolk Southern did after the accident even though Norfolk Southern had provided information about those actions.

III. CONCLUSION

Norfolk Southern respectfully submits the foregoing proposed findings and probable cause analysis based on the NTSB investigation. Norfolk Southern has been privileged to work

[24] System Safety Group Draft Report at p. 31, line 15.
[25] See attached System Safety Notice, attached hereto as Exhibit 1.

with the NTSB and other party members in the course of this investigation. Norfolk Southern thanks the NTSB Board, staff and other party members for their tireless efforts in connection with this investigation.

Respectfully submitted,

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Operations – Southern Region
Norfolk Southern Railway Company

EXHIBIT 1

SERIOUS INCIDENT NOTICE

March 7, 2023

Incident Description

While the investigation of this tragic incident is ongoing, the following information is known:
On Tuesday, March 7, 2023, at approximately 1:15 am EST, a 46-year-old conductor with 18 years of service was fatally injured when he was struck by a vehicle while riding a shove move over a private crossing in Cleveland, OH.

Although this incident is still under investigation, the following information is known:

- The two-person crew went on duty at 6:30 pm EST on Monday, March 6, 2023, and had completed their work at the Cleveland-Cliffs Works facility at the time of the incident.
- At the time of the incident, the injured conductor was positioned on the leading end of a tank car with a lantern and used the radio to direct the shove movement.

Safety Considerations

Safety considerations in this publication should be used to elevate awareness on how to work safely in the railroad environment.

- Always pause to identify risks, process the information to choose the safe course of action, and proceed with the task in a safe manner.
- A job safety briefing may be performed at any time during the operation if work changes, becomes confusing, new tasks are started, or a rule violation is observed. Be sure to stop work as needed and move to a safe area.
- Follow all rules relating to shove moves.

Rules for Discussion

Although the incident remains under investigation, this Serious Incident Notice is an opportunity to refresh on certain rules. Rule excerpts are provided for review to minimize risks when performing work tasks.

Operating Rule 120 – Cars Not Headed by an Occupied Engine over a Highway-Rail Grade Crossing

(a) When cars not headed by an occupied engine are moved over a:

- public crossing
- private crossing located outside the physical confines of a rail yard
- pedestrian crossing located outside the physical confines of a rail yard
- yard access crossing

A member of the crew must be on the ground at the crossing to warn traffic until the leading end has passed over the crossing. Rail movements over the crossing will be made only on proper signal from the employee.

(b) These actions are not required if the crossing is clear, and:

1. Crossing gates are in the fully lowered position, and are not known to be malfunctioning; or
2. The crossing is equipped with flashing lights, crossbucks, or stop signs and it is clearly seen that no traffic is approaching or stopped at the crossing, and the leading end of the movement over the crossing does not exceed 15 MPH; or
3. A qualified employee, other than a crewmember, with the ability to communicate with trains is stationed at the crossing to warn traffic; or
4. The crossing has been rendered inaccessible to highway motor vehicles.

Other Rules for Review

Operating Rule 1 – Job Safety Briefings
Operating Rule 26 – Riding Side of Equipment
Operating Rule 215 - Shoving Equipment at Any Location