

Summary of Initial Observations, Opportunities for Improvement, and Recommendations Regarding Norfolk Southern's Safety Culture

PREPARED BY ATKINS NUCLEAR SECURED

INTRODUCTION

As part of Norfolk Southern's ("NS") commitment to developing an industry leading safety-first operation and culture, the company engaged Atkins Nuclear Secured ("ANS") to provide a comprehensive assessment and plan for enhancements to the company in the following areas:

1. Safety culture,
2. Safety-related training programs,
3. Safety-related employee engagement practices,
4. Safety-related oversight and monitoring practices, and
5. Communications practices regarding the company's safety culture and expectations.

ANS is in the process of completing the first of three phases of work:

Phase 1: ANS has provided a comprehensive safety assessment and proposed safety improvements;

Phase 2: NS will evaluate and assess the recommendations to develop with ANS a multi-year safety improvement plan. Completion is targeted for end of October 2023; and,

Phase 3: ANS will provide follow-on consulting on implementation, which will continue for a 2-3 year period.

OVERVIEW OF PHASE ONE

Phase 1 involved reviewing documents, meeting with NS personnel at all levels (at headquarters and at 26 field locations), observing normal meetings, observing railroad operations/work in progress, touring facilities, and conducting event "deep-dive" reviews (in-depth group discussions to review accident and injury events and problem solving with personnel involved with the events to assess effectiveness). The ANS Team also met with union representatives from thirteen railroad unions, including presidents, general chairmen, and local chairmen to incorporate their perspectives.

The focus of these efforts was on facility conditions, work practices, training programs, leadership measures, communication practices regarding safety culture and expectations, prior accidents, and company organization.

Observations during Phase 1 demonstrate that the company is a high-performing organization, dedicated to employees, customers, and communities. For instance, the ANS Team observed outstanding leaders at all levels devoted to safety; a depth of talent across the organization; strong action and commitment following the February 2023 East Palestine, Ohio derailment; and a commitment to partnership with labor unions to improve safety culture and operational excellence. The ANS Team also identified safety

“best practices” that it observed, including, for example, the Safety Train process for emergency responder training and several local initiatives that the company should consider implementing companywide.

At the same time, the ANS Team has presented opportunities for further improvement and recommended actions to strengthen the safety culture at Norfolk Southern. Among these are more significant improvement opportunities that the ANS Team considers to be the most impactful, most urgently needed, and/or are targeted to address larger/more systemic issues.

Norfolk Southern already is implementing measures to address several of the identified areas for improvement, for example, by aggressively hiring at both management and craft employee levels, increasing the number of field safety representatives, moving out on several actions ANS identified as quick win opportunities, and implementing the Team of Teams initiative, which seeks to improve teamwork across the organization.

SUMMARY OF KEY OPPORTUNITIES FOR IMPROVEMENT

The following summarizes the “more significant” areas identified and ANS’s recommended actions:

- **Recommendation: Improve learning and dissemination of learning from injury and accident events to reduce the potential for recurrence.** An improved process is needed to consistently accomplish fact-finding and causal analysis for events to achieve alignment of facts, issues, causes, and corrective actions. To enhance learning from events, ANS recommends an improved approach for sharing key event lessons with managers and supervisors to enable them to effectively pass this information face-to-face to craft railroaders.
- **Recommendation: Increase ownership of safety at all levels.** ANS proposes that NS develop and implement a program, like an OSHA Voluntary Protection Program in which management, workers, and labor unions work cooperatively and proactively to prevent fatalities, injuries, and illnesses through a system focused on: hazard prevention and control, worksite analysis, training, management commitment, and worker involvement. Additionally, NS should develop and implement an effective performance management/incentive program, covering all levels, to appropriately emphasize expectations concerning safety and teaming across operational departments, in addition to production/performance objectives.
- **Recommendation: Resolve staffing shortages, hiring issues, worker support, and worker quality of life issues.** NS should continue hiring to resolve critical staffing shortages and should streamline and enhance aspects of the hiring process and worker support to address current issues surrounding work schedules.
- **Recommendation: Improve supervisor workload and stress issues.** ANS suggests that, in addition to hiring more supervisors, additional effort should be made to limit supervisors’ administrative workload and to ensure critical worker-supervisor relationships are clearly identified for all workers. Further, supervisors should ensure schedule pressure is not passed to craft railroaders, such that they can remain focused on completing their work safely and correctly.
- **Recommendation: Shift/balance accountability focus from primarily punishment/discipline to include more teaching/coaching.** ANS recommends that NS develop and implement a revised approach for how supervisors/managers oversee work, to ensure that supervisors/managers provide both positive and negative feedback to workers, start with coaching/teaching rather than punishment for minor deficiencies, and include appropriate accountability for serious and repeat deficiencies.

- **Recommendation: Improve training and leadership development.** ANS proposes that NS develop and implement an effective ongoing training program for managers/ supervisors that includes training on expectations and “what right looks like.” ANS also recommends establishing an effective continuing training program for craft railroaders to consistently refresh workers’ understanding of expected standards and behaviors, periodically re-sensitize workers to key safety concerns, and provide effective training on new technologies, equipment, and processes.
- **Recommendation: Improve the response process for unexpected conditions (including wayside detector activations).** NS should develop and implement a consistent process for responding to material problems, operational emergencies/ situations, and wayside detector activations to achieve effective risk evaluation and the desired level of coordination, communication, and command & control of responses.
- **Recommendation: Improve teaming across operational departments.** NS should add an initiative to implement periodic reviews at each major rail yard conducted by a team with representatives from each operational department. NS should also consider establishing the Terminal Superintendent as the overall leader at each rail yard, with responsibility to balance all operational departments’ objectives to produce optimized performance for the yard.
- **Recommendation: Improve consistency of field operations/work safety, oversight, and feedback to headquarters.** ANS recommends that NS establish a cadre of management personnel with field experience serving as dedicated independent safety representatives to oversee field operations/work and provide direct feedback on the safety and performance of that work to headquarters and field leaders.
- **Recommendation: Improve facility and equipment material condition.** ANS observed the full spectrum of facility material conditions, from outstanding to sub-standard. NS should prioritize restoring facilities with sub-standard material conditions. Measures should be implemented to optimize the facilities and equipment maintenance and upkeep process.
- **Recommendation: Rebuild relationships to restore worker trust, respect, and pride.** ANS proposes that NS management and union leadership work together to restore workforce trust, respect, and pride. It is critically important to the future of NS that employees be supported and nurtured through learning and development, culture improvements, and workplace safety initiatives with the goal of improving experience and retention.

Additional Opportunities for Improvement

There are also additional opportunities for improvement. These improvement opportunities are more focused on specific issues and/or while still important, are not likely to be as impactful or urgently needed as the more significant opportunities for improvement.

- **Establish an effective assessment program.** ANS recommends that NS establish a formal assessment program, including operational department self-assessments. Assessments should be planned and scheduled by management to assess programs, systems, and work processes in their operational areas. Assessments provide management with timely, objective feedback on the safety, quality, and work performance of their operational areas enabling proactive correction of identified weaknesses.
- **Develop approaches to address safety issues created or contributed to by workers seniority rights.** ANS recommends that NS work with labor unions to identify whether approaches for spreading the experience and talent of senior craft personnel across shifts can be identified in

a manner that is acceptable to craft railroaders with high levels of seniority to improve safety and mentoring of newer employees.

- **Re-evaluate the number and organization of field regions and divisions.** ANS recommends NS evaluate the physical area covered by each region and division, the associated operations within those areas, and the magnitude and complexity of the area’s infrastructure, to improve supervisor/manager span of control and ability to respond effectively to issues in their territory.
- **Improve locomotive/train car material condition/material history usage.** ANS recommends that NS pursue opportunities to improve the information input into Locomotive Maintenance Information System (“LMIS”) and Enterprise Assessment Management (“EAM”) and use of this information to support tracking and timely correction of locomotive and car deficiencies, as well as the opportunity to use LMIS to forecast seasonal locomotive work.
- **Railroad police force safety related concerns.** NS should evaluate staffing and equipment within its railroad police force and determine whether action is required.
- **Update metrics to balance focus on appropriate operational, maintenance, and safety objectives.** ANS recommends that NS consider expanding its operational and accident and injury performance metrics to drive safety culture, safety performance, and operational excellence objectives.
- **Clearly identify applicability of specific OSHA regulations.** ANS recommends that NS improve recognition of activities that fall outside the scope of the FRA’s safety regulations but within the jurisdiction of OSHA.

EXPECTED OUTCOMES

The expected outcomes of NS efforts to implement the recommended actions are measurable improvements in the following areas:

- NS safety culture and safety performance, including craft railroader/supervisor/ manager/overall organization performance and engagement on safety;
- Better organization focus on continuous improvement through implementation of a coordinated plan;
- Identifying and working on problems while they are small in order to reduce the likelihood of problem recurrence and consequences; and
- Strengthened organizational learning.

These enhancements support NS’ objectives to be the gold standard for safety in the railroad industry, minimizing the risk of high significance events, and achieving operational excellence.

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The ANS team is led by Admiral Kirk Donald, U. S. Navy (Retired), (an independent executive consultant working with the ANS team), who was responsible for the safe and effective operations of the nuclear-powered warships of the United States. ANS personnel have decades of experience, including career nuclear Navy experience, in safety, security, engineering, and project management. Elmer Naples is the ANS Independent Performance Assessment Team Chairman and Stephen Trautman is also an independent executive consultant working with the ANS team; both served the Naval Nuclear Propulsion Program for 34 years, Naples as a Senior Field Representative and Aircraft Carrier Program Manager and Trautman as Deputy Director for 15 years.