March 16, 2020

(Via online at www.regulations.gov)

Docket Operations Facility
U. S. Department of Transportation
1200 New Jersey Avenue, SE, W12–140 (West Building)
Washington, DC 20590

Re: Docket No. FRA-2018-0093

Comments of the
American Train Dispatchers Association (ATDA)
Brotherhood of Locomotive Engineers and Trainmen (BLET/IBT)
Brotherhood of Railroad Signalmen (BRS)
Brotherhood Railway Carmen Division TCU/IAM (BRC)
International Association of Sheet Metal, Air, Rail and Transportation Workers – Transportation Division (SMART-TD)

These comments are submitted in response to the Wednesday, January 15, 2020 publication by the Federal Railroad Administration ("FRA") of a Notice of Proposed Rulemaking ("NPRM") from a rail safety regulation. Published in The Federal Register Vol. 85, No. 10 on Wednesday, January 15, 2020, FRA is proposing the "incorporation of relief from various provisions provided in long-standing waivers related to single car air tests, end-of-train devices, helper service, and brake maintenance" into current safety regulations. 85 Fed. Reg. 2494.

The railroad Labor Organizations identified above ("Labor Organizations") are the collective bargaining representatives for the vast majority of railroad industry workers engaged in train operations, train dispatching, signal, mechanical maintenance, inspection, testing, and repair on passenger and freight railroads throughout the United States. The Labor Organizations and their individual and collective memberships have a direct safety interest in the outcome of this NPRM. The classes or crafts of employees represented by the Labor Organizations include those who would be directly affected should FRA permanently waive safety regulations by enshrining the waivers into a new regulatory scheme that allows railroads to forego brake testing, inspection and maintenance. The Labor Organizations appreciate the opportunity to comment.

FRA's stated rationale for the proposed rule is that it would "reduce the overall regulatory burden on railroads." The Labor Organizations know that the true regulatory burden arises when regulations are pressed into rule and procedures, compliance with which governs every move their members make in the performance of their duties on the nation's railroads. If there is an action to be performed, there is an attendant rule that covers that action and employees are responsible to

follow these rules under threat of job loss. Worse, failure to follow rules can result in injury or death; thus, the long-standing tenet that "regulations and the 'rulebook' are written in blood." Indeed, most regulations and rules governing practices on the job usually came after a person had unfortunately been injured or killed in the course of performing their duties and a process was developed—and enforced by regulations or rules—that was intended to prevent that type of occurrence from repeating. So the "burdens" about which railroads complain are most often felt by the employees. When safety regulations are waived or abandoned, these perceived economic burdens on the railroad become genuine safety burdens in the form of risk passed on to railroad workers.

FRA cites the Regulatory Impact Analysis accompanying this rule for the principle that "overall safety may be improved due to railroad employees experiencing less risk of common injuries such as slips, trips and falls by having to perform fewer inspections, which would produce positive safety benefits, *though these have not been quantified*." NPRM at 2495 (emphasis added). FRA claims to quantify everything, so a diminution in the number of slips, trips and falls should be estimated from FRA's assumptions regarding costs and benefits about how many fewer inspections will be done. These benefits have not been quantified; rather, FRA seems to merely have accepted the claims of the Association of American Railroads ("AAR").

Moreover, slips, trips and falls occurring brake inspections would be better remedied by providing better walking conditions at inspection locations than getting rid of the requirement for safety inspections. Indeed, the logical extension of the AAR/FRA argument is that all inspection-related slips, trips and falls could be completely eliminated by eliminating all inspections, which is an absurdity. This is because a greater risk arises from the undiscovered defects on rail cars that will be allowed to begin or continue their journey because of a reduced inspection sche3dule—and also increases the probabilities of derailment.

Similarly, when AAR applied for a waiver of 49 C.F.R. §232.213, §232.15 and §232.103(f) to use Wayside Wheel Temperature Detectors ("WTD's"), the association contended that "the WTD system would eliminate the potential for injury to inspection personnel due to trips and falls when performing Intermediate Brake Tests." *See* FRA-2016-0018-0001.

AAR also complains Class I test for Cars off air for more than 4 hours is "too restrictive" in its request in FRA-2017-0130. FRA Railroad Safety Board denied that petition for waiver due to "lack of supporting data in submission and more appropriately handled in rule-making. It would be best handling this sort of topic in a collaborative manner, such as in the Agency's Railroad Safety Advisory Committee ("RSAC"), which was founded for this purpose. However, AAR's regulatory wish list in response to DOT-OST-2017-0069 appears to have been considered by FRA as a raison d'etre since its publication. In fact, FRA concedes that this NPRM is a response to this petition and letter dated July 12, 2018, and data supporting request submitted in December 2017.

FRA acknowledges its obligation to regulate "in the public interest and consistent with railroad safety." NPRM at 2496. Regrettably, the standard employed here more resembles one designed "in the economic interests of the railroad and consistent with carrier convenience and higher profits." Indeed, given year after year of record net profits, the railroads cannot serious argue that they are unable to innovate or thrive under the current state of regulations.

FRA also notes on this page that "FRA does not intend to terminate any waivers upon the effective date of a final rule even if FRA incorporates the requirements of a waiver in a final rule." NPRM This brings to the forefront the question of just what would be the relief granted by promulgating this rule if the carriers are still governed by the existing waivers? Having made these preliminary observations, the Labor Organizations now turn to the sections reviewed in the NPRM.

218.22 – Utility Employee – Blue signal protection

This protection for ground workers is meant to provide an alert to operating crews of the work and movements of employees on the ground on or around the equipment. When a train is properly blue-flagged an engineer is notified of the ongoing work by a blue flag on both ends of the track, one hung on the lead locomotive and a blue "light" on the control stand. These warnings keep the engineer aware that they may not move the train and must keep the train in a stationary position, and also to be aware of the ramifications of the use of train air-controlled slack action. The Labor Organizations object to the proposal to exempt utility employees from blue-flag protection when changing the battery on an end-of-train device ("EOTD"). If the switch behind the train isn't locked and another crew is free to line the switch, they could inadvertently line a switch into the train being worked upon, exposing the utility employee to unnecessary risk. it is irrelevant in this situation whether the employee is using tools to change the battery. Moreover, the carriers argument that employees must carry the EOTD to another location to change a battery is a red herring. The work can be performed under blue flag protection, and if a carrier nonsensically requires moving the EOTD to another location merely to avoid complying with blue flag regulations, then it should suffer the consequences of the inefficiency it has chosen in order to evade the regulation.

Section 221.13 – Marking Device – placement of marker light –Siemens equipment

The Labor Organizations have no quarrel with either the weight of a EOTD, or the height as a general matter. However, we strongly question the viewing distance metrics of one-half mile and one mile, upon which FRA's proposal seem to be based. EOTD visibility serves to warn the crew of a following train of the location of the train they are following. Its intended safety purpose is to provide sufficient warning that the engineer of the following train can stop his train short of a collision. Given the ever-increasing proportion of trains having lengths of 1½ miles or more, neither the one-half mile standard nor the one-mile standard provide sufficient distance for an excessively long train to stop short of the collision point within the sight distance under normal braking conditions.

Section 232.5 – Definitions

According to FRA, the Air Flow Meter definition will include digital indicators. Air Repeater Units (ARUs"), according to FRA, will be judged on their purpose, and not their physical description or characteristics. This is appropriate, as the safety-critical functionality is whether the device gets the job done. However, the NPRM proposes no standards by which this can be determined. Moreover, the NPRM is silent regarding how an ARU, as defined, will be inspected, tested and maintained. As a locomotive appurtenance, an ARU certainly is subject to part 229 because it functions as a part of the controls of a train's air brake system. The Labor Organizations believe that general ARU functions should be tested as part of the daily inspection, and that a

periodic inspection regimen also should be required for those portions of an ARU similar in functionality to locomotive air brake components that must undergo periodic inspection.

Section 232.103 – General Requirements

The analysis of this Section discusses FRA's incorporation by reference of AAR's S.469-01 Standard. This standard has been in place from 1947-2000. With regard to FRA's discussion of the appropriate rate of air flow, as measured in cubic feet per minute ("CFM"), the NPRM states

> Canadian railroads have operated with the higher air flow limit of 90 CFM on DP trains since 2011. In 2013, BNSF demonstrated on a train of 110 grain cars that, when air pressure is provided at each end of the train consist through DP, a maximum 90 CFM air flow would only reduce the brake pipe pressure by 8 psi, well within the 15 psi pressure taper limit of § 232.205(c)(1)(i)(A). Brake propagation rates were found to be comparable to 60 CFM levels.

NPRM at 2501.

A reduction of 8 psi is equivalent to a minimum reduction on the automatic brake valve. Thus, if the required brake pipe pressure is 90 psi, the reality is that the engineer now has an effective brake pipe pressure of 82 psi. In some cold weather areas, trains have been told to continue on with AFM readings of 100 psi, and we are aware of at least one reading reported in excess of 250 on the CFM. Some of the crews who staff these trains were instructed that no air tests were necessary on their train because the cars came from multiple pre-tested tracks within a yard. When a train has finally been up and a leakage test performed, that fact needs to be noted on the proper air slip that the train crew can access, so the engineer can make the necessary calculations in determining the effectiveness of the braking system. The Labor Organizations request that FRA give this matter further consideration and adjust the proposed rule to provide at least an equivalent level of safety as that provided by the current rule.

232.205 – Class I Brake Test – Initial Terminal – 4 Hours Off Air

In considering four-hours off air versus eight hours versus twenty-four hours, there can be no "one size fits all" standard because of operational vagaries. Currently, when a train or cut of cars is encountered standing in a siding, yard, spur or set out track and no one knows how long it has been sitting there, four hours is a low bar and the default is to test.

Moving to a 24-hour requirement—a full day—as proposed invites a presumption from a train crew that a cars have already been appropriately tested. This can happen frequently in between terminals and also in terminals where there may be no yardmaster on duty. In support of the change, AAR has contended that this type of routine work is "too restrictive." *See* FRA-2017-0130. To the contrary, it is simple, common sense railroading.

The carriers' position also blithely ignores the fact that the current four hour standard was actually recommended by them railroads when a change from the prior 2-hour limit was requested. The Labor Organizations inquire what evidence exists that routine air tests at the very frequency requested by the carriers, themselves, is too restrictive. The characterization of air brake testing

as being "too restrictive" is a wholly subjective description, and certainly is insufficient to "codify" an air brake safety testing out of existence.

The brake tests cost only a small amount of time. They cost little money, when compared to the potential damages that are saved when a defect is found. AAR's philosophy seems to be that if you do not inspect, there must be no defects. This is akin to thinking you are invisible because you have your eyes closed.

FRA also solicits comments on whether the U.S. should adopt standards similar to Canada's regarding off-air requirements. This is mere cherry picking of a lesser standard for rail cars and air brake tests based on another country. Canada also has more stringent standards for other regulations that the rail carriers probably do not want. Moreover, how far afield should the U.S. safety regulator go when looking at other countries for inspiration regarding rail safety, where the standards for safety are not necessarily analogous to the ones set forth domestically? Canada can provide lessons due to its geographic proximity and types of equipment used—such as accident investigation (see Lac Megantic)—however, for regulatory purposes, unless FRA would also choose a stricter standard to adopt from Canada, perhaps it is best to simply inquire whether or not the U.S. regulation has its own merit.

FRA states that it seeks to "ensure that despite being off air for any length of time, that equipment's air brakes are in proper working condition." We agree wholeheartedly with this approach. The non-burdensome, low cost, efficient way to do this is no mystery. It is the common, garden variety air test, which has been performed for decades at precisely the frequency requested by the industry. FRA has not identified an alternative, and tying the Agency in knots trying to find one is unnecessary and counterproductive. FRA correctly notes that 49 U.S.C § 20303(d)(2) imposes a statutory requirement that any changes governing the "installing, inspection, maintaining, and repair" of train air brakes be made "only for the purpose of achieving safety."

The Labor Organizations believe that all of the current regulations should remain intact. Despite AAR's safety assurances, the Labor Organizations still have concerns with this far sweeping change given the fact that it will cover all of the railroads operating in the U.S. As noted by FRA in the 2001 rulemaking, "FRA does believe that in certain circumstances the length of time that equipment is removed from a source of compressed air can impact the integrity and operation of the brake system on a vehicle or train." 66 Fed. Reg. 4104, 4122 (Jan, 17, 2001). Indeed , FRA specifically noted that this applied "[p]articularly in cold weather situations where freeze-ups in train brake systems can occur."

While AAR touts advancements in managing problems associated with cold weather, AAR itself admits in its petition that some, but not all, locomotives have operable air driers or other systems to remove moisture and contaminants from the air supply system. Given that the rule change will apply to all of the railroads operating in the U.S., a large number of trainlines could still be impaired by the cold weather. Moreover, equipment is interchanged and does not remain exclusively on the Class I railroads. It just takes one piece of equipment with part of the braking operations frozen or blocked by ice to compromise an entire trainline. In addition, FRA also acknowledged in the 2001 rulemaking that extended off-air time was an issue "in areas where the

potential for vandalism is high due to the location where equipment is left standing." This continues to be a recurring issue in railroad operations.

Air Flow Method and Air Brake Repeater cars

FRA admits that, under the FRA-2010-0091 test waiver for 90 CFM allowance, there was an unintentional release not related to the test. It is not listed in the discussion, but would a test have ferreted out the problem that did cause the release? If so, what was the cause? Were these questions even asked? The NPRM provides no answers. No waiver should be incorporated into a regulation when an unanticipated deviation remains unexplained.

FRA proposes 90 CFM air flow on distributed power and air brake repeater trains. This would appear to be too high a limitation, because greater air compressor power should mean need less effort expended and less overall airflow due to having more compressors working to maintain pressure.

Calibration due to Charles Law's dependency on the Kelvin scale (constant temperature) must be present for this law of volumes to work, and FRA has proposed that temperature be considered when calibrating an AFM. Not only is this sound, the Labor Organizations would further say that a traditional form of leakage test method should also be used in temperatures less that 20 degrees Fahrenheit. Moreover, if an AFM cannot be calibrated without taking temperature into account, temperature also should be taken into account to verify the instrument's readings.

We disagree with FRA's position that AFMs are not appurtenances under the Locomotive Inspection Act, which requires that all locomotive appurtenances be "in proper condition and safe to operate," because an AFM is an optional piece of equipment. Once the AFM is chosen and installed, it is no longer an optional piece of equipment because its use is required to be relied upon when performing an air test. Much equipment on a locomotive is optional when initially introduced. One type of brake shoe is optional over another, but that fact does not eliminate the safety requirement that all products on a locomotive must be "in proper condition and safe to operate." NPRM at 2502. Since AFMs are located on/in dash of the control stand of the locomotive, regulation of them should reside in parts 229 and 232. The Labor Organizations also discuss this in the § 232.5 section above regarding new definitions.

Section 232.209 – Class II Brake Tests

FRA is proposing to change "off-air" requirements. *See* discussion above regarding § 232.205.

Section 232.213 – Extended Haul Trains

The AAR has proposed using electronic air brake inspection/testing recordkeeping as the sole basis for extending the distance between such inspections/tests by two-thirds – or 1,000 miles. Although FRA has deferred action on this specific request, the Agency's plans to handle it in the future compel the Labor Organizations to respond at this time. It is nothing short of preposterous to anyone with experience in railroad operations that someone could seriously propose that mechanical equipment inspections could be safely significantly reduced merely by recording inspection data electronically instead of on paper; yet, this precisely the logic behind AAR's

proposal. The medium used for air brake inspection/testing has absolutely no effect on how or when a brake shoe wears out, or whether brake rigging is hanging down improperly, or the point at which a rail car has flat wheels that are outside permissible regulatory limits. For the rail carriers to assert otherwise (NPRM *at* 2502) is an abandonment of its safety obligations. Simply put, the means for communicating the results of an inspection or test—however crude or technologically advanced—cannot be substituted for the inspection/test itself.

The Labor Organizations share another serious safety concern regarding AAR's proposed electronic air brake slip system, which FRA should keep in mind when considering this proposal in the future. This is the variability that exists in air brake system performance when cars—even a single car—are switched out, shuffled into different configurations, or are placed adjacent to different locomotives that may have different air compressors. The actual operational profile in such a situation can be provided to the train's crew only by an air brake inspection/test that is performed on the actual train consist once set-offs, pick-ups and other adjustments have been made. Changing the method of recordkeeping does absolutely nothing in this regard, because a spreadsheet only discloses the history of data entry

232.219 – Double-Heading and Helper Service

FRA proposes to amend § 232.219 by adding paragraph (d), which would incorporate a waiver intended to extend conditions similar to those contained in paragraph (c) to helping trains equipped with Distributed Power ("DP") or Electronically Controlled Pneumatic ("ECP") brakes. However, as proposed, paragraph (d) would eliminate the paragraph (c)(3) requirement that

> The [Helper Link] device [or similar technology] shall be tested for accuracy and calibrated if necessary according to the manufacturer's specifications and procedures every 365 days. This shall include testing radio frequencies and modulation of the device. A legible record of the date and location of the last test or calibration shall be maintained with the device.

The Labor Organizations understand the logic of incorporating the waiver for DP- or ECP-equipped helping trains to resolve this omitted case issue. However, as drafted, the proposed incorporation eliminates the accuracy testing, calibration and recordkeeping for devices used on such trains. Therefore, we strongly urge FRA to redraft the regulation to place current paragraph (c)(3) in a new paragraph (e), and to make this new paragraph (e) applicable to both the current paragraph (c) and FRA's new proposed paragraph (d).

232.305 – Single Car Air Tests

In short, FRA proposes to incorporate AAR Standard S–486–18 for Single Car Air Brake Testing ("SCABT") in place of AAR Standard S–486–04. In support of the sufficiency of AAR's S–486 standard, FRA cites to data developed beginning with a 2003 testing waiver the Agency granted. NPRM at 2504–2505. While the data speaks for itself, the Labor Organizations are troubled by the following passage in the Section-by-Section analysis:

> … FRA specifically requests comments on whether the repair yard provision of paragraph (b)(2) should be eliminated so that a single car air brake test would be

> required only every five years or when the brake system is impacted as contemplated under paragraph (b)(4). FRA understands that, on a daily basis, thousands of individual freight cars (out of the approximately 1.2 million freight cars in the North American fleet) are overdue for their single car air brake test. FRA requests comment on the effect the potentially eliminating the repair track provision of paragraph (b)(2) may have on this statistic and any policies to mitigate this potential issue.

NPRM at 2505.

The Labor Organizations object to reducing the frequency of the SCABT to five (5) years, as this lies outside the scope of the 2003 testing waiver and the data developed thereunder. Moreover, we respectfully suggest that if "on a daily basis, thousands" of freight cars are in violation of current rail safety regulatory requirements, the correct response for the industry's safety regulator is not to move the goalposts by relaxing the requirement; it is to enforce the requirement. To do otherwise would reward what—given the volume of violations—appears to be willful disregard of the regulations by the industry.

232.403 – Design Standards for One-Way End of Train Devices

The Labor Organizations share FRA's "concern[]with the safety risks associated with the loss of communications events between the controlling locomotive and the EOT device." NPRM at 2505. Such failures, while not accidents in and of themselves, introduce risk into the operations because equipment that is not functioning as intended. BLET's Safety Task Force in its Final Submission to the National Transportation Safety Board in the investigation of the October 4, 2018 collision of two Union Pacific Railroad freight trains near Granite Canyon, Wyoming (NTSB Accident Number RRD19FR001) made the following two recommendations to address this risk:

- Revise Subpart E of 49 CFR Part 232 to require that, when an emergency brake application is made on the controlling locomotive, the RDU continuously sends an "initiate emergency application of the brakes" signal to the EOT until the train comes to a complete stop.

- Require that trains be brought to a safe stop upon a loss of communication that lasts longer than 4 minutes and 59 seconds.

See BLET Final Submission at 20–21. This also responds to FRA's specific solicitation—in its analysis of §232.409—of comments regarding communication failures between the controlling locomotive and the EOT device, and failures that include controlling locomotives not sending an emergency application signal to the EOT device after two minutes of not receiving a signal from the rear end unit. NPRM at 2506.

However, the Labor Organizations do not share FRA's view that the conditions applied to the waiver being incorporated are no longer necessary due to the prevalence of air-driven, alternator-equipped EOT devices. *See* NPRM at 2505. The older style of EOT is still in use—as evidenced in the Section-by-Section Analysis discussion of blue flag protection of utility employees changing EOT batteries (*see supra*)—and conditions governing their safe use should not be removed until all such devices are retired.

That being said, the Labor Organizations agree that a back-up battery is necessary when using air-powered generators for providing electricity to EOTs. We do question, though, whether the proposed 12-hour battery life standard is sufficient. While a 12-hour battery life is sufficient for a single crew to complete its tour of duty, there should be a mandatory battery-life notification requirement so that a subsequent crew knows how much battery life is left if an EOT air-powered generator fails during the preceding trip.

Section 232.407(f)(2) – Battery Charging Requirements-

The Labor Organizations support mandatory testing of EOT back-up batteries for residual charge. Again, and as noted above, there should be a mandatory battery-life notification requirement so that a subsequent crew knows how much battery life is left if an EOT air-powered generator fails during the preceding trip. We also support a requirement that, instead of a minimum charge, the battery must have a sufficient charge to power the EOT until it reaches a point where the EOT can be changed to one with a functioning air-powered generator.

Section 232.409 – Inspection and Testing of End-of Train Devices

The Labor Organizations support FRA's proposal to cross reference EOT air pressure reading requirements with § 229.27 because the EOT is used to control the train and in the conducting of required air tests. We also concur with FRA's observation that the need for telemetry calibration has been reduced by technological advances that include continuous feedback such as Phase Lock Loop ("PLL"). NPRM at 2505. A PLL-equipped radio fails safe in that when it does not complete a "sum check," it is considered not functioning. Once again, however, not every EOT has a PLL-equipped radio. Therefore, while it may be appropriate to not require telemetry calibration for an EOT with a PLL-equipped radio, the requirement cannot be removed from § 232.409 so long as EOTs that are not PLL-equipped remain in service.

Subpart H – Scenic, Historic and Excursion Operations Braking Systems

FRA proposes to recodify current Appendix B of Part 232—which preserved Part 232 as it applied to tourist, scenic, historic, and excursion operations prior to the 2001 Final Rule—as Subpart H. NPRM at 2506. In so doing, however, FRA proposes significant relaxation of (1) current maintenance practices and operating requirements, including the periodic inspection requirements for air brake cleaning, repairing, lubricating, and testing (known in the industry as "clean, oil, test, and stencil" or "COT&S"), and (2) periodic testing requirements for 26–C and D–22 brake valves. The Labor Organizations view these proposed relaxations as very problematic.

Regarding COT&S testing, the Labor Organizations observe that FRA proposes to eliminate requirements that have governed scenic, historic and excursion equipment since its manufacture. In its place FRA proposes a scheme of self-regulation. A significant portion of this equipment is far older than anything used by Class I, II and III carriers, and Appendix B was created precisely because the 2001 Final Rule was inapplicable to this type of equipment. Two decades later, FRA proposes to throw the baby out with the bathwater. Scenic, historic and excursion railroads lack the resources of AAR and its member Class I railroads, and they do not enjoy the economies of scale shared by Class II and Class III railroads via their membership in the American Short Line and Regional Railroad Association. We believe allowing scenic, historic and excursion railroads

to self-regulate COT&S standards is an attempt to fix something that isn't broken, and we strongly object to this proposal.

As to periodic testing requirements for 26–C and D–22 brake valves, we must point out that the testing pilot programs created by the Class I railroads via a FRA-granted waiver involved locomotives that were, generally, state-of-the-art in every respect when the testing pilot programs were implemented. To extend the standards applicable to the newest, most robust of locomotives to a motive power fleet that is the oldest in the nation—as is typically the case with locomotives used by scenic, historic and excursion railroads—is simply not justified. The Labor Organizations respectfully request that FRA withdraw this proposal, as well.

In conclusion, the Labor Organizations give credit in our comments to FRA where we think they have addressed a safety issue that benefits from an updated examination. However, most of the rules discussed in the above topics do not warrant changes until a time when the technology itself has proven to provide at least the same level of railroad safety. To assert that something as rudimentary as a spreadsheet take the place of air-brake inspections in the field undermines the legitimacy of many AAR claims, and a disservice to railroad employees and the public.

Thank you for the opportunity to comment

Respectfully submitted,

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