

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 213

[Docket No. FRA-2018-0104]

RIN 2130-AC53

Rail Integrity Amendments & Track Safety Standards

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: FRA is proposing to revise its regulations governing the minimum safety requirements for railroad track. The proposed changes include allowing inspection of rail using continuous rail testing; allowing the use of flange-bearing frogs in crossing diamonds; relaxing the guard check gage limits on heavy-point frogs used in Class 5 track; removing an inspection-method exception for high-density commuter lines; and other miscellaneous revisions. Overall, the proposed revisions would benefit track owners, railroads, and the public by reducing unnecessary costs and incentivizing innovation, while not negatively affecting rail safety.

DATES: Written comments must be received by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. Comments received after

that date will be considered to the extent possible without incurring additional expense or delay.

ADDRESSES: *Comments:* Comments related to Docket No. FRA-2018-0104 may be submitted by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov> and follow the online instructions for submitting comments;

- *Mail:* Docket Management Facility, U.S. DOT, 1200 New Jersey Avenue, SE, W12-140, Washington, DC 20590;

- *Hand Delivery:* The Docket Management Facility is located in Room W12-140, West Building Ground Floor, U.S. DOT, 1200 New Jersey Avenue, SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays; or

- *Fax:* 202-493-2251.

Instructions: All submissions must include the agency name and docket number or Regulatory Identification Number (RIN) for this rulemaking (2130-AC53). All comments received will be posted without change to <http://www.regulations.gov>; this includes any personal information. Please see the Privacy Act heading in the **SUPPLEMENTARY INFORMATION** section of this document for Privacy Act information related to any submitted comments or materials.

Docket: For access to the docket to read background documents or comments received, go to <http://www.regulations.gov> and follow the online instructions for accessing the docket or visit the Docket Management Facility described above.

FOR FURTHER INFORMATION CONTACT: Matthew Brewer, Staff Director, Rail Integrity Division, Office of Railroad Safety, Federal Railroad Administration, 500 East Broadway, Suite 240, Vancouver, WA 98660, telephone: 202-385-2209; Yu-Jiang Zhang, Staff Director, Track Division, Office of Railroad Safety, Federal Railroad Administration, 1200 New Jersey Avenue, SE, W33-302, Washington, DC 20590, telephone: 202-493-6460; or Aaron Moore, Attorney, Office of Chief Counsel, Federal Railroad Administration, 1200 New Jersey Avenue, SE, W31-216, Washington, DC 20590, telephone: 202-493-7009.

SUPPLEMENTARY INFORMATION:

Table of Contents for Supplementary Information

- I. EXECUTIVE SUMMARY
- II. RULEMAKING AUTHORITY AND BACKGROUND
- III. DEVELOPMENT OF THE NPRM
- IV. SUMMARY OF MAJOR PROVISIONS OF THE NPRM
 - A. *Proposal to Allow Continuous Rail Testing*
 - B. *Proposal to Remove High-Density Commuter Line Exception*
 - C. *Incorporation of Flange-Bearing Frog and Heavy-Point Frog Waivers*
 - i. *Heavy-Point Frogs*
 - ii. *Flange-Bearing Frog Crossing Diamonds*
- V. SECTION-BY-SECTION ANALYSIS
- VI. REGULATORY IMPACT AND NOTICES
 - A. *Executive Order 12866, and DOT Regulatory Policies and Procedures*

- B. Regulatory Flexibility Act*
- C. Paperwork Reduction Act*
- D. Environmental Impact*
- E. Federalism Implications*
- F. Unfunded Mandates Reform Act of 1995*
- G. Energy Impact*
- H. Privacy Act Statement*

I. Executive Summary

Beginning in 2015, the Track Safety Standards Working Group (TSS Working Group) of the Railroad Safety Advisory Committee (RSAC) met numerous times to “consider specific improvements to the Track Safety Standards . . . designed to enhance rail safety by improving track inspection methods, frequency, and documentation.” As detailed below, FRA’s proposals in this NPRM are, in part, a direct result of the RSAC’s recommendations and of FRA’s own review and analysis of the Track Safety Standards (TSS or Standards) (49 CFR part 213). To streamline and ensure its regulations are as up to date as practicable, FRA periodically reviews and proposes amendments to its regulations. Various Executive Orders (for example, President Trump’s Executive Order 13771, discussed in more detail below in section II) also encourage or require such review with an emphasis on cost savings. This NPRM is responsive to those Executive Orders.

In this NPRM, FRA proposes to amend subparts A, D, F, and G of the TSS to (1) allow for continuous rail testing, (2) incorporate longstanding waivers related to track frogs, (3) remove the exception for high-density commuter lines from certain track inspection method requirements, and (4) incorporate several consensus-based, RSAC recommendations.

FRA proposes to amend part 213 to allow for what is commonly referred to as “continuous rail testing.” Although the Rail Integrity Working Group did not reach consensus on specific, recommended regulatory text, FRA’s proposal to allow continuous rail testing is based, in part, on information garnered from the Working Group’s discussions of the issue. Generally, continuous rail testing differs from the traditional stop-and-verify rail inspection process, which involves an operator riding in a test vehicle traveling over the rail and reviewing test data in real-time as the vehicle collects it, including stopping the vehicle to verify indications of possible rail defects. Continuous rail testing, on the other hand, is a rail inspection process that tests the rail non-stop along a designated route, collecting the rail inspection data and transmitting it to an analyst at a centralized location for review and categorization of suspected rail flaws that are subsequently field-verified. To enable this process, FRA proposes that those entities electing to use continuous rail testing be exempt from the current requirement that certain indications of suspected rail defects be immediately verified and all other indications be field-verified within four hours. Instead, FRA proposes to extend the verification period to allow the data to be analyzed off-site but still require field verification within a specified period (i.e., between 24 and 84 hours, depending on the type of defect). Since

2011, multiple railroads have conducted pilot projects to test and evaluate the effectiveness of the continuous rail testing process. FRA believes that allowing continuous testing will enhance the effectiveness of the rail testing process while decreasing the economic cost to the industry.

FRA also proposes to incorporate two existing waivers into part 213, to provide additional flexibility in the use of track frogs. A frog is a track component used at the intersection of two running rails to provide support for wheels and passage for their flanges, thus permitting wheels on either rail to cross the other intersecting rail. As explained in more detail below, FRA has approved a waiver to allow railroads to use heavy-point frogs in Class 5 track that do not comply with the current minimum guard check gage limit. A heavy-point frog is a unique design that has a thicker frog point. Under the current waiver, those heavy-point frogs in Class 5 track are instead permitted to meet the minimum guard check gage limit for Class 4 track. Additionally, FRA has issued a waiver allowing the railroad industry to utilize flange-bearing-frog crossing diamonds that do not comply with the flangeway depth requirements in 49 CFR 213.137(a). Flange-bearing-frog crossing diamonds are different from traditional tread-bearing frogs in that they are designed to support wheels running on their flanges. Both waivers have been in place for an extended period of time and both heavy-point frogs and flange-bearing-frog crossing diamonds have been safe under them.

In response to National Transportation Safety Board (NTSB) Safety Recommendation R-14-11 and sec. 11409 of the Fixing America's Surface Transportation Act, Pub. L. 114-94, 129 Stat. 1686 (Dec. 4, 2015) (FAST Act), FRA also

proposes to remove the exception in 49 CFR 213.233(b)(3) concerning the manner of inspecting high-density commuter lines. Section 213.233(b)(3) normally requires each main track be traversed by vehicle or inspected on foot at least once every two weeks, and each siding be traversed by vehicle or inspected on foot at least once every month. Section 213.233(b)(3) exempts high-density commuter lines where track time does not permit on-track vehicle inspection and where track centers are 15 feet or less apart, but FRA is not aware of any railroads utilizing this exception and, as discussed below, agrees that in the interest of safety the exception should be removed.

FRA also proposes other miscellaneous revisions to part 213 (e.g., revising qualification requirements for certain railroad employees, adjusting recordkeeping requirements, etc.), many of which are based on consensus recommendations of the TSS Working Group. FRA proposes to adopt these consensus recommendations with generally minor changes for purposes of clarity, formatting, and consistency. Those proposed revisions are discussed in more detail below.

FRA analyzed the economic impact of this proposed rule over a 10-year period and estimated its costs and cost savings. If railroad track owners choose to take advantage of the cost savings from this proposed rule, they would incur additional labor costs associated with continuous rail testing. These costs are voluntary because railroad track owners would only incur them if they choose to operate continuous rail testing vehicles. The following table shows the net cost savings of this proposed rule, over the 10-year analysis.

Net Cost Savings, in Millions (2018 Dollars)

	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Costs	\$25.9	\$31.4	\$3.7	\$3.7
Cost Savings	\$148.7	\$180.3	\$21.2	\$21.1
Net Cost Savings	\$122.8	\$148.9	\$17.5	\$17.4

This proposed rule would result in cost savings for railroad track owners. The cost savings are in the table below.

Cost Savings, in Millions (Over a 10-Year Period of Analysis)

Section	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Flange Bearing Frog Inspections	\$0.191	\$0.223	\$0.027	\$0.026
Frog Waiver Savings	\$0.013	\$0.016	\$0.002	\$0.002
Continuous Testing Labor Cost Savings	\$7.086	\$8.590	\$1.009	\$1.007
Slow Orders	\$141.329	\$171.340	\$20.122	\$20.086
Continuous Testing Waiver Savings	\$0.130	\$0.154	\$0.012	\$0.010
Total	\$148.749	\$180.324	\$21.172	\$21.132

The table below presents the estimated costs, over the 10-year analysis.

Estimated Costs, in Millions (Over a 10-Year Period of Analysis)

	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Continuous Testing	\$25.9	\$31.4	\$3.7	\$3.7

II. Rulemaking Authority and Background

On January 30, 2017, President Trump issued Executive Order (EO)

13771. EO 13771 seeks to “manage the costs associated with the governmental imposition of private expenditures required to comply with Federal regulations” and directs each executive department or agency to identify for elimination two existing regulations for every new regulation issued. EO 13771 also requires any new incremental cost associated with a new regulation, to the extent permitted by law, be at least offset by the elimination of existing costs associated with at least two prior regulations. Similarly, EO 13610 (Identifying and Reducing Regulatory Burdens, issued May 12, 2012), seeks “to modernize our regulatory system and to reduce unjustified regulatory burdens and costs” and directs each executive agency to conduct retrospective reviews of its regulatory requirements to identify potentially beneficial modifications to regulations. 77 FR 28469. Executive agencies are to “give priority, consistent with the law, to those initiatives that will produce significant quantifiable monetary savings or significant quantifiable reductions in paperwork burdens while protecting public health, welfare, safety and our environment.” *See id.* at 28470.

In response to EO 13771, FRA initiated a review of its existing regulations with the goal of identifying regulations that it could amend or eliminate to reduce the overall regulatory, paperwork, and cost burden on entities subject to FRA jurisdiction. FRA identified part 213 as a regulation FRA could amend and thereby reduce the railroad industry’s overall regulatory and cost burden without negatively affecting safety. Also, in response to a DOT request for public comment on existing rules ripe for repeal or modification, the Association of American Railroads and other industry participants encouraged FRA to revise part 213 to allow for the use of innovations in rail inspection

technology, specifically the use of non-stop rail inspection vehicles. *See* docket number DOT-OST-2017-0069 (available online at www.regulations.gov). This rule responds to those comments by proposing to provide railroads with the flexibility to use continuous rail testing in a way that will facilitate operational efficiency and enhance safety.

Section 20103 of title 49 of the United States Code (U.S.C.) provides that, “[t]he Secretary of Transportation, shall prescribe regulations and issue orders for every area of railroad safety.” This statutory section codifies the authority granted to the Secretary of Transportation under the Federal Railroad Safety Act of 1970. The Secretary’s authority to act under sec. 20103 is delegated to the Federal Railroad Administrator. *See* 49 CFR 1.89.

FRA published the first Standards on October 20, 1971. The most comprehensive revision of the Standards resulted from the Rail Safety Enforcement and Review Act of 1992, Pub. L. 102–365, 106 Stat. 972 (Sept. 3, 1992), later amended by the Federal Railroad Safety Authorization Act of 1994, Pub. L. 103–440, 108 Stat. 4615 (Nov. 2, 1994), which led to FRA issuing a final rule amending the Standards in 1998. *See* 63 FR 34029, June 22, 1998; 63 FR 54078, Oct. 8, 1998.

III. Development of the NPRM

As noted above, the proposals in this NPRM are based, in part, on the consensus recommendations of the TSS Working Group and, in part, on FRA’s own review and analysis. The RSAC provides a forum for developing consensus recommendations and

providing information to the Administrator of FRA on rulemakings and other safety program issues, and includes representatives from all the agency's major stakeholders. The RSAC established the TSS Working Group on February 22, 2006, and it met numerous times since formation and addressed multiple tasks and issues. Beginning in 2015, one of those tasks involved some of the revisions proposed in this NPRM. At the July 19-20, 2016 meeting, FRA presented draft proposed revisions to part 213. Over the course of two years and four additional meeting, the TSS Working Group discussed the draft revisions in depth, considered draft revisions presented by other members, and ultimately tailored the revisions to reflect the suggestions and concerns of the TSS Working Group members. During the March 13-14, 2018 meeting, the TSS Working Group unanimously recommended proposed revisions, which form the basis for parts of this NPRM. As proposed in this NPRM and discussed in more detail below, these revisions include removal of the high-density commuter line inspection-method exception, changes to qualification requirements for certain railroad employees, and revisions to recordkeeping requirements.

IV. Summary of Major Provisions of the NPRM

A. Proposal to Allow Continuous Rail Testing

FRA sponsors railroad safety research, including research on rail integrity. The general objectives of FRA rail integrity research have been to improve railroad safety by reducing rail failures and the associated risks of train derailment, and to do so more efficiently through maintenance practices that increase rail service life. Generally, FRA's rail integrity research focuses on four distinct areas: analysis of rail defects; residual

stresses in rail; strategies for rail testing; and other related issues (e.g., advances in nondestructive inspection techniques; feasibility of advanced materials for rail, rail lubrication, rail grinding and wear; etc.). FRA's rail integrity research is an ongoing effort, and is particularly important as annual tonnages and average axle loads continue to increase on the nation's railroads. For more discussion of rail integrity generally, see FRA's 2014 final rule titled Track Safety Standards; Improving Rail Integrity. 79 FR 4234, Jan. 24, 2014.

One of the most important assets to the railroad industry is its rail infrastructure. Historically, a primary concern of railroads has been the probability of rail flaw development. Rail defects may take many forms (e.g., rail head surface conditions and internal rail flaws). If defects go undetected, they may grow to critical size, potentially resulting in a broken rail and subsequent derailment. Accordingly, to prevent rail defect development, railroads seek ways to improve their rail maintenance practices, install more wear-resistant rail, utilize improved flaw-detection technologies, and increase rail inspection frequencies.

The development of internal rail defects is an inevitable consequence of the accumulation and effects of fatigue under repeated loading. The direct cost of an undetected rail defect is the difference between the cost of replacing the rail when a failure occurs, plus the cost of any damage caused by the failure, which can be considerably more than the cost of the planned replacement of detected defects before they fail. Rail failures can have widespread and catastrophic consequences, such as environmental damage and potential injury and loss of life

along with excessive service interruptions, and extensive traffic rerouting. The challenge for the railroad industry is to avoid the occurrence of rail service failure due to the presence of an undetected defect.

The effectiveness of a rail inspection program depends, in part, on the test equipment being properly designed and capable of reliably detecting rail defects of a certain size and orientation, while also ensuring that the test frequencies allow for detection of defects before they grow to critical size. Normal railroad operations can add additional complexity to the rail inspection program. High traffic and tonnage volumes can accelerate defect growth, while at the same time decreasing the time available for rail inspection. Additionally, these high volumes can lead to rail surface fatigue that may negatively affect the ability of test equipment to see into the rail and thus prevent detection of an underlying rail flaw by the test equipment. Most railroads attempt to control risk by monitoring test reliability through an evaluation process of fatigue service failures that occur soon after testing, and by comparing the ratio of service failures or broken rails to detected rail defects.

Current rail flaw detection methods that are performed in the railroad industry utilize various types of processes with human involvement in the interpretation of the test data. These include the:

- Portable test process, which consists of an operator pushing a test device over the rail at a walking pace while visually interpreting the test data;

- Stop-and-verify process, where a vehicle-based flaw detection system tests at a slow speed (normally not exceeding 20 m.p.h.) gathering data that is presented to the operator on a test monitor for interpretation and field verification;
- Chase car process, which consists of a lead test vehicle performing the flaw detection process in advance of a verification chase car; and
- Continuous test process, which is one of the subjects addressed in this NPRM and consists of operating a high-speed, vehicle-based, test system non-stop along a designated route, analyzing the test data at a centralized location, and subsequently verifying suspect defect locations.

The main technologies utilized for the processes listed above are the ultrasonic and induction methods. Ultrasonic technology is the primary technology used, with induction technology currently used as a complementary system. As with any non-destructive test method, these technologies are susceptible to physical limitations that allow poor rail head surface conditions to negatively influence the detection of rail flaws. Other conditions that can limit the effectiveness of inspection include heavy lubrication or debris on the rail head.

Induction testing introduces a high-level, direct current into the top of the rail and establishing a magnetic field around the rail head. An induction sensor unit is then passed through the magnetic field. The presence of a rail flaw will result in a distortion of the current flow and the magnetic field, which will be detected by the search unit.

Ultrasonic testing uses sound waves that propagate at a frequency that is normally between 2.25 MHz (million cycles per second) to 5.0 MHz, above the range of human hearing. Ultrasonic waves are generated into the rail by transducers placed at various angles with respect to the rail surface. The ultrasonic waves produced by these transducers normally scan the entire rail head and web, as well as the portion of the base directly beneath the web. Internal rail defects represent a discontinuity in the material that constitutes the rail. This discontinuity acts as a reflector to the ultrasonic waves, resulting in a portion of the wave being reflected back to the respective transducer. These conditions include rail head surface conditions, internal or visible rail flaws, weld upset/finish, or known reflectors within the rail geometry such as drillings or rail ends. The information is then processed by the test system and recorded in the permanent test data record.

FRA is proposing to amend its regulations on inspection of rail and verification of indications of defective rail to allow for continuous rail testing. *See* proposed § 213.240. The current regulations require immediate verification of certain indications and require all others be verified within 4 hours. 49 CFR 213.113(b). This verification timeframe has made it practically impossible for track owners to conduct continuous testing. Consistent with FRA's desire to improve rail safety and encourage innovation that does the same, this proposed rulemaking would establish procedures that, except for indications of a broken rail, extend the required verification timeframes for those entities that adopt continuous testing. FRA believes this would facilitate operational efficiency and encourage both a broader scope and more frequent use of rail testing in the industry.

Although rail flaw detection is not an exact science, noncritical rail flaw limits can be difficult to estimate, and numerous variables affect rail flaw growth, FRA believes the procedures proposed in this NPRM are sufficient to ensure the extended verification timeframes would not result in complete rail failure prior to verification. Continuous rail testing is a process that has been successfully trialed under the waiver process outlined in 49 CFR 213.17 on select rail segments on multiple railroads in the U.S. since 2009.¹ In general, FRA is authorized to waive compliance with its regulations if the waiver “is in the public interest and consistent with railroad safety.” 49 U.S.C. 20103(d). Under 49 CFR 213.17 and FRA’s Rules of Practice found at 49 CFR part 211, any person subject to FRA’s safety regulations can submit a petition for a waiver from those requirements. FRA’s Rules of Practice provide a process and outline the requirements for waiver petitions. Each properly filed petition for a waiver is referred to the FRA Railroad Safety Board (Board) for decision. *See* 49 CFR 211.41(a). The Board’s decision is typically rendered after a notice is published in the *Federal Register* and an opportunity for public comment is provided. *See* 49 CFR 211.41. If the Board grants the waiver request, the Board may impose conditions on the grant of relief to ensure the decision is in the public interest and consistent with railroad safety. This rulemaking would codify the continuous rail testing practices FRA has permitted by waiver and allow for additional flexibility in the rail inspection process. Track owners that do not desire to conduct continuous rail testing would not be affected by the proposal.

¹ *See* docket numbers FRA-2008-0111 (CSX), FRA-2011-0107 (CSX), FRA-2014-0029 (CN), FRA-2015-0019 (NS), FRA-2015-0115 (KCS), FRA-2015-0130 (BNSF), FRA-2018-0022 (UP), FRA-2018-0031 (LIRR), FRA-2019-0057 (MNCW) (available online at www.regulations.gov).

Further, FRA’s proposal would provide additional flexibility in the rail flaw detection processes to promote innovative approaches to improving safety in railroad operations. Proposed § 213.240 would provide track owners the option to conduct continuous rail testing to satisfy the rail inspection requirements in § 213.237 or, where applicable, § 213.339. This proposed section would allow additional time for verification of indications of potential rail flaws identified through continuous testing. This additional time would allow for improvements in planning and execution of rail inspections and rail defect remediation, enabling track owners to conduct rail inspections with less impact on railroad operations. By reducing the impact on the rail network, more track time may become available to conduct maintenance and increase inspections. However, as continuous testing is a more complicated process compared to the traditional stop-and-verify rail inspection process, additional criteria have been proposed to ensure that this elective process is conducted in a manner that is in the interests of safety and has sufficient recordkeeping and transparency to allow for adequate FRA oversight.

The proposed continuous rail test section would not modify the requirements to inspect rail as set forth in §§ 213.237 and 213.339, nor would it make any change to the remedial actions required after field verification of a rail defect as described in § 213.113(c).

B. Proposal to Remove High-Density Commuter Line Exception

FRA is proposing to remove what is commonly referred to as the “high-density commuter line exception” from the track inspection requirements in § 213.233. This exception applies to “high density commuter railroad lines where track time does not

permit on-track vehicle inspection and where track centers are 15 feet or less apart” and exempts those operations from 49 CFR 213.233(b)(3). Section 213.233(b)(3) requires each main track to be traversed by vehicle or inspected on foot at least once every two weeks and each siding at least once each month. Although other provisions of § 213.233 do require that such track be inspected, § 213.233(b)(3) focuses on the direct manner of conducting those inspections over or on the subject track.

On May 17, 2013, Metro-North Commuter Railroad (Metro-North) passenger train 1548 was traveling eastbound from Grand Central Station, New York, toward New Haven, Connecticut, when it derailed in Bridgeport, Connecticut, and was struck by westbound Metro-North passenger train 1581. The accident resulted in approximately 65 injuries and damages estimated at over \$18 million. During the investigation, a pair of broken compromise joint bars were found at the point of derailment. One of those broken joint bars was located on the gage side of the track over which train 1548 was traveling (main track 4). NTSB’s investigation also found that Metro-North last inspected the track in the area two days before the accident, but the inspection was conducted by an inspector in a hi-rail vehicle traveling on main track 2, which was *next to main track 4, and the joint bars in question would not have been visible during that inspection. See NTSB’s Railroad Accident Brief, October 24, 2014, available at <https://www.nts.gov/investigations/AccidentReports/Reports/RAB1409.pdf>*. In response to the Bridgeport accident, NTSB issued Safety Recommendation R-14-

11 to FRA, which recommended that FRA revise the Standards, specifically § 213.233(b)(3), to remove the high-density commuter line exception.

Subsequently, in 2015, Congress passed the FAST Act, and mandated in section 11409 that the Secretary of Transportation evaluate the Standards to determine if the high-density commuter line exception should be retained. After considering safety, system capacity, and other relevant factors such as the views of the railroad industry and relevant labor organizations, FRA has concluded, and the TSS Working Group unanimously agreed, that the high-density commuter line exception should be removed. All railroad operations, whether commuter or freight, or both, should be subject to the same inspection method requirements in § 213.233(b)(3). No track owners or railroads currently utilize this exception.

C. Incorporation of Flange-Bearing Frog and Heavy-Point Frog Waivers

As explained in more detail above, under 49 CFR 213.17 and FRA's Rules of Practice found at 49 CFR part 211, any person subject to FRA's safety regulations can submit a petition for a waiver from those requirements. FRA is proposing to revise two sections of part 213 (§§ 213.137 and 213.143) to incorporate longstanding waivers that, with certain limiting conditions, permit the use of flange-bearing frogs and heavy-point frogs that do not comply with current FRA standards. FRA believes that under certain conditions, use of these types of frogs provide safety benefits by more evenly distributing loads across the frogs with minimal impact to rail surfaces, as compared to other types of rail frogs. Incorporating these waivers into FRA's regulations would result in industry cost-savings larger than from the waivers alone.

i. Heavy-Point Frogs

A heavy-point frog (HPF) is a unique design that has a thicker frog point than a traditional frog. This unique design offers safety benefits over a traditional frog because of more inert mass to reduce metal fatigue from impact loading, greater durability, reduced susceptibility to deformation of the frog point, and better ability to guide the wheel flange toward the proper flangeway. In an HPF, the gage line is $11/32$ (0.3438) of an inch thicker than a traditional, rail-bound manganese frog point. This reduces the standard guard check distance from 4 feet, $6 \frac{5}{8}$ (54.6250) inches to 4 feet, $6 \frac{29}{64}$ (54.4531) inches, which does not comply with minimum guard check distance for Class 5 track.

As defined in 49 CFR 213.143, footnote 1, and as shown in Figure 1 below, guard check gage is the distance between the gage line of a frog to the guard line (a line along the side of the flangeway nearest to the center of the track and at the same elevation as the gage line) of its guard rail or guarding face, measured across the track at right angles to the gage line (a line $5/8$ " below the top of the center line of the head of the running rail, or corresponding location of the tread portion of the track structure).

The purpose of the minimum guard check gage is to ensure a vehicle's wheels are able to pass through the frog without one of the wheels (the right wheel in Figure 1) striking the frog point. In Figure 1, there are two key dimensions: "wheel check," which is the distance between the two wheels plus the wheel flange thickness at the gage line ($5/8$ " below the running surface); and "guard check gage," which is defined above. As illustrated in Figure 1, guard check gage must be greater than or equal to the wheel check

so there will be a “flange–frog point gap” between the right wheel and frog point interface, when the left wheel flange passes against the guard rail. As stated above and further illustrated in Figure 1, this ensures the right wheel does not strike the frog point.

Figure 1 depicts a standard frog, which has a standard guard check gage of 54.625”, meeting the requirement for Class 5 track (greater than or equal to 54-1/2” or 54.5”). A heavy-point frog has a standard guard check gage of 54.4531”, which does not meet current FRA standards for Class 5 track but does meet the current standards for Class 4 track (greater than or equal to 54.375”).

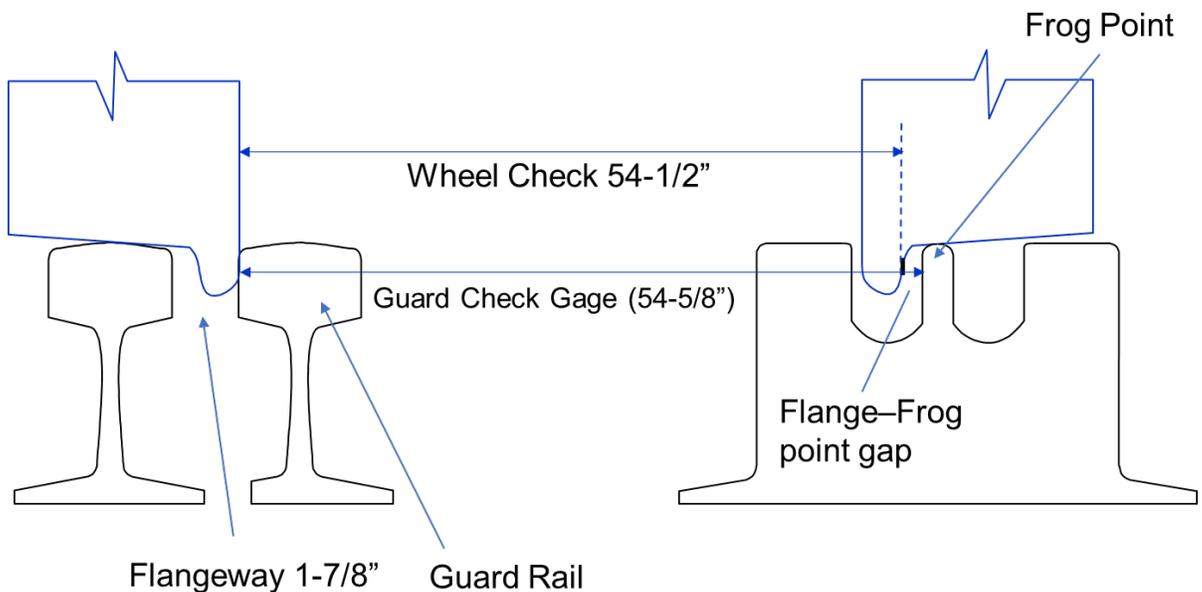


Figure 1

In 2003, FRA approved a waiver permitting operation of trains at Class 5 track speeds over certain HPFs at which the guard check gage, under existing 49 CFR 213.143,

conforms to the standards applicable to Class 4 track. *See* docket number FRA-2001-10654 (available online at www.regulations.gov). Among other conditions to ensure safety, the waiver requires that the frog, and the guard rails on both tracks through the turnout containing the frog, be equipped with at least three through-gage plates (metal plates underneath the frog that expand across the entire frog to provide both vertical support and lateral restraint for the frog components) with elastic rail fasteners and guard rail braces that permit adjustment of the guard check gage without removing spikes or other fasteners from the crossties. The waiver also requires that track owners retain records of the location and description of each turnout containing an HPF, notify FRA prior to operating trains over a new HPF, and provide proper information and training to any employees designated to inspect or supervise restoration or renewal of areas containing an HPF. Each HPF must also bear an identifying mark. Since FRA initially granted the waiver in 2003, FRA has renewed the waiver three times, most recently on February 15, 2018. The waiver is currently set to expire on February 15, 2023.

To date, no accidents have been reported to FRA as having occurred at or near locations where HPFs are installed. Accordingly, FRA believes that the safety benefits of HPFs have been proven. As discussed in more detail below in the section-by-section analysis for § 213.143, FRA proposes to incorporate the waiver provisions into the regulation.

ii. Flange-Bearing Frog Crossing Diamonds

Flange-bearing frogs (FBF) are different from the traditional tread-bearing frogs used by freight railroads in most crossing diamonds and turnouts in the United States. In

traditional tread-bearing crossing diamonds, a vehicle's wheels must run over the gaps in the running rails. This creates significant dynamic loading that can damage both the diamond and components of the vehicle (e.g., the vehicle's wheels and axles). For FBFs, the flangeway is designed to support the wheels running on their flanges. There are ramps to provide a smooth transition from tread-bearing to flange-bearing and significantly reduce the dynamic wheel forces. This can greatly reduce noise and vibration, increase the service life of crossing diamonds and vehicle components, reduce the need for maintenance, and possibly decrease the need for speed restrictions in certain circumstances due to worn, damaged, or defective crossing diamonds.

In 2000, FRA approved a waiver granting relief from the flangeway depth requirements in 49 CFR 213.137(a) as well as the limitation in 49 CFR 213.137(d) restricting FBFs to Class 1 track. *See* docket number FRA-1999-5104 (available online at www.regulations.gov). Among other conditions, this initial waiver allowed track owners to install up to five FBF crossing diamonds in Class 2 or 3 track. FRA limited its initial approval to five FBF crossings under specific operational conditions and conditions requiring vehicle and track inspections designed to closely monitor the performance of the FBFs. In 2010, based on the successful implementation of the initial waiver and data gathered as a result, at industry's request, FRA granted a revised waiver allowing installation of FBF crossing diamonds on Classes 2 through 5 track with crossing angles above 20 degrees unless movable guard rails are used. Among other conditions, the waiver required that newly installed FBF crossing diamonds be inspected daily during the first week of operation, weekly for the month after, and monthly

thereafter. The waiver also required the track owner to prepare maintenance manuals and properly train its personnel. The waiver was renewed in September 2015, and is set to expire in September 2020.

To date, no accidents have been reported to FRA as having occurred at or near FBFs. Accordingly, FRA believes that the safety benefits of FBFs have been proven and proposes to incorporate the waiver provisions into the regulation. Because the performance of the FBF crossing diamonds installed under the waiver is the primary basis for FRA's conclusion that these frogs are safe, FRA believes that it is in the best interests of public safety to retain, as much as reasonably possible, similar limitations imposed under the waiver.

V. Section-by-Section Analysis

FRA seeks comments on all proposals made in this NPRM.

Section 213.1 Scope of Part

Section 213.1 sets forth the scope of part 213. Paragraph (b) specifies that subparts A through F of part 213 apply to track Classes 1 through 5 and that subpart G and certain individual sections of subpart A apply to track Classes 6 through 9. FRA proposes to amend paragraph (b) of this section to reference proposed § 213.240 (continuous rail testing). Together with proposed § 213.240, this change would allow track owners to elect to use continuous rail testing conducted under § 213.240 on Class 6 through Class 9 track to satisfy the requirement for internal rail testing under § 213.339.

Section 213.5 Responsibility for Compliance

Section 213.5 specifies the parties responsible for compliance with part 213.

Paragraph (a)(3) of this section addresses persons responsible for overseeing operations over track that is known to be not in compliance with part 213. That paragraph requires operations over such track to be overseen by a person designated under § 213.7(a) who has “at least one year of supervisory experience in railroad track maintenance.” FRA is proposing to remove the requirement for the person overseeing operations on non-compliant track to have “one year of supervisory experience in railroad track maintenance.” This proposed change would conform to the proposed changes to § 213.7, which are discussed below.

Additionally, FRA proposes to add the following sentence to the end of paragraph (a)(3): “If the operation is on Continuous Welded Rail (CWR) track, the person under whose authority operations are conducted must also be designated under § 213.7(c).” This change is meant to clarify that in order for a person to authorize operations over CWR track that does not meet all the requirements of part 213, the person must be designated and qualified by the track owner under § 213.7(c) to inspect CWR track or supervise the installation, adjustment, and maintenance of CWR track.

Following issuance of a final rule, FRA will issue a schedule of civil penalties to provide guidance on penalties for violations of new and amended section of part 213. This guidance will be available on FRA’s website at www.fra.dot.gov. Because such penalty schedules are statements of agency policy, notice and comment are not required prior to their issuance. *See* 5 U.S.C. 553(b)(3)(A). Nevertheless, commenters are invited to submit suggestions to FRA describing the types of actions or omissions for each proposed or amended regulatory section that would subject a person to the assessment of

a civil penalty. Commenters are also invited to recommend what penalties may be appropriate, based upon the relative seriousness of each type of violation.

Section 213.7 Designation of Qualified Persons to Supervise Certain Renewals and Inspect Track

Section 213.7 requires track owners to designate qualified persons to inspect track and supervise certain track restorations and renewals, and specifies the records related to these designations a track owner must maintain. The section also requires these qualified persons to have “written authorization” from the track owner to prescribe remedial actions to address identified nonconformities in the track. Paragraph (a)(1) of this section specifically requires that a person designated to supervise the restoration and renewal of track under traffic conditions have, among other things, either one year of supervisory experience in railroad maintenance or a combination of supervisory experience in track maintenance and training. During the TSS Working Group meetings, some members expressed the view that the requirement for supervisory experience in paragraph (a)(1) was unreasonable. Those members asserted that as written, an employee cannot be qualified to supervise restoration and renewal of track under paragraph (a)(1) unless he or she has supervisory experience in track maintenance, yet the employee may only be able to gain supervisory experience if he or she is first considered qualified under paragraph (a)(1). FRA agrees that requiring supervisory experience to qualify under paragraph (a)(1) creates a possible conflict in the regulatory language and proposes to remove the supervisory requirement in the paragraph.

Paragraphs (a)(3), (b)(3), and (c)(4) each require that a qualified person possess

“[w]ritten authorization from the track owner to prescribe remedial actions.” Although FRA believes that the term “written” can be interpreted to encompass both physical hardcopies of an authorization as well as electronic authorizations, to avoid any possible confusion, consistent with the TSS Working Group’s recommendation, FRA proposes to remove the term “written” from each of these paragraphs. The change would make clear that the required authorizations may be recorded and conveyed either in hardcopy or electronic form.

Existing paragraph (e) of this section requires track owners to maintain “written records” of each designation in effect and the basis for that designation. Consistent with the proposed revisions to paragraphs (a)(3), (b)(3) and (c)(4), FRA proposes to revise this paragraph to remove the requirement to maintain “written” records. Records of designations made under § 213.7 can be either in hardcopy or electronic form. FRA proposes to add new paragraph (e)(2) to require records of designations under § 213.7 to include the date each designation is made. TSS Working Group members expressed the view that the date of an individual’s designation is relevant and important information both to the track owner and to FRA, and FRA believes most, if not all, track owners already include this in their designation records. To incorporate this proposed revision, existing paragraph (e)(2) would be redesignated as paragraph (e)(3) and revised to require records to contain not only the basis for each designation as existing paragraph (e)(2) currently requires, but also to require track owners to include the method used to determine that the designated person is qualified. This change is intended to better conform with the requirements of existing § 213.305(e) for high-speed operations, and

better describe what FRA means by the “basis for each designation.” To meet this requirement, a track owner could include information about the nature of any training courses the designated person participated in and how the track owner determined that the designated person successfully completed the course (e.g., test scores, demonstrated proficiency, etc.).

Existing paragraph (e)(3) also requires designation records under § 213.7 to include records of track inspections “made by each designated qualified person.” FRA proposes to remove the requirement as FRA finds it to be redundant when considering the current requirements of § 213.241, Inspection records. Under existing § 213.241, track owners are required to maintain records of track inspections made by qualified inspectors and make those records available to FRA. Accordingly, existing paragraph (e)(3) would be redesignated as new paragraph (f) and revised. As under the existing regulation, a track owner would be required to make the records kept under paragraph (e) available for inspection and copying by FRA. FRA proposes rephrasing the paragraph to require that FRA make its request for records during normal business hours and provide the track owner “reasonable notice” before requiring production. The meaning of the term “reasonable notice” depends on the specific facts of each situation (e.g., time of day, day of the week, number of records requested, etc.). FRA does not intend these revisions to substantively change recordkeeping requirements or FRA’s existing inspection practices. These revisions are primarily intended to clarify how FRA currently enforces the regulation.

Section 213.9 Classes of Track: Operating Speed Limits

Section 213.9 sets forth the maximum allowable operating speeds for both passenger and freight trains for excepted track, and track Classes 1 through 5 (track speeds up to 90 miles per hour for passenger trains and up to 80 mph for freight trains). Paragraph (b) of this section addresses situations in which a track segment does not meet the requirements for its intended class and specifies that if a segment of track does not at least meet the requirements for Class 1 track, operations may continue under the authority of a person designated under § 213.7(a) “who has at least one year of supervisory experience in railroad track maintenance” for up to 30 days. Consistent with the revisions proposed to § 213.7(a), FRA proposes to revise this paragraph to remove the requirement that a person designated under § 213.7(a) have a least one year of “supervisory” experience in railroad track maintenance. Please see the above discussion of § 213.7(a).

Section 213.11 Restoration or Renewal of Track Under Traffic Conditions

Existing § 213.11 requires operations over track undergoing restoration or renewal under traffic conditions and not meeting all the requirements of part 213 to be conducted under the continuous supervision of a person designated under § 213.7(a) with “at least one year of supervisory experience in railroad track maintenance.” Consistent with the proposed changes to § 213.7(a), FRA proposes to remove the requirement that the person supervising restoration or renewal of track under traffic conditions have a minimum of one year of “supervisory” experience in track maintenance. Additionally, FRA proposes to add the requirement that if the restoration or renewal is on continuous welded rail (CWR) track, the person must also be qualified under § 213.7(c). Because §

213.7 already requires that anyone designated under § 213.7(a) or (b) who inspects or supervises maintenance of CWR track must also be designated under § 213.7(c), this change to § 213.11 is simply a clarifying revision that restates the existing regulatory requirement.

Additionally, FRA proposes adding a sentence stating the “operating speed cannot be more than the maximum allowable speed under § 213.9 for the class of track concerned.” This is meant to clarify that the person designated under § 213.7(a), and (c) if applicable, may not authorize movement over the track the person is supervising at speeds greater than the maximum allowable operating speed for the class of track concerned.

Section 213.113 Defective Rails

Section 213.113 prescribes the required actions that must be taken when a track owner learns that a rail contains an indication of a defect and after the track owner verifies the existence of the defect. FRA proposes to modify the second sentence in paragraph (b) so that it begins with “except as provided in § 213.240,” This change is simply meant to clarify that the requirement that an indication of a defect be verified within four hours would not apply if a track owner elects to conduct continuous testing under proposed § 213.240.

Section 213.137 Frogs

Section 213.137 contains the standards for use of frogs. Existing paragraph (a) prescribes limits on the flangeway depth of a frog. On June 27, 2000, FRA granted a waiver (docket number FRA-1999-5104) to members of the railroad industry allowing

the installation of flange-bearing frogs (FBFs) used in crossing diamonds in track Classes 2 through 5, and exempting those diamonds from the flangeway depth requirements of paragraph (a), subject to certain conditions. As discussed in more detail in section II.C of this NPRM, the waiver was renewed multiple times, most recently on September 17, 2015, and will expire on September 17, 2020. After careful review of safety performance under the waiver and analysis of track-caused derailments, FRA has not identified any negative safety implications for use of FBFs.

Based on the above, as well as the discussion in section II.C of this NPRM, FRA proposes to modify § 213.137 by adding paragraph (e) and allowing the use of FBFs in crossing diamonds in Classes 2 through 5 track consistent with the conditions of the existing waiver.² Because the performance of the FBFs installed under the waiver is the primary basis for FRA's conclusion that these crossing diamonds are safe, FRA believes that it is in the best interests of public safety to retain, as much as reasonably possible, the same limitations imposed under the waiver.

The limitation in proposed paragraph (e)(1) would require the crossing angle to be greater than 20 degrees unless movable guard rails are used. When a crossing diamond has a smaller crossing angle, there is a heightened risk of damage to the rail head when the wheel flange crosses over it. Proposed paragraph (e)(2) would require that the track owner document the location, crossing angle, tonnage, speed, direction, and type of traffic for each FBF utilized under paragraph (e). Type of rail traffic means passenger, freight, and hazardous material. This information would be required to be made available

² As noted above, § 213.137(d) already allows the use of FBFs in Class 1 track.

to FRA upon request following reasonable notice during normal business hours.

Proposed paragraph (e)(3) would require the track owner to prepare a maintenance manual for FBFs in crossing diamonds and make copies of that manual available to all personnel responsible for inspecting or repairing any such FBFs.

Proposed paragraph (e)(3) would also require that all personnel responsible for inspecting or repairing any FBF in a crossing diamond be properly trained. FRA does not specify what must be included in the maintenance manuals or covered in the training. Instead, FRA expects that a manual would include all necessary information relevant to the successful inspection and maintenance of an FBF and organized in a manner that allows the person performing the inspection or maintenance, or both, to find the information in a timely fashion. Maintenance manuals can be prepared by entities other than the track owner (e.g., the manufacturer of the FBF or the railroad). Training must be of a sufficient duration and quality to ensure the trainee has a sufficient understanding to properly inspect and maintain FBFs. Additionally, the railroad or track owner must ensure that the trainee is actually “trained.” This could be accomplished, for example, through testing, on-the-job mentoring, or any other means sufficient to demonstrate that the trainee fully understands and retains the information necessary to properly inspect and maintain FBFs. FRA invites comment on whether FRA’s intent to implement the rule in this manner and the proposed meaning of the terms used in paragraph (e)(3) should be defined in the rule text.

FRA has not proposed to adopt the condition, included in the waiver, mandating an increased inspection frequency for FBFs. Under the waiver, track owners are required

to inspect a newly-installed FBF daily during the first week of operation, and weekly for the month thereafter. Since FBFs have been proven safe under the long-standing waiver and the waiver has produced no data that FRA is aware of indicating a higher likelihood for defects in newly-installed FBFs when compared to traditional frogs, FRA does not believe these increased inspections are warranted and has not proposed to include that condition. FRA invites comment on whether this condition should be included in the final rule and, if so, any data that would justify such inclusion.

Section 213.143 Frog Guard Rails and Guard Faces; Gage

This section prescribes a minimum and maximum value for guard check and guard face gages, respectively. Guard check gage is the distance between the gage line of a frog and the guard line of its guardrail or guarding face. Allowable minimum dimensions vary with track classification, *i.e.*, train speed.

As discussed in more detail in section IV.C of this NPRM, in 2003, FRA granted a waiver (docket number FRA-2001-10654) to members of the railroad industry allowing operation of trains at Class 5 speeds over a heavy-point frog (HPF) with guard check gages conforming to the standards for Class 4 track frogs. FRA granted three extensions of this waiver, most recently on February 15, 2018, and it will expire on February 15, 2023. After careful review of safety performance under the waiver and analysis of track-caused derailment data, FRA believes that the safety case has been proven and proposes to incorporate the waiver provision into the regulation. Because the performance of the HPFs installed under the waiver is the primary basis for FRA's conclusion that these frogs are safe, FRA believes that it is in the best interests of safety to retain, as much as

reasonably possible, the same limitations imposed under the waiver.

Consistent with the conditions of the existing waiver, FRA proposes the addition of footnote 3 to the table in § 213.143, which would allow the guard check gage for HPFs on Class 5 track to be less than the current 4 feet, 6¹/₂-inch minimum, but not less than 4 feet, 6³/₈ inches (the current minimum for frogs in Class 4 track). Proposed paragraph (a) of footnote 3 would require that each track owner maintain records of the location and description of each HPF and make that information available to FRA upon request during normal business hours following reasonable notice. Proposed paragraph (b) of footnote 3 would require that each HPF and guard rails on both rails through the turnout be equipped with at least three serviceable through-gage plates with elastic rail fasteners and guard rail braces that permit adjustment of the guard check gage without removing spikes or other fasteners from the crossties.

Proposed paragraph (c) of footnote 3 would require that each track owner provide proper maintenance manuals, instructions, and training to any § 213.7 designated employees who inspect track or supervise restoration and renewal of track, or both, in areas that include turnouts with HPFs. As with the proposed revisions to § 213.137, FRA does not specify what must be included in the maintenance manuals or covered in the training. Instead, FRA expects that a manual will include all necessary information relevant to the successful inspection and maintenance of an HPF and organized in a manner that would allow the person performing the inspection or maintenance, or both, to find the information in a timely fashion. Maintenance manuals can be prepared by entities other than the track owner (e.g., the manufacturer of the HPF or the railroad).

Training likewise must be of a sufficient duration and quality to ensure the trainee has a sufficient understanding to properly inspect and maintain HPFs. Additionally, the track owner must ensure that the trainee is trained. This can be accomplished, for example, through testing, on-the-job mentoring, or any other means sufficient to demonstrate that the trainee fully understands and retains the information necessary to properly inspect and maintain HPFs. FRA invites comment on whether FRA's intent to implement the rule in this manner and the proposed meaning of the terms used in paragraph (c) should be defined in the rule text.

Finally, proposed paragraph (d) of footnote 3 would require that each HPF bear an identifying mark that identifies the frog as an HPF. This mark can be applied by the track owner, railroad, or the HPF manufacturer. The mark used must be described in the instructions given to the employees discussed in proposed paragraph (c). The identifying mark must be of a type and size, and in a location, that will allow the employees to quickly and effectively determine that it is an HPF.

Section 213.233 Visual Track Inspections

Section 213.233, currently titled "Track inspections," sets forth general requirements for the frequency and method of performing required visual track inspections on excepted track and track Classes 1 through 5. To better reflect the scope of this section, FRA proposes to add the word "visual" to the section heading so that it would read "Visual track inspections." No substantive change is intended. Because other sections in part 213 for these track speeds cover different types of inspections and inspection methods (e.g., automated inspections, inspections of rail, etc.), this proposed

change would clarify that this section deals specifically with visual track inspections. This proposal is also consistent with the current heading for the corresponding high-speed track section, § 213.365, “Visual inspections.” As discussed below, FRA proposes to revise the heading for § 213.365 so that the headings are the same for both §§ 213.233 and 213.365.

Paragraph (b) of this section requires visual track inspections to be made on foot or by “riding over” the track at a speed allowing the inspector to visually inspect the track structure for compliance; and, when inspecting from a vehicle, this section sets the vehicle’s maximum speed at 5 m.p.h. when “passing over” track crossings and turnouts. Paragraph (b) also specifies that one inspector in a vehicle may inspect up to two tracks at one time under certain conditions, including that the second track is not centered more than 30 feet from the track upon which the inspector “is riding.” Similarly, two inspectors may inspect up to four tracks from one vehicle under certain conditions, including that the second track center is within 39 feet from the track on which the inspectors “are riding.” For grammatical consistency throughout this section, FRA proposes revising the terms “riding over” and “passing over” to “traversing” in this paragraph and, for the same reason, FRA is also proposing to revise the terms “is riding” and “are riding” to “traverses” and “traverse.”

Additionally, FRA proposes removing the terms “upon which” from paragraphs (b)(1) and (2), and changing “is actually” to “must be” in paragraph (b)(3). These changes are not meant to affect the meaning of § 213.233, but are instead made for grammatical consistency.

As discussed in more detail above in section IV.B of this NPRM, FRA proposes to remove the last sentence of paragraph (b)(3), also known as the high-density commuter line exception. Paragraph (b)(3) requires, among other things, that each main track be traversed by a vehicle or inspector on foot at least once every two weeks, and every siding at least every month. The high-density commuter line exception currently applies where track time does not permit on-track vehicle inspection and where track centers are 15 feet or less apart and exempts those operations from the inspection method requirements of paragraph (b)(3). FRA's proposal to remove this exception is directly responsive to Congress's direction in sec. 11409 of the FAST Act and NTSB's Safety Recommendation R-14-11. In addition, FRA understands that no track owner currently utilizes this exception, so its removal will have little to no impact on the regulated industry.

FRA proposes three revisions to paragraph (c). First, FRA proposes to add the word "visual" before "track inspection" in the introductory text. This is simply to make paragraph (c) consistent with the new heading for § 213.233 and has no effect on the meaning of paragraph (c). Second, FRA proposes adding footnote 1 after the word "weekly" in the table in paragraph (c). The proposed footnote defines the term "weekly" to be a seven-day period beginning on Sunday and ending on Saturday. This definition is consistent with FRA's past interpretation and enforcement practice, as well as FRA's public guidance included in Volume II, Chapter 1, of the Track and Rail and Infrastructure Integrity Compliance Manual, March 1, 2018, available on FRA's public eLibrary website (<https://www.fra.dot.gov/eLib/Find>).

Third, FRA proposes to add footnote 2 after the term “passenger trains” in the table in paragraph (c). The proposed language was suggested to the TSS Working Group by the Rail Heritage Association and FRA agrees that it would reduce unnecessary burden on certain regulated entities while not negatively impacting safety. This proposed footnote would exempt, in two situations, entities from the required twice-weekly inspection requirement for track carrying passenger trains if the passenger train service consists solely of tourist, scenic, historic, or excursion operations as defined in 49 CFR 238.5. In the first situation, this exemption would apply where no passenger service is operated over the track during the inspection week. In the second situation, this exemption would apply where passenger service is operated during the inspection week but only on a weekend (Saturday and Sunday) or a 3-day extended weekend (Saturday and Sunday plus either a contiguous Monday or Friday) and an inspection is conducted before, but not more than one day before, the start of the weekend or 3-day extended weekend.

FRA also proposes to revise paragraph (d). Specifically, FRA proposes the addition of the phrase “the § 213.7 qualified” at the beginning of the paragraph to clarify that “the person” making the inspection that the existing rule text refers to is the qualified track inspector designated under § 213.7. Additionally, FRA proposes adding a sentence at the end of paragraph (d) stating that any subsequent movements to facilitate repairs on track that is out of service must be authorized by a § 213.7 qualified person. This section is silent as to whether or when movement over track that is out of service is permissible. FRA recognizes that certain movements are necessary to facilitate repairs and therefore

does not interpret or enforce the current regulatory language to bar such movements of equipment and materials on track that is out of service. The proposed revision is meant to embody that practice and interpretation and prevent possible confusion.

Section 213.240 Continuous Rail Testing

FRA proposes to add this new section to allow track owners to satisfy the requirements for internal rail inspections under § 213.237, or § 213.339 (for Class 6 track and higher), using continuous rail testing. This proposed section would allow for greater flexibility in the rail flaw detection process and additional time to analyze the data collected during continuous rail testing and field-verify indications of potential rail flaws. This additional time allotment would allow for improvements in planning and execution of rail inspections and rail defect remediation, thereby lessening the impact on rail operations. As a result, more track time should become available to conduct maintenance and increase inspections. However, as continuous testing is a more complex process compared to the traditional stop-and-verify rail inspection, certain conditions must be met to ensure that this elective process is conducted properly and provides sufficient recordkeeping and transparency to allow for adequate oversight by FRA.

The continuous rail test method consists of a vehicle using ultrasonic testing, in some cases augmented by other flaw detection systems, to detect defects in the rail. The raw test data is transmitted from the vehicle to a centralized location to be analyzed by a team of experts, using multiple advanced techniques, including comparison to past data from the same location (sometimes referred to as “change detection”). Once analyzed, suspect locations (locations where the data indicates the possible presence of a rail

defect) are then transmitted back to the field for on-site verification to determine if an actual rail flaw exists.

Under existing § 213.113(b), when a track owner learns that a rail contains an indication of one of the defects listed in the table in § 213.113(c), the track owner must field-verify the indication within four hours. Proposed § 213.240 would exempt track owners who elect to utilize continuous rail testing from the requirement to field-verify the indication within four hours. This increased verification period is justified by the logistical and safety benefits of continuous rail testing. Because the test vehicle does not have to stop and verify each suspected defect, more track can be inspected at greater speeds with significantly less interruption to revenue service. The more time-consuming analysis of the test data can be conducted at an off-site location and reviewed at an optimal speed not related to the speed of the test vehicle. Additionally, the test data can be more thoroughly compared to past test runs over the same section of track to better identify possible defect propagation and growth. The decreased interruption to revenue service would also allow track owners to test track more frequently. FRA believes that continuous rail testing would substantially decrease the overall cost to the railroad industry while not negatively affecting safety.

As noted in section IV.A above, since 2009, a number of railroads have implemented continuous rail testing programs through limited, conditional waivers of 49 CFR 213.113(b). That section requires track owners, who learn that a rail in their track contains an indication of a defect listed in the table in § 213.113(c), verify the indication within four hours and take remedial action in accordance with the table. The remedial

action table in § 213.113(c) prescribes the required remedial actions (and timelines for taking those actions) based on the severity of the defects identified. In other words, based on the size and severity of specific types of defects, there is a built-in safety threshold in the remedial action table for each known defect depending on the defect type and size. Generally, the waivers FRA has granted to date allowing railroads to conduct continuous rail testing programs provide railroads with a longer period of time to verify indications of defects than permitted by § 213.113(b), and allow railroads to prioritize the verification and remediation of those defects based on the severity of the indications and defects identified. Suspect indications of defects are not prioritized arbitrarily, but are put into categories based on ultrasonic reflective responses as viewed by the analyst.

Under the continuous rail test process, analysts interpret the collected ultrasonic reflective responses, which allows them to estimate the defect type and size. As explained in more detail below, when these responses indicate a suspected defect above the threshold that, if verified, would require remedial action note “A,” “A2,” or “B” under the table contained in § 213.113(c), that suspect location must be field-verified within the timeframe listed in proposed § 213.240(e)(2), and is commonly referred to in the industry as a “priority one.” The “A,” “A2,” and “B” remedial actions are required when a defect is at or above a specific size as outlined in the table in § 213.113(c).

Those suspected defects that, if verified, would not require remedial actions “A,” “A2,” or “B,” must be field-verified within the timeframe listed in proposed § 213.240(e)(1), and are commonly referred to in the industry as either a priority two or a priority three, depending on the clarity of the indication. Often, when the ultrasonic test

data produces a response where the analyst believes a defect is present because of the strength of the ultrasonic reflective signal, but that signal does not indicate a suspect defect of the type and/or size requiring remedial action “A,” “A2,” or “B,” the track owner lists the indication as a priority two. All other suspect locations identified by the analyst as potential defects or questionable ultrasonic responses are often marked as priority three suspect locations by the track owner. These so-called priority threes are indications where the ultrasonic reflective data does not produce a clear indication of defect type or size, but produces an unfamiliar or questionable response. Since many variables affect ultrasonic responses, the priority three suspect type is the most commonly used since it requires the hand verifier to check that location to ensure nothing is being missed or misinterpreted that might result in a rail failure and subsequent derailment.

The § 213.113(c) remedial action table reflects the fact that all verified defects pose a potential risk of sudden failure, depending on conditions, even with defects deemed to be less severe than others. Regardless of the defect size and type, once a rail failure occurs, there is a potential for a catastrophic accident. Data from the existing waivers demonstrates that, while less than 2% of the suspected priority three defects are found to be actual rail defects, priority three defects account for approximately 85% of the field-verified defects marked and removed from the tracks as a result of continuous testing. Thus, while priority three defects have a much higher probability of a false positive, they are also by far the most common indication of an actual defect. Accordingly, FRA believes that safety necessitates continuing to require the field verification of all defects

identified by tests carried out under § 213.237 or § 213.239.

FRA requests comment, however, on the feasibility and desirability of establishing a generally applicable, performance-based requirement differentiating different categories of defects and appropriate field verification and remediation requirements, and whether there are any types of defects that should be exempted from field verification and/or remediation requirements.

Proposed paragraph (a) would allow track owners to use continuous rail testing instead of complying with § 213.113(b), provided the track owner complies with the minimum requirements of § 213.240. Proposed paragraph (a) also makes clear that the track owner must still comply with all other requirements of § 213.113, as well as all requirements of proposed § 213.240. Specifically, proposed § 213.240 would not make any changes to the remedial action(s) a track owner must take after field verification of a suspect location determines a rail defect does exist. In other words, § 213.240 provides additional time to field-verify a defect, but once verified, the track owner must immediately take appropriate remedial action as described in § 213.113(c).

Proposed paragraph (b) outlines the minimum procedures that a track owner must adopt to conduct continuous rail testing under § 213.240. Prior to starting a continuous testing program, a track owner must adopt procedures that comply with this section. Rail testing is vital to the prevention of track-caused accidents, and documented procedures are necessary to ensure continuous rail testing works consistently and effectively, and that those involved understand their responsibilities and have a resource they can consult if they have any questions. These minimum procedures are designed to allow each track

owner flexibility in determining the best approach to conduct continuous testing.

Proposed paragraph (b)(1) would require continuous rail testing procedures address how test data will be transmitted and analyzed. This would include how the test data is transmitted from the test vehicle to the offsite facility for analysis and how the analyzed test data and findings are to be transmitted to those responsible for field verification and remediation. The procedures must also cover how the data is to be analyzed, including comparing the test data to data from prior test runs. The provision is intentionally general to allow track owners to tailor their procedures to their own circumstances and gives the necessary flexibility for those procedures to be revised as new information and technology becomes available. The lines of communication and means of analysis must be covered in the track owner's procedures so that the parties involved understand the process. This is vitally important because an error in how the data is transmitted or analyzed can result in a rail defect going undetected or unaddressed, potentially causing a derailment.

Proposed paragraph (b)(2) would require continuous rail testing procedures address how suspect locations are to be identified for field verification. As discussed in greater detail below, proposed paragraphs (e) and (f) would require the suspect location be identified and recorded in a manner that allows the qualified person under § 213.238 to accurately locate the suspect location with repeatable accuracy during field verification. Proposed paragraph (b)(2) requires the continuous rail testing procedures cover how that is to be done—for example, what information will be provided to the personnel responsible for field verification (e.g. GPS coordinates) and, if necessary, what

steps must those personnel take to ensure they accurately use that information depending on the actual field conditions. Additionally, FRA understands that some entities currently performing continuous testing may require field-verifiers to coordinate with the person who conducted the analysis of the test data for certain categories of defects to ensure they accurately locate the suspect location. Track owners that adopt such a practice must include it in their procedures.

Proposed paragraph (b)(3) would require the procedures discuss how suspect locations will be categorized and prioritized according to their potential severity. As noted below, proposed paragraph (e) includes different time limits for field verification of suspected defects depending on their type. Proposed paragraph (b)(3) requires the track owner's procedures cover how those different categories of suspected defects will be designated as well as any additional categorization, or sub-categories, that the track owner decides to use. This would include what terminology the track owner decides to use for the different categories, and is necessary so that all parties involved can understand the reports and documentation created by the continuous testing process.

Proposed paragraph (b)(4) would require the procedures address how suspect locations will be field-verified, and is necessary so those responsible for field verification understand what they must do. Accurate field verification is a vitally important part of continuous testing, and rail testing in general, because it is the process by which the track owner determines whether a rail defect exists or not, and if so, how serious. As with all the minimum procedures in proposed paragraph (b), the provision is intentionally general and intended to give flexibility to the track owner to determine how best to effectively

field-verify. New research and technology may change how field verification is conducted, and this provision is intended to allow the procedures to be revised accordingly.

Proposed paragraph (b)(5) would require continuous testing procedures cover how suspect locations will be designated following field verification. The designation of suspect locations following field verification should, at minimum, allow the reviewing individual to determine the outcome of the field verification and, if a rail defect was found, the type and size of the defect. In other words, proposed paragraph (b)(5) would require the procedures explain the process for how the results of field verification will be recorded and the terminology used by the track owner to note the outcome and findings. If field verification does not confirm a defect exists at a suspect location, the designation may specify the reason(s) why the continuous test data indicated a suspect location (e.g., the presence of a surface condition).

Proposed paragraph (c) would require the track owner to designate and record the type of rail test to be conducted, whether continuous or stop-and-verify, prior to commencing the testing. Track owners may elect to conduct continuous testing in conjunction with stop-and-verify rail testing. However, a determination must be made prior to commencement of the test as to which type of test will be conducted on a given section of track, and that decision must be properly documented to ensure that the effectiveness of the inspection can be adequately evaluated for efficacy and reporting requirements. If the type of rail testing changes after the test has been commenced, the track owner must document that change, including the time the test was initially started,

the time it was changed, the milepost where the test started, the milepost where the test changed, and the reason for the change. These records must be made available to FRA upon request during regular business hours following reasonable notice. To conduct oversight and ensure safety, FRA must know the type of test utilized on a section of track, because the type of test will dictate both the necessary procedures and, more importantly, the required time period for field verification of a suspected defect.

Additionally, proposed paragraph (b)(1) would require that at least 10 days prior to commencement of a continuous rail test, the track owner must designate and record whether the test is being conducted to satisfy the requirement for an internal rail inspection under § 213.237, or § 213.339 where applicable. As discussed in greater detail above, track owners are required to conduct a sufficient number of internal rail inspections to satisfy the requirements of § 213.237, or § 213.339 where applicable. A continuous rail test conducted to meet the minimum number of required internal rail inspections must comply with proposed § 213.240, including the field verification requirements under proposed paragraph (e). Track owners are of course permitted to conduct continuous rail tests above and beyond the minimum requirements of § 213.237, or § 213.339 where applicable. Those additional rail tests (that are not intended to meet the minimum number required by § 213.237, or § 213.339 where applicable), are not required to meet the requirements of proposed § 213.240, and the track owner therefore cannot rely on such tests to demonstrate compliance with either § 213.237 or § 213.339. As such, the track owner must designate and record whether the test is being conducted to satisfy the minimum frequency requirements of § 213.237, or § 213.339 where

applicable, at least 10 days in advance of the test so that FRA can conduct oversight and ensure the proper procedures are being followed.

Proposed paragraph (d) lists required qualifications for certain persons involved in key aspects of the continuous testing program. Proposed paragraph (d)(1) would require that an operator of a continuous rail test vehicle be qualified under § 213.238. Section 213.238 lists the qualification requirements for operators of rail test vehicles conducting stop-and-verify rail testing. FRA believes that the same qualification requirements should apply to operators of continuous test vehicles because, like operators of stop-and-verify test vehicles, they must ensure that the vehicles conduct a valid search and function as intended, be able to interpret relevant equipment responses, and determine that a continuous valid search has been conducted.

Proposed paragraph (d)(2) would require that the internal rail inspection data be reviewed and interpreted by a person qualified to interpret the equipment responses. FRA is intentionally not proposing specific qualification requirements but instead proposes to leave it up to the track owner to ensure the necessary procedures are in place for its specific system so that the persons reviewing and interpreting the data have been properly trained and tested. An analyst may not necessarily need to have intimate knowledge of the inner workings of the test equipment, but must be trained on how to properly assess the equipment responses to determine when a possible rail defect exists and field verification is necessary. The track owner or a designee shall have a process in place to ensure all persons responsible for the interpretation of the data are competent and capable of that task. By using the word “qualified,” FRA does not simply mean that the

track owner has designated an individual as qualified. To be “qualified,” the persons must be properly trained and tested, and thus possess the necessary knowledge and ability to accurately and competently review and interpret the rail test data and properly identify suspected rail defects.

Proposed paragraph (d)(3) requires that all suspected locations be field-verified by a person qualified under § 213.238. FRA is aware that this is the same qualification required for the continuous test vehicle operators and believes that an understanding of the vehicle systems is necessary to accurately understanding the test data, find the suspected location, and successfully field-verify the suspected defect.

Proposed paragraph (e) would require that the continuous test process, at a minimum, produce a report containing a systematic listing of all suspected locations that may contain any defect listed in the Remedial Action Table of § 213.113(c). The suspect location must be identified with sufficient information so that a qualified person under § 213.238 can accurately locate and field-verify each suspected defect. FRA is intentionally not prescribing how a suspect location is identified and proposes to leave it up to the track owner because it may be affected by specific circumstances facing each track owner.

FRA notes that when proposed paragraph (e) is read in conjunction with proposed paragraph (f), the suspect location must be identified and recorded in a manner that allows the qualified person under § 213.238 to accurately locate the suspect location with repeatable accuracy. This could include Global Positioning System (GPS) coordinates, but for locations where GPS does not work, such as tunnels, the track owner must have

another procedure in place to accurately identify the exact location of the suspected defects. FRA also recognizes that the locations likely cannot be listed with perfect accuracy and that there must be some acceptable margin of error. Although FRA does not quantify the exact size of an allowable margin of error, it cannot be of a size that would affect the ability of the qualified person under § 213.238 to accurately locate the suspected defect noted on the report. For example, if the margin of error is too large, there is the risk that the qualified person may confuse the suspected defect noted on the report with another condition present in or on the rail in the vicinity of the actual suspected defect.

Proposed paragraphs (e)(1) and (2) contain specific timeframes in which field verification of suspected locations must be conducted. For purposes of verification timeframes, the indications are classified into two categories: those suspected defects that, if verified, would require remedial action note “A,” “A2,” or “B” in the Remedial Action Table; and all other defects. Additionally, indications of a possible broken rail with rail separation must be protected immediately. As discussed below, field verification would be required within 24 hours of completion of the test run for suspected defects falling into the first category and 72 hours for defects falling into the second category. Further, FRA understands that new technologies or processes may be developed that could allow for the collection of data to occur around-the-clock or for extended periods of time. Thus, FRA proposes adding an additional 12 hours to the verification time limits as the absolute maximum period within which a suspected defect must be field-verified.

Proposed paragraph (e)(1) would require, subject to the requirements of proposed paragraphs (e)(2) and (3), that the track owner field-verify any suspect location within 72 hours after completing the test run, or within 84 hours of the detection of the suspect location, whichever is earlier. This, along with proposed paragraphs (e)(2) and (3), would take the place of the current requirement that suspect locations be field-verified within 4 hours. Proposed paragraph (e)(1) would apply to any suspect location that does not indicate a broken rail with rail separation or indicate a suspected defect that, if verified, requires remedial action note “A,” “A2,” or “B” under the table contained in § 213.113(c). In other words, this proposed paragraph would apply to suspected defects that pose a slightly lower immediate safety risk than the ones covered in proposed paragraphs (e)(2) and (3). FRA believes allowing 72 hours from the completion of the test run, or 84 hours from detection of the suspect location, to field-verify the suspected defect would provide sufficient flexibility to conduct continuous rail testing and have the test data analyzed while also ensuring safe operations. FRA also recognizes that a single test run may span a significant distance and time. Thus, FRA proposes a maximum limit of 84 hours from detection of a suspect location to when it must be field-verified, regardless of when the test run has been officially completed.

Proposed paragraph (e)(2) would require that any suspect location containing a suspected defect that, if verified, would require remedial action note “A,” “A2,” or “B” under the table contained in § 213.113(c) must be field-verified no more than 24 hours after completion of the test run, or 36 hours after detection of the suspect location, whichever is earlier. The remedial action need not be the only required remedial action,

just one of the options. Thus, if remedial action note “A,” “A2,” or “B” are listed in the remedial action column (the last column) of the table in § 213.113(c), the defects associated with those remedial actions would be covered under proposed paragraph (c)(3) and any suspect location possibly containing one of those defects must be field-verified within the time required by proposed paragraph (c)(3). Based on the table in § 213.113(c), the covered defects include:

- All compound fissures;
- Transverse fissures 60 percent or greater;
- Detail fractures 60 percent or greater;
- Engine burn fractures 60 percent or greater;
- Defective welds 60 percent or greater;
- Horizontal split head greater than 4 inches or where there is a break out in the rail head;
- Vertical split head greater than 4 inches or where there is a break out in the rail head;
- Split web greater than 4 inches or where there is a break out in the rail head;
- Piped rail greater than 4 inches or where there is a break out in the rail head;
- Head web separation greater than 4 inches or where there is a break out in the rail head;
- Defective weld greater than 4 inches or where there is a break out in the rail head;

- Bolt hole crack greater than 1.5 inches or where there is a break out in the rail head;
- Broken base greater than 6 inches; and
- Ordinary breaks.

Proposed paragraph (e)(3) would require that the track owner have procedures in place to ensure adequate protection is immediately implemented where the continuous rail test inspection vehicle indicates a possible broken rail with rail separation. FRA intentionally does not specify what needs to be included in the procedures but expects the individual track owners to determine what is appropriate for their specific operations. At a minimum, these procedures would need to include specific communication channels, open at all times continuous rail testing is conducted and data is being analyzed, among the individuals who can take the necessary steps to immediately implement adequate protection. A track owner may not wait until the suspected broken rail with rail separation is field-verified. The visual indication from the analyst alone is sufficient.

Proposed paragraph (e)(4) states that a suspected location is not considered an actual rail defect under § 213.113(c) until it has been field-verified by a person qualified under § 213.238. Thus, a track owner would not be required to implement the remedial actions listed in the table contained in § 213.113(c) until a suspected location is field-verified, or, as provided in proposed paragraph (e)(5), the required time period to conduct field verification has elapsed. Proposed paragraph (e)(4) goes on to state that once a suspected location is field-verified and determined to be a defect, the track owner must immediately perform all remedial actions required by § 213.113(a).

Proposed paragraph (e)(5) would require that if a suspected location is not field-verified within the time required by proposed paragraph (e)(1) or (2), it must be immediately protected by applying the most restrictive remedial action outlined under the table contained in § 213.113(c) for the suspected type and size of the suspected defect. The protection must cover a sufficient segment of track to assure coverage of the suspected location until field verification. Thus, if the size of a defect is not immediately clear, the protection must provide a safety margin and cover a larger segment of track to ensure the limits of the suspected defect are included in the protection.

Proposed paragraph (f) would require that each suspect location be recorded with repeatable accuracy that allows for the location to be accurately located for subsequent field verification and remedial action. As the continuous testing process allows track owners to conduct field verifications well after the inspection equipment traverses a track segment, it is critical that each suspect location be accurately identified. A cornerstone of the entire process is that each suspect location is recorded with repeatable accuracy such that true and valid field verifications may be conducted. This can be accomplished through a variety or combination of methods, including use of GPS and measuring from known reference points. When GPS is used, procedures must be adopted that allow verifiers to be able to accurately find those suspect locations in areas where the signals for GPS are compromised or otherwise rendered unreliable, such as in tunnels, cut sections, or near buildings. When determining the appropriate procedures to follow, track owners should be particularly mindful of scenarios in which GPS is unreliable and few track features exist, such as can result with some rail that is rolled in weld-free

segments that exceed one-tenth of a mile in length.

Proposed paragraph (g) would require that track owners utilizing continuous rail testing submit an annual report to the FRA Associate Administrator for Railroad Safety/Chief Safety Officer no later than 45 days following the end of each calendar year. This would apply only to track owners that have conducted continuous rail testing within the previous calendar year. Continuous testing programs have been trialed through temporary waivers granted to several railroads throughout the country; however, it is important to continue monitoring the overall impacts and efficacy of the process. As proposed, only railroads choosing to conduct continuous rail testing would be required to submit an annual report. This proposed reporting requirement is designed to provide sufficient data to enable a comparison of the results and effectiveness of continuous rail testing, as compared to the results and effectiveness of inspections by railroads who do not use continuous rail testing. The annual report will also allow FRA to monitor the effectiveness of individual railroads' specific continuous testing processes and programs, and compare results on a micro level for specific railroads. Furthermore, as innovation and technology evolve, it is critical to the success of the safety improvement process to collect and analyze this data for positive trend exploration.

FRA will utilize the data provided in each railroad's annual report to match service failure rates with testing frequencies to correlate the impact of increased testing frequencies and the run over run comparison data to the accident rate. This will help ensure that the anticipated safety improvements resulting from the proposed modifications are realized. In addition, FRA intends to analyze and share the data with

railroads to inform continuous process improvement, as done during the lengthy waiver history for continuous rail testing. Finally, the information should also serve as a valuable input to FRA's ongoing research on potential commonalities in rail geometry and rail defect growth patterns, to aid the industry in its continuous effort to mitigate the risk of track caused derailments.

The annual report must be in a reasonably usable format, or its native electronic format, and contain at least all the information required by proposed paragraphs (g)(1) through (10) for each track segment requiring internal rail inspection under either § 213.237 or § 213.339. Specifically, the submission must include the track owner's name (g)(1); the name of the railroad division and subdivision (g)(2); the segment identifier, milepost limits, and length of each segment (g)(3); the track number (g)(4); the class of track (g)(5); the annual million gross tons over that segment of track (g)(6); the total number of internal rail tests conducted over each track (g)(7); the type of internal rail test conducted on the segment, whether continuous rail test or stop-and-verify (g)(8); and the total number of defects identified over each track segment (g)(9), which would include only the defects that have been field-verified and determined to be actual defects. Proposed paragraph (g)(10) would also require the total number of service failures on each track segment.

This information would be necessary for FRA to ensure safe operations and monitor the effectiveness of continuous rail testing and the requirements of this regulation as proposed. For FRA to fulfill its responsibilities to oversee railroad safety and the implementation of continuous testing, the agency must receive sufficient data to

effectively perform its functions, while not placing undue burden on the industry.

Accordingly, the proposed annual reporting requirements are intended to provide a high-level review for FRA to ensure that the continuous testing process would be consistently carried out in a proper manner.

Section 213.241 Inspection Records

Section 213.241 provides that track owners keep a record of each inspection required to be performed under part 213, subpart F. Paragraph (b) of this section requires that each record of inspection under certain sections include specific information, be prepared on the day the inspection is made, and be signed by the person making the inspection. FRA proposes revising paragraph (b) by adding § 213.137 to the list of sections that require inspections for which records must comply with the requirements of paragraph (b). This addition is necessitated by the proposed revision to § 213.137, specifically the incorporation of the waiver allowing the use of FBFs. One of the requirements for the use of FBFs under proposed § 213.137(e)(3) is that they must be inspected at specific intervals. Records of those inspections must be kept and comply with § 213.241(b).

FRA proposes adding the phrase “or otherwise certified” after “signed” in paragraph (b), and thus require that records be “signed or otherwise certified by the person making the inspection.” This is meant to clarify that a record does not have to be physically signed by the person making the inspection. The track owner can choose to use other methods to allow an inspector to certify an inspection record, provided that the method accurately and securely identifies the person making the inspection. Third, FRA

proposes to add three elements to the list of information that must be included in an inspection record. Specifically, FRA proposes that the record must include the author of the record, the type of track inspected, and the location of the inspection. FRA believes this information is already included in most, if not all, of the inspection records currently produced by the railroad industry. The proposal is therefore intended to emphasize the importance of this information and should have little, if any, impact on recordkeeping practices. The remaining edits to paragraph (b) are simply technical edits that have no effect on the intent of the paragraph. Specifically, FRA proposes changing “owner” to “track owner” at the beginning of the last two sentences. FRA also proposes removing “either” before the word “maintained” in the last sentence and changing “10 days notice” to “10 days’ notice.”

FRA proposes redesignating current paragraphs (f) and (g) as paragraphs (i) and (j), respectively, and revising them, and adding new paragraphs (f), (g), and (h). Proposed paragraph (f) would list the recordkeeping requirements for continuous testing performed under proposed § 213.240. These are similar to the current recordkeeping requirements for internal rail inspections conducted under § 213.237. Proposed paragraph (f)(1) would require the track owner’s continuous rail testing records include all information required under proposed § 213.240(e). Broadly, this would require the track owner to produce a report containing a systematic listing of all suspected locations, and is explained in greater detail above. Proposed paragraph (f)(2) would require that the records state whether the test is being conducted to satisfy the requirements for an internal rail inspection under § 213.237. As discussed in more detail above, this is

necessary information because it is relevant to whether the track owner must comply with the field verification time limits in proposed § 213.240(e). Proposed paragraph (f)(3) would require that the continuous rail testing records include the date and time of the beginning and end of each continuous test run, as well as the date and time each suspect location was identified and field-verified. Proposed paragraph (f)(4) would require that the continuous testing records include the determination made for each suspect location after field verification. This must include, at a minimum, the location and type of defect, the size of the defect, and the initial remedial action taken, if required, and the date thereof. Finally, proposed paragraph (f)(5) would require that these records be kept for two years from the date of the inspection, or one year after initial remedial action, whichever is later.

Proposed paragraph (g) is similar to existing paragraph (e). It would require any track owner that elects to conduct continuous testing under proposed § 213.240 to maintain records sufficient for monitoring and determining compliance with all applicable regulations and make those records available to FRA during regular business hours following reasonable notice. For example, the track owner must keep sufficient records of procedures enacted to comply with proposed § 213.240(b) as well qualification procedures under § 213.238. The meaning of the term “reasonable notice” would depend on the specific facts of each situation (e.g., time of day, day of the week, number of records requested, etc.).

Proposed paragraph (h) states that track inspection records, meaning each inspection record created under § 213.241, shall be available to persons who performed

the inspections and to persons performing subsequent inspections of the track segment. This is vitally important to ensure the quality and effectiveness of track inspections, and FRA believes that in most cases this is already being done, as it is required, at least for electronic inspection records, under existing § 213.241(g)(7). A person performing a subsequent inspection must have an understanding of the track condition during previous inspections to effectively recognize significant changes in the track condition as well as ensure that previously-noted defects are adequately protected, have been adequately remediated, or have not degraded to a degree that requires further action.

FRA proposes redesignating existing paragraph (f) as paragraph (i) and revising it by adding to the end of the paragraph “during regular business hours following reasonable notice.” The meaning of the term “reasonable notice” would depend on the specific facts of each situation (e.g., time of day, day of the week, number of records requested, etc.).

FRA proposes redesignating existing paragraph (g) as paragraph (j) and revising it. FRA first proposes to reword the introductory language of the paragraph (g) to make it clearer. The new language allows a track owner to create, retain, transmit, store, and retrieve records by electronic means for purposes of complying with this section. The proposed change to this language is not meant to affect the meaning or intent of this paragraph.

Further, in redesignating paragraph (g) as paragraph (j), FRA would remove existing paragraphs (g)(5) through (7). Existing paragraph (g)(1) would be redesignated as paragraph (j)(3), existing paragraph (g)(2) would be redesignated as paragraph (j)(5),

and existing paragraph (g)(3) would be redesignated as paragraph (j)(4). Proposed new paragraphs (j)(1) and (2) would be added. FRA believes the proposal would preserve the intent of existing paragraph (g), ensuring the integrity of electronic records, while increasing clarity and allowing track owners additional flexibility without negatively impacting safety.

Proposed paragraph (j)(1) would require that the system used to generate the electronic records meet all the requirements and include all the information required under subpart F. Proposed paragraph (j)(2) would require that the track owner monitor its electronic records database to ensure record accuracy. FRA would intentionally leave it up to the track owner to determine the best way to effectively monitor, protect, and maintain the integrity and accuracy of its records database. FRA proposes that existing paragraph (g)(1) be redesignated as paragraph (j)(3) and revised to require that the electronic system be designed to uniquely identify the author of each record and prohibit two persons from having the same electronic identity. This is a simplified rephrasing of the requirements of existing paragraph (g)(1).

FRA proposes that existing paragraph (g)(3) be redesignated as paragraph (j)(4) and slightly revised. Proposed paragraph (j)(4) would require that the electronic system ensures each record cannot be modified or replaced in the system once the record is completed. The one meaningful change is that proposed paragraph (j)(4) would prohibit modification once the record is completed while existing paragraph (g)(3) prohibits modification once the record is transmitted and stored. FRA recognizes that there are times when an inspection record may include information that cannot be entered until a

later date, such as the date of final repair. Proposed paragraph (j)(4) would therefore allow for modification of a record, provided the modification is made by the original author of the record or the author of the modification is identified in the record, after the record has been transmitted but before the record has been fully completed. This would not permit someone other than the author of the record to modify existing information at a later date, such as track measurements or listings of reported defects.

FRA proposes that existing paragraph (g)(2) be redesignated as paragraph (j)(5) and revised to require that electronic storage of records be initiated by the person making the inspection within 72 hours following completion of the inspection. Existing paragraph (g)(2) requires that electronic storage be initiated within 24 hours of completion of the inspection. FRA believes that giving track owners an additional 48 hours to upload inspection records would provide needed flexibility without negatively impacting safety. For example, where an inspector does not have internet connection or where their computer fails, it may take more than 24 hours to upload the inspection report. The new 72-hour requirement would also take into account the possibility of technical issues occurring late on a Friday that cannot be remedied until the following Monday, due to limited availability of technical support personnel.

FRA proposes removing existing paragraph (g)(5), which requires that the electronic system provide for maintenance of the inspection records without corruption or loss of data. FRA believes that proposed paragraph (j)(2), which would require that the track owner monitor the database to ensure record accuracy, would make existing paragraph (g)(5) redundant. FRA also proposes removing existing paragraph (g)(6),

which generally requires that track owners make paper copies of electronic records available to FRA. FRA believes that this would also be redundant given that existing paragraph (f) already requires this, and would continue to require as redesignated paragraph (i). Finally, FRA proposes removing existing paragraph (g)(7), which requires that electronic track inspection records be kept available to persons who performed the inspections and to persons performing subsequent inspections. FRA believes this would be made redundant with the addition of proposed paragraph (h), which would require the same for all records.

Section 213.305 Designation of Qualified Individuals; General Qualifications

Proposed revisions are intended to mirror the relevant proposed revisions to § 213.7, discussed above. Section 213.305 addresses the qualification of individuals responsible for the maintenance and inspection of Class 6 and above track. Currently, paragraphs (a)(3), (b)(3), and (c)(4) each require that a qualified person “[b]e authorized in writing” or possess “[w]ritten authorization from the track owner.” Although FRA believes that the term “written” and “in writing” can be interpreted to encompass both physical hardcopies of an authorization as well as electronic versions, to avoid any possible confusion, FRA proposes to remove the terms “written” and “in writing.” These changes would make clear that the required authorizations under these paragraphs may be recorded and conveyed either in hardcopy or electronic form.

FRA proposes to revise and reorganize paragraph (e) to clarify the type of information track owners must include in their records of designations made under paragraphs (a) through (d). First, for the reasons stated above, the term “written” would

be removed. Records of designations made under § 213.305 can be either in physical or electronic form. FRA proposes to add new paragraph (e)(2) to require records of designations include the date each designation was made. The date of an individual's designation is relevant and important information both to the track owner and to FRA, and FRA believes most, if not all, track owners already include this in their designation records. To incorporate this proposed revision, existing paragraph (e)(2) would be redesignated as paragraph (e)(3).

FRA also proposes to remove the first sentence of existing paragraph (e)(3), because it is redundant when considering the requirements of § 213.369. The second sentence of existing paragraph (e)(3) would be redesignated as paragraph (f) and revised. As under the existing regulation, a track owner would be required to make the records kept under paragraph (e) available for inspection and copying by FRA. FRA proposes rephrasing the sentence to require that FRA make its request for records during normal business hours and give the track owner "reasonable notice" before requiring production. The meaning of the term "reasonable notice" would depend on the specific facts of each situation (e.g., time of day, day of the week, number of records requested, etc.).

Section 213.365 Visual Track Inspections

Proposed revisions are intended to mirror the relevant proposed revisions to § 213.233, discussed above. FRA first proposes to revise the heading for § 213.365 by adding the word "track" after "visual" so that the heading reads "Visual track inspections." This change is not meant to affect the intent of the section. Because other sections in part 213 cover different types of inspections (e.g., automated inspections,

inspections of rail, etc.), the proposed heading change is simply intended to clarify that this section deals specifically with visual track inspections. This proposal is also consistent with the current heading for the corresponding non-high-speed track section, § 213.233, “Track inspections.” As discussed above, FRA proposes to revise the heading for § 213.233 so that the headings are the same for both §§ 213.233 and 213.365.

FRA also proposes revising paragraph (b) to change the terms “riding over” and “passing over” to “traversing,” and “is riding” and “are riding” to “traverses” and “traverse.” Additionally, FRA proposes changing “is actually” to “must be” in paragraph (b)(3). These changes are not meant to affect the meaning of § 213.365, but instead are made for grammatical consistency.

FRA proposes removing the last sentence of paragraph (b)(3), also known as the high-density commuter line exception. It is FRA’s understanding that no railroads currently utilize this exception. Paragraph (b)(3) requires, among other things, that each main track be traversed by a vehicle or inspector on foot at least once every two weeks, and every siding at least every month. The high-density commuter line exception applies where track time does not permit on-track vehicle inspection and where track centers are 15 feet or less apart and exempts those operations from the inspection method requirements of paragraph (b)(3). FRA’s proposal to remove this exception is consistent with NTSB recommendation R-14-11, section 11409 of the FAST Act, and the proposal to remove the counterpart to this section in § 213.233(b)(3), as discussed above in the section-by-section analysis for § 213.233(b)(3) and in section IV.B.i of this NPRM.

FRA proposes two revisions to paragraph (c). First, FRA proposes to add the

word “visual” before “track inspection” in the introductory text. This would simply be to make paragraph (c) consistent with the heading for § 213.365 and would have no effect on the meaning of paragraph (c). Second, FRA proposes adding footnote 1 after the word “weekly” in the table in paragraph (c). The footnote defines the term “weekly” to be any seven-day period beginning on Sunday and ending on Saturday. This definition is consistent with FRA’s past interpretation and enforcement practice, as well as FRA’s public guidance included in Volume II, Chapter 1, of the Track and Rail and Infrastructure Integrity Compliance Manual, March 1, 2018, available on FRA’s public eLibrary (<https://www.fra.dot.gov/eLib/Find>).

FRA also proposes to revise paragraph (d). Specifically, FRA would add the phrase “the § 213.305 qualified” at the beginning of the paragraph to clarify that “the person” making the inspection that the existing rule text refers to is the qualified track inspector designated under § 213.305. Additionally, FRA proposes adding a sentence at the end of paragraph (d) stating that any subsequent movements to facilitate repairs on track that is out of service must be authorized by a § 213.305 qualified person. This section is silent as to whether or when movement over track that is out of service is permissible. FRA recognizes that certain movements are necessary to facilitate repairs and does not interpret or enforce the current regulatory language to bar track owners from moving equipment and materials to do so on track that is out of service. The proposed revision is meant to embody that practice and interpretation into the regulation and prevent possible confusion.

Section 213.369 Inspection Records

Proposed revisions are intended to mirror the relevant proposed revisions to § 213.241, discussed above. FRA proposes adding the phrase “or otherwise certified” after “signed” in paragraph (b), and thus require that records be “signed or otherwise certified by the person making the inspection.” This is meant to clarify that a record does not have to be physically signed by the person making the inspection. The track owner can choose to use other methods to allow an inspector to certify an inspection record, provided that the method accurately and securely signifies the identity of the person making the inspection. Next, FRA proposes to add three elements to the list of information that must be included in an inspection record. Specifically, FRA proposes that the record must include the author of the record, the type of track inspected, and the location of the inspection. FRA believe this information is already included in most, if not all, of the inspection records currently produced by the railroad industry. The proposal is therefore intended to emphasize the importance of this information and should have little, if any, impact on recordkeeping practice. The remaining edits to paragraph (b) are simply technical edits that have no effect on the intent or effect of the paragraph. Specifically, FRA proposes changing “owner” to “track owner” at the beginning of the last two sentences. FRA also proposes removing “either” before the word “maintained” in the last sentence and changing “10 days notice” to “10 days’ notice.”

FRA proposes redesignating paragraphs (d), (e), and (f) as paragraphs (g), (h), and (i), respectively, and revising them, and adding new paragraphs (d), (e), and (f). Proposed paragraph (d) would list the recordkeeping requirements for continuous testing performed under proposed § 213.240. These are similar to the current recordkeeping

requirements for internal rail inspections conducted under § 213.339. Proposed paragraph (d)(1) would require the track owner's continuous rail testing records include all information required under proposed § 213.240(e). Broadly, this would require the track owner to produce a report containing a systematic listing of all suspected locations, and is explained in greater detail above. Proposed paragraph (d)(2) would require that the records state whether the test is being conducted to satisfy the requirements for an internal rail inspection under § 213.339. As discussed in more detail above, this is necessary information because it is relevant to whether the track owner must comply with the field verification time limits in proposed § 213.240(e). Proposed paragraph (d)(3) would require that the continuous rail testing records include the date and time for the beginning and end of each continuous test run, as well as the date and time each suspect location was identified and field-verified. Proposed paragraph (d)(4) would require that the continuous testing records include the determination made for each suspect location after field verification. This must include, at a minimum, the location and type of defect, the size of the defect, and the initial remedial action taken, if required, and the date thereof. Finally, proposed paragraph (d)(5) would require that these records be kept for two years from the date of the inspection, or one year after initial remedial action, whichever is later.

Proposed paragraph (e) would require any track owner that elects to conduct continuous testing under proposed § 213.240 to maintain records sufficient for monitoring and determining compliance with all applicable regulations and make those records available to FRA during regular business hours following reasonable notice. For

example, the track owner must keep sufficient records of procedures developed to comply with proposed § 213.240(b) as well qualification procedures under § 213.238. The meaning of the term “reasonable notice” would depend on the specific facts of each situation (e.g., time of day, day of the week, number of records requested, etc.).

Proposed paragraph (f) states that track inspection records, meaning each inspection record created under § 213.369, shall be available to persons who performed the inspections and to persons performing subsequent inspections of the track segment. This is vitally important to ensure the quality and effectiveness of track inspections, and FRA believes that in most cases this is already being done, as it is required, at least for electronic inspection records, under existing § 213.369(e)(7). A person performing a subsequent inspection must have an understanding of the track condition during previous inspections to effectively recognize significant changes in the track condition as well as ensure that previously noted defects are adequately protected, have been adequately remediated, or have not degraded to a degree that requires further action.

As noted above, FRA proposes redesignating existing paragraph (d) as paragraph (g), and revising it, principally by adding to the end of the paragraph “upon request during regular business hours following reasonable notice.” The meaning of the term “reasonable notice” would depend on the specific facts of each situation (e.g., time of day, day of the week, number of records requested, etc.).

FRA also proposes redesignating existing paragraph (e) as paragraph (h), and revising it. FRA first proposes to reword the introductory language of existing paragraph (e) to make it clearer. The new language would allow a track owner to create, retain,

transmit, store, and retrieve records by electronic means for purposes of complying with this section. The proposed change to this language is not meant to affect the meaning or intent of this paragraph.

Further, in redesignating paragraph (e) as paragraph (h), FRA would remove existing paragraphs (e)(5) through (7). Existing paragraph (e)(1) would be redesignated as paragraph (h)(3), existing paragraph (e)(2) would be redesignated as paragraph (h)(5), and existing paragraph (e)(3) would be redesignated as paragraph (h)(4). Proposed new paragraphs (e)(1) and (2) would be added. FRA believes the proposal would preserve the intent of existing paragraph (e), ensuring the integrity of electronic records, while increasing clarity and allowing track owners additional flexibility without negatively impact safety.

Proposed paragraph (h)(1) would require that the system used to generate the electronic records meet all the requirements and include all the information required under subpart G. Proposed paragraph (h)(2) would require that the track owner monitor its electronic records database to ensure record accuracy. FRA would intentionally leave it up to the track owner to determine the best way to effectively monitor, protect, and maintain the integrity and accuracy of its records database. FRA proposes that existing paragraph (e)(1) be redesignated as paragraph (h)(3) and revised to require that the electronic system be designed to uniquely identify the author of each record and prohibit two persons from having the same electronic identity. This is a simplified rephrasing of the requirements of existing paragraph (e)(1).

FRA proposes that existing paragraph (e)(3) be redesignated as paragraph (h)(4)

and slightly revised. Proposed paragraph (h)(4) would require that the electronic system ensures each record cannot be modified or replaced in the system once the record is completed. The one meaningful change is that proposed paragraph (h)(4) would prohibit modification once the record is completed; instead, existing paragraph (e)(3) prohibits modification once the record is transmitted and stored. FRA recognizes that there are times when an inspection record may include information that cannot be entered until a later date, such as the date of final repair. Proposed paragraph (h)(4) would therefore allow for modification of a record, provided the modification is made by the original author of the record or the author of the modification is identified in the record, after the record has been transmitted but before the record has been fully completed. This would not permit someone other than the author of the record to modify existing information at a later date, such as track measurements or listings of reported defects.

FRA proposes that existing paragraph (e)(2) be redesignated as paragraph (h)(5) and revised to require that electronic storage of records be initiated by the person making the inspection within 72 hours following completion of the inspection. Existing paragraph (e)(2) requires that electronic storage be initiated within 24 hours of completion of the inspection. FRA believes that giving track owners an additional 48 hours to upload inspection records would provide needed flexibility without negatively impacting safety. For example, where an inspector does not have internet connection or experiences computer failure, it may take more than 24 hours to upload the inspection report. The new 72-hour requirement would also take into account the possibility of technical issues occurring late on a Friday that cannot be remedied until the following

Monday, due to limited availability of technical support personnel.

FRA proposes removing existing paragraph (e)(5), which requires that the electronic system provide for maintenance of the inspection records without corruption or loss of data. FRA believes that proposed paragraph (h)(2), which would require that the track owner monitor the database to ensure record accuracy, would make existing paragraph (e)(5) redundant. FRA also proposes removing existing paragraph (e)(6), which generally requires that track owners make paper copies of electronic records available to FRA. FRA believes that this would also be redundant given that existing paragraph (d) already requires this, and would continue to require as redesignated paragraph (g). Finally, FRA proposes removing existing paragraph (e)(7), which requires that electronic track inspection records be kept available to persons who performed the inspections and to persons performing subsequent inspections. FRA believes this would be made redundant with the addition of proposed paragraph (f), which would require the same for all records.

FRA is redesignating paragraph (f) as paragraph (i) and slightly revising it for punctuation; no substantive change is intended.

VI. Regulatory Impact and Notices

A. Executive Order 12866, and DOT Regulatory Policies and Procedures

This proposed rule is a significant regulatory action within the meaning of Executive Order 12866 (EO 12866) and DOT policies and procedures. *See* DOT Order 2100.6, Policies and Procedures for Rulemaking (Dec. 20, 2018), *available at* <https://cms.dot.gov/sites/dot.gov/files/docs/regulations/328561/dot-order-21006->

rulemaking-process-signed-122018.pdf. Additionally, this proposed rule is considered an EO 13771 deregulatory action. Details on the estimated cost savings of this proposed rule can be found in the proposed rule’s Regulatory Impact Analysis, which FRA has prepared and placed in the docket (docket number FRA-2018-0104). The analysis details estimated costs and cost savings the railroad track owners regulated by the rule are likely to see over a 10-year period.

FRA proposes to revise its regulations governing the minimum safety requirements for railroad track. The proposed changes include: permitting the inspection of rail using continuous rail testing; allowing the use of flange-bearing frogs in crossing diamonds; relaxing the guard check gage limits on heavy-point frogs used in Class 5 track; removing the high-density commuter line exception; and other miscellaneous revisions.

The proposed revisions would benefit railroad track owners and the public by reducing unnecessary costs and incentivizing innovation, while not negatively affecting safety.

The following table shows the net cost savings of this proposed rule, over the 10-year analysis.

Net Cost Savings, in Millions (2018 Dollars)

	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Costs	\$25.9	\$31.4	\$3.7	\$3.7
Cost Savings	\$148.7	\$180.3	\$21.2	\$21.1
Net Cost Savings	\$122.8	\$148.9	\$17.5	\$17.4

The estimated 10-year net cost savings of the proposed rule would be \$122.8 million (7%) and \$148.9 million (3%). The annualized net cost savings would be \$17.5 million (7%) and \$17.4 million (3%).

The additional flexibility of this proposed rule would result in cost savings for railroad track owners. Continuous rail testing would reduce overtime hours for maintenance-of-way employees. The flange-bearing frog changes would eliminate the required inspection time during the first week when compared to current conditions under the FRA waiver. The continuous testing, flange-bearing frog, and heavy-point frog changes would eliminate the need for and costs of applying for waivers to implement such a testing practice and track components. In fact, fewer slow orders would be needed with continuous testing, which would result in a significant cost savings.

The table below presents the estimated cost savings associated with the proposed rule, over the 10-year analysis.

Summary of Total Cost Savings, in Millions

Section	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Flange Bearing Frog Inspections	\$0.191	\$0.223	\$0.027	\$0.026
Frog Waiver Savings	\$0.013	\$0.016	\$0.002	\$0.002
Continuous Testing Labor Cost Savings	\$7.086	\$8.590	\$1.009	\$1.007
Slow Orders	\$141.329	\$171.340	\$20.122	\$20.086
Continuous Testing Waiver Savings	\$0.130	\$0.154	\$0.012	\$0.010
Total	\$148.749	\$180.324	\$21.172	\$21.132

The estimated 10-year total cost savings of the proposed rule would be \$148.7 million (discounted at 7%) and \$180.3 million (discounted at 3%). The annualized cost savings would be \$21.2 million (7%) and \$21.1 million (3%).

If railroad track owners choose to take advantage of the cost savings from this proposed rule, they would incur additional labor costs associated with continuous rail testing. These costs are voluntary because track owners would only incur them if they choose to operate continuous rail testing vehicles. The table below presents the estimated costs, over the 10-year analysis.

Summary of Total Costs, in Millions

	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Continuous Testing	\$25.9	\$31.4	\$3.7	\$3.7

The estimated 10-year costs of the proposed rule would be \$25.9 million (discounted at 7%) and \$31.4 million (discounted at 3%). The annualized costs would be \$3.7 million (at both 7% and 3%).

The proposed rule would also encourage the use of continuous rail testing, which may reduce certain types of derailments. FRA does not have sufficient data to estimate the reduction in derailments. However, FRA expects the proposed rule to result in safety benefits from fewer injuries, fatalities, and property and track damage.

B. *Regulatory Flexibility Act*

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) and Executive

Order 13272 (67 FR 53461, Aug. 16, 2002) require agency review of proposed and final rules to assess their impacts on small entities. An agency must prepare an Initial Regulatory Flexibility Analysis (IRFA) unless it determines and certifies that a rule, if promulgated, would not have a significant economic impact on a substantial number of small entities. FRA has not determined whether this proposed rule would have a significant economic impact on a substantial number of small entities.

Therefore, FRA prepared an IRFA which is included as an appendix to the accompanying Regulatory Impact Analysis and available in the docket for this rulemaking (FRA 2018-0104) to aid the public in commenting on the potential small business impacts of the requirements in this NPRM.

C. *Paperwork Reduction Act*

The information collection requirements in this proposed rule are being submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.* The sections that contain the current and new information collection requirements and the estimated time to fulfill each requirement are as follows:

CFR Section	Respondent Universe	Total Annual Responses	Average Time per Response	Total Annual Burden Hours	Total Annual Dollar Cost Equivalent ³
213.4 - Excepted track - Notification to FRA about removal of excepted track	236 railroads	15 notices	10 minutes	3 hours	\$219
213.5 - Responsibility of track owners	744 railroads	10 written notices	1 hours	10 hours	\$730
213.7 - Designation of qualified persons to supervise certain renewals and inspect track - Designations: Names on list with written authorization	728 railroads	1,500 names	10 minutes	250 hours	\$18,250
213.17 - Waivers	744 railroads	6 petitions	2 hours	12 hours	\$876
213.57 - Curves, elevation and speed limitations - Request to FRA for vehicle type approval - Written Notification to FRA prior to implementation of higher curving speeds -- Written consent of track owners obtained by railroad providing service over that track	744 railroads	2 requests	8 hours	16 hours	\$1,168
	744 railroads	2 notifications	2 hours	4 hours	\$292
	744 railroads	2 written consents	45 minutes	2 hours	\$146
213.110 - Gage restraint measurement systems (GRMS) - Implementing GRMS - notices & reports - GRMS vehicle output reports - GRMS vehicle exception reports - GRMS/PTLF - procedures for data integrity - GRMS inspection records	744 railroads	5 notifications + 1 tech. rpt.	45 minutes/ 4 hours	8 hours	\$365
	744 railroads	50 reports	5 minutes	4 hours	\$288
	744 railroads	50 reports	5 minutes	4 hours	\$288
	744 railroads	1 proc. doc.	2 hours	2 hours	\$146
	744 railroads	50 records	1 hour	50 hours	\$3,650
213.118 Continuous welded rail (CWR); plan review and approval - Revised plans w/procedures for CWR - Notification to FRA and RR employees of CWR plan effective date - Written submissions after plan disapproval - Final FRA disapproval and plan amendment	436 railroads	8 plans	4 hours	32 hours	\$2,336
	436 RRs/80,000 employees	800 notifications	15 seconds	3 hours	\$219
	744 railroads	7 written submissions	2 hours	14 hours	\$1,022
	744 railroads	7 amended plans	1 hour	7 hours	\$511

³ The dollar equivalent cost is derived from the 2018 Association of American Railroads publication titled Railroad Facts (Employment and Annual Wages by Class) using the appropriate employee group to calculate the average hourly wage rate that includes 75 percent overhead charges.

213.119 - Continuous welded rail (CWR); plan contents - Record keeping for special inspections - Record keeping for CWR rail joints - Periodic records for CWR rail adjustments	436 railroads 436 railroads 436 railroads	60,000 records 180,000 rcds. 480,000 rcds.	15 seconds 2 minutes 2 minutes	250 hours 6,000 hours 16,000 hours	\$18,250 \$438,000 \$1,168,000
213.137 -- New Requirements -- Frogs: - Railroad documentation of flange-bearing frogs (FBFs) location, crossing angle, tonnage, speed, directions, and type of traffic - Inspection of FBF crossing diamond installations and records -- RR preparation and distribution of insert to maintenance manuals for responsible personnel for the inspection and repair of FBF crossing diamonds	744 railroads 744 railroads 744 railroads	5 railroad documents 240 inspection /records 7 manuals	30 minutes 15 minutes 30 minutes	3 hours 60 hours 4 hours	\$219 \$4,380 \$292
213.143 -- New Requirements -- Frog guard rails and guard faces; gage (FRA request from RR/track owner of record of the location and description of each turnout containing a heavy-point frog (HPF))	744 railroads	10 HPF turnout records	30 minutes	5 hours	\$365
213.237-- Inspection of Rail - Detailed request to FRA to change designation of a rail inspection segment or establish a new segment - Notification to FRA and all affected employees of designation's effective date after FRA's approval/conditional approval - Notice to FRA that service failure rate target in paragraph (a) of this section is not achieved - Explanation to FRA as to why performance target was not achieved and provision to FRA of remedial action plan	10 railroads 10 railroads 10 railroads 10 railroads	10 requests 50 notices + 120 notices/ bulletins 12 notices 12 letters of explanation + 12 plans	15 minutes 15 minutes 15 minutes 15 minutes	3 hours 43 hours 3 hours 6 hours	\$219 \$3,139 \$219 \$438
213.240-- New Requirements -- Continuous rail testing	12 railroads	12 reports	4 hours	48 hours	\$3,504
213.241 - Inspection records	744 railroads	1,375,000 records	10 minutes	229,167 hours	\$16,729,191

213.303 – Responsibility for compliance	2 railroads	1 notification	1 hour	1 hour	\$73
213.305 – Designation of qualified individuals; general qualifications - Designations (partially qualified)	2 railroads	200 railroad designations	10 minutes	33 hours	\$2,409
- RR produced designation record upon FRA request	2 railroads	20 records	30 minutes	10 hours	\$730
213. 317 – Waivers	2 railroads	1 petition	2 hours	2 hours	\$146
213.329 Curves, elevation and speed limitations - FRA approval of qualified vehicle types based on results of testing	2 railroads	2 docs.	8 hours	16 hours	\$1,168
- Written notification to FRA 30 days prior to implementation of higher curving speeds	2 railroads	2 notices	2 hours	4 hours	\$292
- Written Consent of Other Affected Track Owners by Railroad	2 railroads	2 written consents	45 minutes	2 hours	\$146
213.333 Automated Vehicle Insp. System - Measurements – - TGMS Output/Exception Reports	7 railroads	7 reports	1 hour	7 hours	\$504
213.341 – Initial inspection of new rail & welds - Inspection of field welds	2 railroads	800 records	2 minutes	27 hours	\$1,971
213.343 – Continuous welded rail (CWR) - Revised plans w/procedures for CWR	2 railroads	1 plan	4 hours	4 hours	\$292
- Notification to FRA and RR employees of CWR plan effective date	2 RRs/80,000 employees	100 notifications	15 seconds	0.4 hours	\$30
- Written submissions after plan disapproval	2 railroads	1 written submission	2 hours	2 hours	\$146
- Final FRA disapproval and plan amendment	2 railroads	1 amended plan	1 hour	1 hour	\$73
213.345 Vehicle qualification testing - Vehicle qualification program for all vehicle types operating at track Class 6 speeds or above	2 railroads	2 programs	120 hours	240 hours	\$17,520
- Previously qualified vehicle types qualification programs	2 railroads	2 programs	40 hours	80 hours	\$5,840
-- Written consent of other affected track owners by railroad	2 railroads	2 written consents	8 hours	16 hours	\$1,760

213.369 Inspection Records - Record of inspection of track - Internal defect inspections and remedial action taken	2 railroads 2 railroads	15,000 records 50 records	1 minute 5 minutes	250 hours 4 hours	\$18,250 \$292
TOTAL	744 railroads	2,114,200	N/A	252,712	\$18,448,364

All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information.

Pursuant to 44 U.S.C. 3506(c)(2)(B), FRA solicits comments concerning: whether these information collection requirements are necessary for the proper performance of the functions of FRA, including whether the information has practical utility; the accuracy of FRA's estimates of the burden of the information collection requirements; the quality, utility, and clarity of the information to be collected; and whether the burden of collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology, may be minimized. For information or a copy of the paperwork package submitted to OMB, contact Ms. Hodan Wells, Information Clearance Officer, Federal Railroad Administration, at 202-493-0440, or Ms. Kimberly Toone, Records Management Officer, Federal Railroad Administration, at 202-493-6139.

Organizations and individuals desiring to submit comments on the collection of information requirements should direct them to Ms. Hodan Wells or Ms. Kimberly Toone, Federal Railroad Administration, 1200 New Jersey Avenue, SE, 3rd Floor, Washington, DC 20590. Comments may also be submitted via e-mail to Ms. Wells at *Hodan.Wells@dot.gov*, or to Ms. Toone at *Kim.Toone@dot.gov*.

OMB is required to make a decision concerning the collection of information requirements contained in this proposed rule between 30 and 60 days after publication of this document in the *Federal Register*. Therefore, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

FRA is not authorized to impose a penalty on persons for violating information collection requirements that do not display a current OMB control number, if required. FRA intends to obtain current OMB control numbers for any new information collection requirements resulting from this rulemaking action prior to the effective date of the final rule. The OMB control number, when assigned, will be announced by separate notice in the *Federal Register*.

D. *Environmental Impact*

FRA has evaluated this proposed rule in accordance with its “Procedures for Considering Environmental Impacts” (FRA’s Procedures) (64 FR 28545, (May 26, 1999)) as required by the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*), other environmental statutes, Executive Orders, and related regulatory requirements. FRA has determined that this proposed rule is not a major Federal action, requiring the preparation of an environmental impact statement or environmental assessment, because it is categorically excluded from detailed environmental review pursuant to section 4(c)(20) of FRA’s Procedures. *See* 64 FR 28547 (May 26, 1999).

In accordance with section 4(c) and (e) of FRA’s Procedures, the agency has

further concluded that no extraordinary circumstances exist with respect to this proposed rule that might trigger the need for a more detailed environmental review. As a result, FRA finds that this proposed rule is not a major Federal action significantly affecting the quality of the human environment.

E. *Federalism Implications*

Executive Order 13132, “Federalism” (64 FR 43255 (Aug. 10, 1999)), requires FRA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” are defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.” Under Executive Order 13132, the agency may not issue a regulation with federalism implications that imposes substantial direct compliance costs and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments or the agency consults with State and local government officials early in the process of developing the regulation. Where a regulation has federalism implications and preempts State law, the agency seeks to consult with State and local officials in the process of developing the regulation.

FRA has analyzed this proposed rule in accordance with the principles and criteria contained in Executive Order 13132. FRA has determined that this final rule has no federalism implications, other than the possible preemption of state laws under 49 U.S.C.

20106. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply, and preparation of a federalism summary impact statement for the proposed rule is not required.

F. *Unfunded Mandates Reform Act of 1995*

Pursuant to section 201 of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4, 2 U.S.C. 1531), each Federal agency shall, unless otherwise prohibited by law, assess the effects of Federal regulatory actions on State, local, and tribal governments, and the private sector (other than to the extent that such regulations incorporate requirements specifically set forth in law). Section 202 of the Act (2 U.S.C. 1532) further requires that before promulgating any general notice of proposed rulemaking that is likely to result in the promulgation of any rule that includes any Federal mandate that may result in expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100,000,000 or more (adjusted annually for inflation) in any one year, and before promulgating any final rule for which a general notice of proposed rulemaking was published, the agency shall prepare a written statement detailing the effect on State, local, and tribal governments and the private sector. This proposed rule would not result in such an expenditure, and thus preparation of such a statement is not required.

G. *Energy Impact*

Executive Order 13211 requires Federal agencies to prepare a Statement of Energy Effects for any “significant energy action.” 66 FR 28355 (May 22, 2001). FRA evaluated this proposed rule in accordance with Executive Order 13211 and determined

that this regulatory action is not a “significant energy action” within the meaning of the Executive Order.

Executive Order 13783, “Promoting Energy Independence and Economic Growth,” requires Federal agencies to review regulations to determine whether they potentially burden the development or use of domestically produced energy resources, with particular attention to oil, natural gas, coal, and nuclear energy resources. *See* 82 FR 16093 (March 31, 2017). FRA determined this proposed rule would not burden the development or use of domestically produced energy resources.

H. *Privacy Act Statement*

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, to www.regulations.gov, as described in the system of records notice, DOT/ALL-14 FDMS, accessible through www.dot.gov/privacy. To facilitate comment tracking and response, we encourage commenters to provide their name, or the name of their organization; however, submission of names is completely optional. Whether or not commenters identify themselves, all timely comments will be fully considered. If you wish to provide comments containing proprietary or confidential information, please contact the agency for alternate submission instructions.

List of Subjects in 49 CFR Part 213

Penalties, Railroad safety, Reporting and recordkeeping requirements.

The Proposed Rule

For the reasons discussed in the preamble, FRA proposes to amend part 213 of chapter II, subtitle B of title 49, Code of Federal Regulations, as follows:

PART 213—[AMENDED]

1. The authority citation for 49 CFR part 213 continues to read as follows:

Authority: 49 U.S.C. 20102-20114 and 20142; Sec. 403, Div. A, Pub. L. 110-432, 122 Stat. 4885; 28 U.S.C. 2461, note; and 49 CFR 1.89.

Subpart A—General

2. Amend § 213.1 by revising paragraph (b) to read as follows:

§ 213.1 Scope of part.

* * * * *

(b) Subparts A through F apply to track Classes 1 through 5. Subpart G and 213.2, 213.3, 213.15, and 213.240 apply to track over which trains are operated at speeds in excess of those permitted over Class 5 track.

3. Amend § 213.5 by revising paragraph (a)(3) to read as follows:

§ 213.5 Responsibility for compliance.

(a) * * *

(3) Operate under authority of a person designated under § 213.7(a), subject to conditions set forth in this part. If the operation is on continuous welded rail (CWR) track, the person under whose authority operations are conducted must also be designated under § 213.7(c).

* * * * *

4. Amend § 213.7 by revising paragraphs (a)(1)(i) and (ii), (a)(3), (b)(3), (c)(4), and (e) and adding paragraph (f) to read as follows:

§ 213.7 Designation of qualified persons to supervise certain renewals and inspect track.

(a) * * *

(1) * * *

(i) 1 year of experience in railroad track maintenance under traffic conditions;

or

(ii) A combination of experience in track maintenance and training from a course in track maintenance or from a college level educational program related to track maintenance.

* * * * *

(3) Authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements of this part.

(b) * * *

(3) Authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements of this part, pending review by a qualified person designated under paragraph (a) of this section.

(c) * * *

(4) Authorization from the track owner to prescribe remedial actions to correct or safely compensate from deviation from the requirements in these procedures and successfully completed a recorded examination on those procedures as part of the

qualification process.

* * * * *

(e) With respect to designations under paragraph (a) through (d) of this section, each track owner shall maintain records of—

- (1) Each designation in effect;
- (2) The date each designation was made; and
- (3) The basis for each designation, including the method used to determine that the designated person is qualified.

(f) Each track owner shall keep designation records required under paragraph (e) of this section readily available for inspection or copying by the Federal Railroad Administration during regular business hours, following reasonable notice.

5. Amend § 213.9 by revising paragraph (b) to read as follows:

§ 213.9 Classes of track: operating speed limits.

* * * * *

(b) If a segment of track does not meet all of the requirements of its intended class, it is reclassified to the next lowest class of track for which it does meet all of the requirements of this part. However, if the segment of track does not at least meet the requirements of Class 1 track, operations may continue at Class 1 speeds for a period of not more than 30 days without bringing the track into compliance, under the authority of a person designated under § 213.7(a), after that person determines that operations may safely continue and subject to any limiting conditions specified by such person.

6. Amend § 213.11 by revising the first sentence and adding a new sentence

at the end of the first sentence to read as follows:

§ 213.11 Restoration or renewal of track under traffic conditions.

If during a period of restoration or renewal, track is under traffic conditions and does not meet all of the requirements prescribed in this part, the work on the track shall be under the continuous supervision of a person designated under § 213.7(a), and (c) as applicable, and subject to any limiting conditions specified by such person. The operating speed cannot be more than the maximum allowable speed under § 213.9 for the class of track concerned. The term “continuous supervision” as used in this section means the physical presence of that person at the job site. However, since the work may be performed over a large area, it is not necessary that each phase of the work be done under the visual supervision of that person.

Subpart D—Track Structure

7. Amend § 213.113 by revising the second sentence of paragraph (b), to read as follows:

§ 213.113 Defective rails.

* * * * *

(b) When an owner of track learns that a rail in the track contains an indication of any of the defects listed in the table contained in paragraph (c) of this section, the track owner shall verify the indication. Except as provided in § 213.240, the track owner must verify the indication within four hours, unless the track owner has an indication of the existence of a defect that requires remedial action A, A2, or B identified in the table contained in paragraph (c) of this section, in which case the track owner must

immediately verify the indication. If the indication is verified, the track owner must — *

* *

* * * * *

8. Amend § 213.137 by revising paragraph (a) and adding paragraph (e), to read as follows:

§ 213.137 Frogs.

(a) Except as provided in paragraph (e) of this section, the flangeway depth measured from a plane across the wheel-bearing area of a frog on Class 1 track shall not be less than 1 3/8 inches, or less than 1 1/2 inches on Classes 2 through 5 track.

* * * * *

(e) The flange depth requirements in paragraph (a) do not apply to a frog designed as a flange-bearing frog (FBF) used in a crossing diamond in Classes 2 through 5 track, provided that:

(1) The crossing angle is greater than 20 degrees unless movable guard rails are used;

(2) The track owner documents the location, crossing angle, tonnage, speed, direction, and type of traffic for each FBF used under this paragraph (e), and makes this information available to FRA upon request during regular business hours following reasonable notice; and

(3) Maintenance manuals are prepared and made available to all personnel who are responsible for inspecting and repairing each FBF used under this paragraph (e).

Each person conducting inspections of or repairing such an FBF must be properly trained.

9. Amend § 213.143 by revising to read as follows:

§ 213.143 Frog guard rails and guard faces; gage.

The guard check and guard face gages in frogs shall be within the limits prescribed in the following table—

	Guard check gage	Guard face gage
Class of track	The distance between the gage line of a frog to the guard line ¹ of its guard rail or guarding face, measured across the track at right angles to the gage line, ² may not be less than—	The distance between guard lines, ¹ measured across the track at right angles to the gage line, ² may not be more than—
Class 1 track	4'6 ¹ / ₈ ".....	4'5 ¹ / ₄ ".....
Class 2 track	4'6 ¹ / ₄ ".....	4'5 ¹ / ₈ ".....
Class 3 and 4 track	4'6 ³ / ₈ ".....	4'5 ¹ / ₈ ".....
Class 5 track	4'6 ¹ / ₂ " ³	4'5".....

¹ A line along that side of the flangeway which is nearer to the center of the track and at the same elevation as the gage line.

² A line five-eighths of an inch below the top of the center line of the head of the running rail, or corresponding location of the tread portion of the track structure.

³ For any heavy-point frog (HPF) on class 5 track, the guard check gage may be less than 4'6¹/₂" but not be less than 4'6³/₈", provided that:

(a) Each track owner maintains a record of the location and description of each turnout containing an HPF, and makes this information available to FRA upon request during regular

business hours following reasonable notice;

(b) Each HPF and guard rails on both rails through the turnout are equipped with at least three serviceable through-gage plates with elastic rail fasteners and guard rail braces that permit adjustment of the guard check gage without removing spikes or other fasteners from the crossties;

(c) Each track owner provides all of its employees who are designated under § 213.7 to inspect track or supervise restoration and renewal of track, or both, in areas that include turnouts with HPFs, with the proper maintenance manuals, instructions, and training; and

(d) Each HPF bears an identifying mark applied by either the track owner, railroad, or the frog manufacturer that identifies the frog as an HPF. The identifying mark to be applied or used shall be specified in the instructions to employees described in paragraph (d)(3) of this footnote.

Subpart F—Inspection

10. Amend § 213.233 by revising the section heading, paragraph (b), the first row of the table in paragraph (c), and paragraph (d), and adding footnotes 1 and 2 to the table in paragraph (c) to read as follows:

§ 213.233 Visual track inspections.

* * * * *

(b) Each inspection shall be made on foot or by traversing the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this part. However, mechanical, electrical, and other track inspection devices may be used to supplement visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 m.p.h. when traversing track crossings and turnouts; otherwise, the inspection vehicle speed shall be at the sole discretion of the inspector, based on track conditions and inspection requirements. When traversing the track in a vehicle, the inspection will be subject to the following conditions—

(1) One inspector in a vehicle may inspect up to two tracks at one time

provided that the inspector’s visibility remains unobstructed by any cause and that the second track is not centered more than 30 feet from the track the inspector traverses;

(2) Two inspectors in one vehicle may inspect up to four tracks at a time provided that the inspectors’ visibility remains unobstructed by any cause and that each track being inspected is centered within 39 feet from the track the inspectors traverse;

(3) Each main track must be traversed by the vehicle or inspected on foot at least once every two weeks, and each siding must be traversed by the vehicle or inspected on foot at least once every month; and

(4) Track inspection records shall indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section.

(c) Each visual track inspection shall be made in accordance with the following schedule—

Class of Track	Type of Track	Required Frequency
Excepted track, and Class 1, 2, and 3 track	Main track and sidings	Weekly ¹ with at least 3 calendar days’ interval between inspections, or before use, if the track is used less than once a week, or twice weekly with at least 1 calendar day interval between inspections, if the track carries passenger trains ² or more than 10 million gross tons of traffic during the preceding calendar year.

¹ An inspection week is defined as a seven (7) day period beginning on Sunday and ending on Saturday.

² “Twice weekly” inspection requirement for track carrying regularly scheduled passenger trains does not apply where passenger train service consists solely of tourist, scenic, historic, or excursion operations as defined in 49 CFR 238.5 and the following conditions are met for an inspection week: (1) No passenger service is operated during the inspection week, or (2) if

passenger service is operated during the inspection week: (i) the passenger service is operated only on a weekend or a 3-day extended weekend (weekend plus a contiguous Monday or Friday), and (ii) an inspection is conducted no more than 1 calendar day before a weekend or 3-day extended weekend on which passenger service is to be operated.

(d) If the § 213.7 qualified person making the inspection finds a deviation from the requirements of this part, the inspector shall immediately initiate remedial action. Any subsequent movements to facilitate repairs on track that is out of service must be authorized by a § 213.7 qualified person.

* * * * *

11. Add § 213.240 to read as follows:

§ 213.240 Continuous Rail Testing

(a) Track owners may elect to use continuous rail testing to satisfy the requirements for conducting internal rail inspections under § 213.237, or § 213.339 where applicable. When a track owner utilizes the continuous rail test inspection process under the requirements of this section, the track owner is exempt from the requirements of § 213.113(b); all other requirements of § 213.113 apply.

(b) Track owners shall adopt the necessary procedures for conducting continuous testing. At a minimum, the procedures must conform to the requirements of this section and address:

- (1) How test data will be transmitted and analyzed;
- (2) How suspect locations will be identified for field verification;
- (3) How suspect locations will be categorized and prioritized according to their potential severity;
- (4) How suspect locations will be field-verified; and

(5) How suspect locations will be designated following field verification.

(c) The track owner must designate and record the type of rail test (continuous or stop-and-verify) to be conducted prior to commencing the test over a track segment and make those records available to FRA upon request during regular business hours following reasonable notice. If the type of rail test changes following commencement of the test, the change must be documented and include the time the test was started and when it was changed, the milepost where the test started and where it was changed, and the reason for the change. If the track owner intends to conduct a continuous test, at least 10 days prior to commencement of the test the track owner must designate and record whether the test is being conducted to satisfy the requirements for an internal rail inspection under § 213.237, or § 213.339 if applicable. This documentation must be provided to FRA upon request during regular business hours follow reasonable notice.

(d)(1) Continuous rail test inspection vehicle operators must be qualified under § 213.238;

(2) Internal rail inspection data collected during continuous rail tests must be reviewed and interpreted by a person qualified to interpret the equipment responses; and

(3) All suspect locations must be field-verified by a person qualified under § 213.238.

(e) At a minimum, the continuous rail test process must produce a report containing a systematic listing of all suspected locations that may contain any of the defects listed in the table in § 213.113(c), identified so that a person qualified under § 213.238 can accurately locate and field-verify each suspected defect.

(1) Subject to the requirements of paragraphs (c)(2) and (3) of this section, if the continuous rail test inspection vehicle indicates a suspect location, field verification must be conducted within 72 hours of the completion of the test run, or within 84 hours of the detection of the suspect location, whichever is earlier.

(2) If the continuous rail test inspection vehicle indicates a suspect location containing a suspected defect that, if verified, requires remedial action A, A2, or B identified in the table contained in § 213.113(c), the track owner must field-verify the suspect location no more than 24 hours after the completion of the test run, or 36 hours from detection of the suspect location, whichever is earlier.

(3) If the continuous rail test inspection vehicle indicates a broken rail with rail separation, the track owner must have procedures to ensure that adequate protection is immediately implemented.

(4) A suspect location is not considered a defect under § 213.113(c) until it has been field-verified by a person qualified under § 213.238. After the suspect location is field-verified and determined to be a defect, the track owner must immediately perform all required remedial actions prescribed in § 213.113(a).

(5) Any suspected location not field-verified within the time required under paragraphs (e)(1) and (2) of this section must be protected by applying the most restrictive remedial action under § 213.113(c) for the suspected type and size of the suspected defect. The remedial action must be applied over a sufficient segment of track to assure coverage of the suspected defect location until field-verified.

(f) Each suspect location must be recorded with repeatable accuracy that

allows for the location to be accurately located for subsequent verification and, as necessary, remedial action.

(g) Within 45 days following the end of each calendar year, each track owner utilizing continuous rail testing must provide the FRA Associate Administrator for Railroad Safety/Chief Safety Officer with an annual report, in a reasonably usable format, or its native electronic format, containing at least the following information for each track segment requiring internal rail inspection under § 213.237, or § 213.339 if applicable:

- (1) The track owner's name;
- (2) The railroad division and subdivision;
- (3) The segment identifier, milepost limits, and length of each segment;
- (4) The track number;
- (5) The class of track;
- (6) The annual million gross tons over the track;
- (7) The total number of internal rail tests conducted over each track;
- (8) The type of internal rail test conducted over each segment, either continuous rail test or stop-and-verify;
- (9) The total number of defects identified over each track segment; and
- (10) The total number of service failures on each track segment.

12. Amend § 213.241 by revising paragraphs (b), (f), and (g), and adding paragraphs (h) through (j) to read as follows:

§ 213.241 Inspection records.

* * * * *

(b) Each record of an inspection under §§ 213.4, 213.119, 213.137, 213.233, and 213.235 shall be prepared on the day the inspection is made and signed or otherwise certified by the person making the inspection. Records shall specify the author of record, the type of track inspected, date and location of inspection, location and nature of any deviation from the requirements of this part, and the remedial action taken by the person making the inspection. The track owner shall designate the location(s) where each original record shall be maintained for at least one year after the inspection covered by the record. The track owner shall also designate one location, within 100 miles of each state in which it conducts operations, where copies of records that apply to those operations are maintained or can be viewed following 10 days' notice by the Federal Railroad Administration.

* * * * *

- (f) Records of continuous rail testing under § 213.240 shall—
- (1) Include all information required under § 213.240(e);
 - (2) State whether the test is being conducted to satisfy the requirements for an internal rail inspection under § 213.237;
 - (3) List the date(s) and time(s) of the continuous rail test data collection, including the date and time of the start and end of the test run, and the date and time each suspect location was identified and field-verified;
 - (4) Include the determination made after field verification of each suspect location, including the:
 - (i) Location and type of defect found;

- (ii) Size of defect; and
- (iii) Initial remedial action taken, if required, and the date thereof; and
- (5) Be retained for at least two years after the inspection and for at least one year after initial remedial action is taken, whichever is later.

(g) Track owners that elect to utilize continuous rail testing under § 213.240 shall maintain records of all continuous rail testing operations sufficient for monitoring and determining compliance with all applicable regulations and shall make those records available to FRA during regular business hours following reasonable notice.

(h) Track inspection records shall be kept available to persons who performed the inspections and to persons performing subsequent inspections of the track segment.

(i) Each track owner required to keep inspection records under this section shall make those records available for inspection and copying by FRA upon request during regular business hours following reasonable notice.

(j) For purposes of complying with the requirements of this section, a track owner may create, retain, transmit, store, and retrieve records by electronic means provided that—

(1) The system used to generate the electronic record meets all requirements and contains the information required under this subpart;

(2) The track owner monitors its electronic records database to ensure record accuracy;

(3) The electronic system is designed to uniquely identify the author of the record. No two persons shall have the same electronic identity;

(4) The electronic system ensures that each record cannot be modified in any way, or replaced, once the record is completed;

(5) The electronic storage of each record shall be initiated by the person making the inspection within 72 hours following the completion of that inspection; and

(6) Any amendment to a record shall be electronically stored apart from the record which it amends. Each amendment to a record shall be uniquely identified as to the person making the amendment.

Subpart G—Train Operations at Track Classes 6 and Higher

13. Amend § 213.305 by revising paragraph (a)(3), paragraph (b)(3), (c)(4), and (e), and adding paragraph (f) to read as follows:

§ 213.305 Designation of qualified individuals; general qualifications.

* * * * *

(a) * * *

(3) Be authorized by the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements of this subpart and successful completion of a recorded examination on this subpart as part of the qualification process.

(b) * * *

(3) Be authorized by the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in this subpart and successful completion of a recorded examination on this subpart as part of the qualification process.

(c) * * *

(4) Authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in those procedures and successful completion of a recorded examination on those procedures as part of the qualification process. The recorded examination may be written, or it may be a computer file with the results of an interactive training course.

* * * * *

(e) With respect to designations under paragraphs (a), (b), (c) and (d) of this section, each track owner shall maintain records of:

- (1) Each designation in effect;
- (2) The date each designation was made; and
- (3) The basis for each designation, including but not limited to:
 - (i) The exact nature of any training courses attended and the dates thereof;

and

(ii) The manner in which the track owner has determined a successful completion of that training course, including test scores or other qualifying results.

(f) Each track owner shall keep these designation records readily available for inspection or copying by the Federal Railroad Administration during regular business hours, following reasonable notice.

14. Amend § 213.365 by revising the section heading and paragraphs (b) through (d) to read as follow:

§ 213.365 Visual track inspections.

* * * * *

(b) Each inspection shall be made on foot or by traversing the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this part. However, mechanical, electrical, and other track inspection devices may be used to supplement visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 m.p.h. when traversing track crossings and turnouts; otherwise, the inspection vehicle speed shall be at the sole discretion of the inspector, based on track conditions and inspection requirements. When traversing the track in a vehicle, the inspection will be subject to the following conditions—

(1) One inspector in a vehicle may inspect up to two tracks at one time provided that the inspector's visibility remains unobstructed by any cause and that the second track is not centered more than 30 feet from the track upon which the inspector traverses;

(2) Two inspectors in one vehicle may inspect up to four tracks at a time provided that the inspectors' visibility remains unobstructed by any cause and that each track being inspected is centered within 39 feet from the track upon which the inspectors traverse;

(3) Each main track must be traversed by a vehicle or inspected on foot at least once every two weeks, and each siding must be traversed by a vehicle or inspected on foot at least once every month; and

(4) Track inspection records shall indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section.

(c) Each visual track inspection shall be made in accordance with the following schedule—

Class of track	Required frequency
6, 7, and 8	Twice weekly ¹ with at least 2 calendar days' interval between inspections.
9	Three times per week.

¹ An inspection week is defined as a seven (7) day period beginning on Sunday and ending on Saturday.

(d) If the § 213.305 qualified person making the inspection finds a deviation from the requirements of this part, the person shall immediately initiate remedial action. Any subsequent movements to facilitate repairs on track that is out of service must be authorized by a § 213.305 qualified person.

* * * * *

15. Amend § 213.369 is amended by revising paragraph (b) and (d) through (f), and adding paragraphs (g) through (i) to read as follows:

§ 213.369 Inspection records.

* * * * *

(b) Except as provided in paragraph (e) of this section, each record of an inspection under § 213.365 shall be prepared on the day the inspection is made and signed or otherwise certified by the person making the inspection. Records shall specify the author of record, the type of track inspected, date of inspection, location of inspection, nature of any deviation from the requirements of this part, and the remedial action taken by the person making the inspection. The track owner shall designate the location(s)

where each original record shall be maintained for at least one year after the inspection covered by the record. The track owner shall also designate one location, within 100 miles of each state in which it conducts operations, where copies of records that apply to those operations are maintained or can be viewed following 10 days' notice by the Federal Railroad Administration.

* * * * *

(d) Records of continuous rail testing under § 213.240 shall—

(1) Include all information required under § 213.240(e);

(2) State whether the test is being conducted to satisfy the requirements for an internal rail inspection under § 213.339;

(3) List the date(s) and time(s) of the continuous rail test data collection, including the date and time of the start and end of the test run, and the date and time each suspect location was identified and field-verified;

(4) Include the determination made after field verification of each suspect location, including the:

(i) Location and type of defect found;

(ii) Size of defect; and

(iii) Initial remedial action taken, if required, and the date thereof; and

(5) Be retained for at least two years after the inspection and for at least one year after initial remedial action is taken, whichever is later.

(e) Track owners that elect to utilize continuous rail testing under § 213.240 shall maintain records of all continuous rail testing operations sufficient for monitoring

and determining compliance with all applicable regulations and shall make those records available to FRA during regular business hours following reasonable notice.

(f) Track inspection records shall be kept available to persons who perform the inspections and to persons performing subsequent inspections.

(g) Each track owner required to keep inspection records under this section shall make those records available for inspection and copying by the Federal Railroad Administration upon request during regular business hours following reasonable notice.

(h) For purposes of compliance with the requirements of this section, a track owner may create, retain, transmit, store, and retrieve records by electronic means provided that—

(1) The system used to generate the electronic record meets all requirements and contains the information required under this subpart;

(2) The track owner monitors its electronic records database to ensure record accuracy;

(3) The electronic system be designed to uniquely identify the author of the record. No two persons shall have the same electronic identity;

(4) The electronic system ensures that each record cannot be modified in any way, or replaced, once the record is completed;

(5) The electronic storage of each record shall be initiated by the person making the inspection within 72 hours following the completion of that inspection; and

(6) Any amendment to a record shall be electronically stored apart from the record which it amends. Each amendment to a record shall be uniquely identified as to

the person making the amendment.

(i) Each vehicle/track interaction safety record required under § 213.333(g) and (m) shall be made available for inspection and copying by the FRA at the locations specified in paragraph (b) of this section.

Issued in Washington, DC.

Ronald L. Batory,

Administrator.