4910-06-P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 213

[Docket No. FRA-2018-0104, Notice No. 2]

RIN 2130-AC53

Rail Integrity Amendments & Track Safety Standards

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

ACTION: Final rule.

SUMMARY: FRA is revising its regulations governing the minimum safety requirements for railroad track. The 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 revisions will benefit track owners, railroads, and the public by reducing unnecessary costs and incentivizing innovation, while improving rail safety.

DATES: This final rule is effective [**INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER***] in accordance with 5 U.S.C 553(d)(1).

ADDRESSES: *Docket*: For access to the docket to read background documents or comments received, go to *http://www.regulations.gov* at any time.

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SUPPLEMENTARY INFORMATION:

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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." On December 31, 2019, FRA published a Notice of Proposed Rulemaking (NPRM) that was informed by the RSAC's recommendations and FRA's own review and analysis of the Track Safety Standards (TSS or Standards) (49 CFR part 213). *See* 84 FR 72526. In the NPRM, FRA proposed 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,[1] (3) remove the exception for high-density commuter lines from certain track inspection

[1] 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.

method requirements, and (4) incorporate several consensus-based, RSAC recommendations. For a more in-depth discussion of the proposals and their development, please see the NPRM (84 FR 72526).

FRA analyzed the economic impact of this 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 rule, they will incur additional labor costs associated with continuous rail testing. These costs are voluntary because railroad track owners will only incur them if they choose to operate continuous rail testing vehicles. The following table shows the net cost savings of this rule, over the 10-year analysis.

Net Cost Savings, in Millions (2019 Dollars)

	Present Value 7%	**Present Value 3%**	**Annualized 7%**	**Annualized 3%**
Costs	$27.44	$33.24	$3.91	$3.90
Cost Savings	$149.30	$180.99	$21.26	$21.22
Net Cost Savings	**$121.86**	**$147.75**	**$17.35**	**$17.32**

This rule will 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%**
Government Cost Savings	$0.194	$0.229	$0.028	$0.027
Flange Bearing Frog Inspections	$0.184	$0.215	$0.026	$0.025
Frog Waiver	$0.013	$0.016	$0.002	$0.002

Savings				
Continuous Testing Labor Cost Savings	$7.452	$9.034	$1.061	$1.059
Slow Orders	$141.329	$171.340	$20.122	$20.086
Continuous Testing Waiver Savings	$0.132	$0.157	$0.019	$0.018
Total	**$149.305**	**$180.991**	**$21.258**	**$21.218**

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	$27.4	$33.2	$3.9	$3.9

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.

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 while improving rail 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 providing 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 former Federal Railroad Safety Act of 1970. The Secretary's authority to act under section 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.

As noted in the NPRM, this final rule is based, in part, on the consensus recommendations of the TSS Working Group. Specifically, this final rule implements the TSS Working Group's recommendations to remove the high-density commuter line inspection-method exception and to revise certain recordkeeping requirements and the qualification requirements for certain railroad employees.

III. Summary of Major Provisions of the Final Rule

A. 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 that leads to a rail failure is the cost of replacing the rail plus the cost of any damage and other consequences that may result from the failure. Rail failures can have widespread and catastrophic consequences (e.g., environmental damage and potential injury and loss of life, along with significant service interruptions, and traffic rerouting). As such, the cost of a rail failure is typically considerably more than the cost of replacing the rail containing the defect before the rail actually fails. The challenge for the railroad industry is to avoid the occurrence of rail failures due to the presence of undetected defects.

The effectiveness of a rail inspection program depends, in part, on the test equipment being properly designed and capable of detecting rail defects of a certain size and orientation reliably, and on ensuring that the test frequencies allow for detection of defects before they grow to critical size. 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 impede the ability of test equipment to detect an

underlying rail flaw.

Currently, track owners use four general rail flaw detection methods, each of which requires human involvement to interpret the test data. The four methods are:

- 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 miles per hour (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 ahead of a verification chase car; and
- Continuous test process, which is one of the subjects addressed in this final rule, where a high-speed, vehicle-based, test system runs non-stop along a designated route, the test data is analysed at a centralized location, and suspect defect locations are subsequently verified.

The main technologies utilized for the processes listed above are 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 (e.g., shelling or corrugation) to impair the detection of rail flaws. Conditions, other than poor rail head surface conditions (e.g., heavy lubrication or debris on the rail head), can also limit the effectiveness of certain inspection

technologies.

Induction testing introduces a high-level, direct current into the top of the rail, 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 distorts the current flow and the magnetic field, and it is this distortion that is 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 transmitted 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 are discontinuities in the material that constitutes the rail. These discontinuities act as a reflector to the ultrasonic waves, a portion of which are reflected back to the transducers. These conditions include rail head surface conditions, internal and visible rail flaws, weld upset/finish, and 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 test data record.

FRA is amending its regulations on inspection of rail and verification of indications of defective rail to allow for continuous rail testing. *See* § 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 rulemaking establishes procedures that, except for indications of a broken rail, extend the required verification timeframes for those entities that adopt continuous testing. FRA expects this will facilitate operational efficiency and encourage both a broader scope and more frequent use of continuous 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 expects the procedures adopted in this final rule are sufficient to ensure the extended verification timeframes are unlikely to 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.[2] This rulemaking codifies the continuous rail testing practices FRA has permitted by waiver and allows for additional flexibility in the rail inspection process. Track owners that do not desire to conduct continuous rail testing are not required to do so.

As explained in detail in the NPRM, 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

[2] *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), and FRA-2019-0057 (MNCW) (available online at www.regulations.gov).

to as "change detection"). Once analyzed, suspect locations or "indications" (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 § 213.113(b), when a track owner learns that a rail contains an indication of one of the defects listed in the Remedial Action Table, the track owner must field-verify the indication within four hours. As proposed, § 213.240 would exempt track owners who elect to utilize continuous rail testing from the requirement to field-verify indications within four hours. Depending on the type and severity of an indication, as proposed § 213.240 would allow railroads up to either 36 or 84 hours to field-verify the suspect locations. (Once a suspect location is verified as a defect, however, the remedial action timelines in the Remedial Action Table would apply).

As noted in the NPRM, the 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 off-site 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 allows track owners to test track more frequently. FRA expects that continuous rail testing would substantially decrease the overall cost to the railroad industry while improving rail

safety.

As noted in section IV.A of the NPRM (*see* 84 FR 72528–30), since 2009, a number of railroads have implemented continuous rail testing programs through limited, conditional waivers of § 213.113(b). As discussed above, § 213.113(b) requires track owners who learn that a rail in their track contains an indication of a defect listed in the Remedial Action Table to verify the indication within four hours and take remedial action in accordance with the Remedial Action Table. The Remedial Action Table prescribes the required remedial actions (and timelines for taking those actions) based on the severity of the defects identified. In other words, 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 a longer period of time to verify indications of defects than permitted by § 213.113(b), thereby allowing the railroads to prioritize the verification of those defects based on the severity of the indications identified.

Under the existing waivers, suspect locations are not prioritized arbitrarily, but are categorized based on the ultrasonic reflective responses viewed by the analyst. In other words, analysts interpret the collected ultrasonic reflective responses, estimate each indication type and size, and, based on that estimate, categorize the suspect locations in terms of severity and remedial action required by the Remedial Action Table (typically suspect locations are categorized as "priority one," "priority two," or "priority three"). Priority one indications are suspected locations above the threshold that, if verified as a defect, would require remedial action note "A," "A2," or "B" under the Remedial Action

Table. Thus, as proposed, these suspect locations must be field-verified within the timeframe listed in § 213.240(e)(2).

Those suspected locations that, if verified as a defect, would not require either remedial action "A," "A2," or "B" must be field-verified within the timeframe listed in § 213.240(e)(1), and are commonly referred to in the industry as either "priority two" or "priority three" indications, 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. Because many variables affect ultrasonic responses, the priority three suspect type is the most commonly indicated, requiring hand-verification to check that location to ensure nothing is being missed or misinterpreted that might result in a rail failure and subsequent derailment.

The Remedial Action Table reflects the fact that all verified defects pose a potential risk of sudden failure, depending on the conditions, even with defects deemed to be less severe than others. Data from the existing waivers demonstrates that, although less than two percent of the priority three suspect locations are found to be actual rail defects, priority three suspect locations

account for approximately 85 percent of the field-verified defects found as a result of continuous testing. Priority one and priority two suspect locations are found to be actual rail defects in approximately 95-99 percent and 65-70 percent of the cases, respectively. Thus, although priority three suspect locations have a much higher probability of a false positive, they are also by far the most common indication of an actual defect. Accordingly, FRA finds that safety necessitates continuing to require the field verification of all defects identified by tests carried out under § 213.237 or § 213.239.

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

The continuous rail test section would not modify the required frequency of rail inspections or the applicable procedural requirements as set forth in §§ 213.237 and

213.339, nor does it make any change to the remedial actions required after field verification of a rail defect as described in § 213.113(c).

B. Removal of the High-Density Commuter Line Exception

FRA is removing 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.ntsb.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).

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

FRA is revising 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 finds 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 will result in industry cost savings that are larger than the cost savings that result 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. A thicker frog point provides more inert mass, which results in reduced 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 ⅝ (54.6250) inches to 4 feet, 6 $^{29}⁄_{64}$ (54.4531) inches, which does not comply with minimum guard check distance for Class 5 track.

As defined in 49 CFR 213.143, 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 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).

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 of an inch 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 inches, meeting the requirement for Class 5 track (greater than or equal to 54.5 inches). A heavy-point frog has a standard guard check gage of 54.4531 inches, 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 inches).

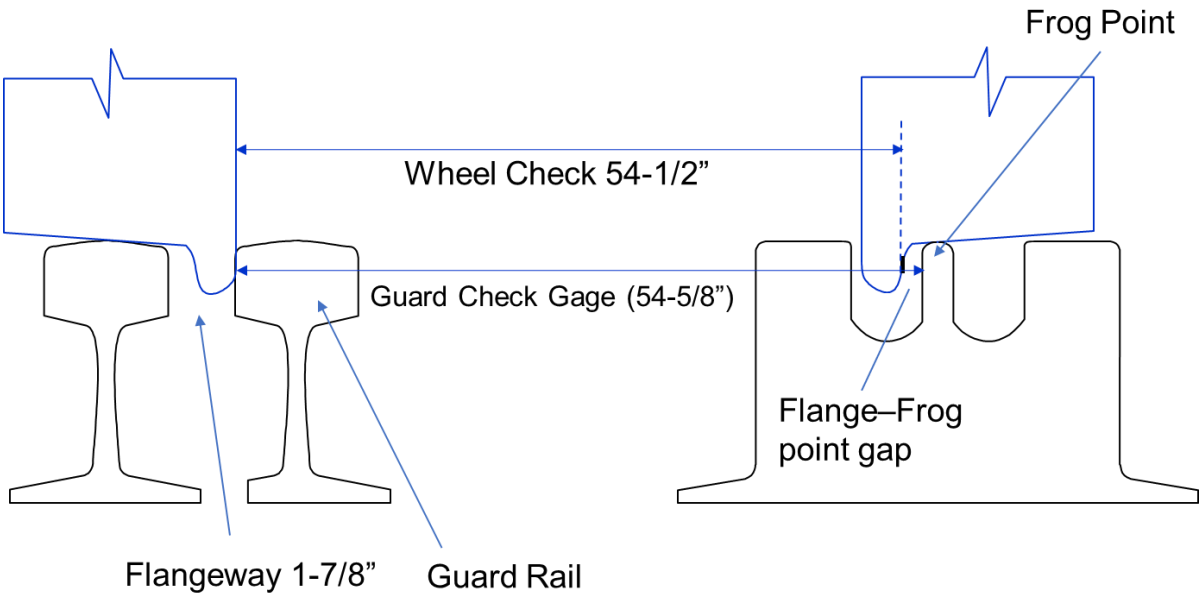

Figure 1

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. The waiver also requires that each HPF 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 finds that the safety of HPFs have been proven. As discussed in more detail below in the section-by-section analysis for § 213.143, FRA is incorporating some of 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 very high impact forces between the wheels and rails, which 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. Ramps provide a smooth transition from tread-bearing to flange-bearing and reduce the dynamic wheel forces significantly. 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 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 May 2020, and is set to expire in May 2025.

To date, no accidents have been reported to FRA as having occurred at or near FBFs. Accordingly, FRA finds that the safety benefits of FBFs have been proven and incorporates some of 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 finds that it is in the best interests of public safety to retain, as much as reasonable, similar limitations imposed under the waiver.

IV. Discussion of Comments and Conclusions

FRA received six sets of comments in response to the NPRM. Three sets of comments were from RSAC members and included comments from the National Transportation Safety Board (NTSB), joint comments submitted from the Association of American Railroads (AAR) and the American Short Line and Regional Railroad Association (ASLRRA) (jointly referred to as "AAR/ASLRRA"), and joint comments from the Brotherhood of Maintenance of Way Employes Division (BMWED) and the Brotherhood of Railroad Signalmen (BRS) (jointly referred to as "BMWED/BRS"). FRA also received comments from Herzog Service, Inc., and the American Association for Laboratory Accreditation (A2LA). Finally, FRA received a joint comment from the following seven entities: the American Chemistry Council, the American Fuel &

Petrochemical Manufacturers, the American Petroleum Institute, the Chlorine Institute, the Fertilizer Institute, the Renewable Fuels Association, and the Sulphur Institute (collectively referred to as the "Chemical, Energy, and Agricultural Trade Associations").

FRA thanks the commenters for the time and effort put into each of the comments received. Directly below FRA discusses the comments generally applicable to this rulemaking. Comments directed at specific proposed regulatory changes are discussed below in the section-by-section analysis. The order in which FRA discusses the comments below is not meant to imply that FRA is prioritizing one commenter over another. Rather, FRA has organized the discussion of comments in as logical manner as possible.

BMWED/BRS

In their comment, BMWED/BRS raised a number of concerns with the NPRM, primarily regarding the proposal to allow for continuous rail testing. Although many of BMWED/BRS's concerns are discussed below in the section-by-section analysis, they recommend that certain additional conditions, not proposed in the NPRM, be required for continuous rail testing. BMWED/BRS assert that suspect locations containing a suspect defect that, if verified, would require remedial action A, A2, or B identified in the Remedial Action Table contained in § 213.113(c) (Remedial Action Table), as well as indications of a "possible transverse defect estimated to be greater than 25%," should require immediate protection. Additionally, BMWED/BRS contend that the Remedial Action Table should be revised for continuous rail testing. Specifically, BMWED/BRS state that "the number of days/hours in the Remedial Action Table" should be reduced to

"accommodate the additional 36 to 84 hours for 'field verification' . . . in order to maintain an equivalent level of safety." A proposed revised Remedial Action Table was attached to BMWED/BRS's comment. Finally, BMWED/BRS recommend that FRA require railroads "opting to use [continuous rail testing] under proposed § 213.240 to at least double the frequency of inspections on each track segment."

FRA disagrees that these changes are needed or justified. As discussed in more detail in the NPRM (*see* 84 FR 72528–30), continuous rail testing has been successfully trialed under the waiver process on select rail segments on multiple railroads in the United States since 2009. The data derived and the lessons learned from over 10 years of testing do not support the additional conditions proposed in BMWED/BRS's comment. Continuous rail testing has the potential to improve rail safety significantly and FRA is confident that § 213.240, as adopted in this final rule, successfully balances the flexibility needed to conduct continuous rail testing with conditions necessary to ensure at least an equivalent level of safety, and very likely improve it. FRA also finds that adopting the additional conditions proposed by BMWED/BRS would be a significant and unjustified disincentive to track owners' and railroads' use of continuous testing. Adopting such conditions could make continuous rail testing more onerous than traditional stop-and-verify testing (e.g., by doubling the required number of inspections, requiring immediate protections for certain defects before field verification, and decreasing existing timeframes for imposing remedial action)—all of which could result in track owners and railroads forgoing adoption of continuous testing, and therefore, the associated safety benefits discussed throughout this final rule.

Additionally, BMWED/BRS advocate for an interpretation of existing § 213.5(a) and how it relates to a suspect location found during a rail inspection. BMWED/BRS assert that "delayed application of the Remedial Action Table for suspect rail defects" violates § 213.5(a) since once "suspected defects are identified, the carrier 'knows or has notice' that the track does not comply with the requirements of Part 213." BMWED/BRS contend that "[a]ll suspected rail defects must first be protected and then 'verified.'" FRA does not agree that this interpretation of § 213.5(a) is consistent with regulatory language or longstanding FRA interpretation. An indication of a suspect defect is only that: an indication that a defect might exist. The track owner does not have knowledge or notice of an actual defect until the suspected defect is field-verified and confirmed to be a defect. This long-held interpretation is consistent with the structure of § 213.113. Section 213.113(a) lists the actions a track owner must take when the owner "learns that a rail in the track contains any of the defects listed in the table contained in paragraph (c)," whereas § 213.113(b) lists the actions a track owner must take when the owner "learns that a rail in the track contains an indication of any of the defects listed in the table contained in paragraph (c)." Thus, the plain language of the regulation makes clear that an indication of a defect is not the same as a verified defect and thus § 213.5(a) would not require immediate remediation for an unverified indication of a defect.

Finally, BMWED/BRS state that "FRA must assure that all verified defects be marked with a highly visible marking in compliance with § 213.237(e) or § 213.339(c) as appropriate." FRA notes that this is already required by §§ 213.237(e) and 213.339(c), and this final rule does not change that.

AAR/ASLRRA

In addition to comments directed at specific, proposed regulatory provisions, which are discussed below in the section-by-section analysis, AAR/ASLRRA raise a concern about training and qualification provisions. Specifically, AAR/ASLRRA contend that 49 CFR part 243, which was originally issued in 2014 but had its effective date delayed multiple times, "generally made obsolete the previous need to codify scattershot training provisions throughout the Federal railroad safety regulations," and that any "references to training and qualification in the final rule [are] unnecessary and duplicative." FRA disagrees. As § 243.1 expressly states, part 243 contains the general minimum training and qualification requirements for each category and subcategory of safety-related railroad employee (§ 243.1(b)), and the requirements of part 243 do not exempt any other requirements in this chapter (§ 243.1(c)). Further, unless otherwise noted, part 243 augments other training and qualification requirements contained in this chapter (§ 243.1(d)). The clear wording of part 243 shows that training and qualification requirements codified in other parts of the CFR are not obsolete or duplicative.

A2LA

A2LA, in its comment, generally favors utilizing International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) accreditation for multiple areas of part 213, including requiring continuous rail testing be done by ISO/IEC accredited inspection agencies, adopting ISO/IEC standards for qualification requirements, and adopting ISO/IEC accreditation for track inspections. FRA does not believe ISO/IEC standards are necessary for purposes of this final rule. The qualification

requirements already included in part 213 and adopted in this final rule, along with continued FRA oversight, are sufficient to ensure railroad personnel conducting relevant tasks are properly trained and possess the requisite skills to complete their jobs safely and effectively.

Chemical, Energy, and Agricultural Trade Associations

The Chemical, Energy, and Agricultural Trade Associations "support allowing inspection of rail using continuous rail testing," but raise a general concern "that the proposed revisions, particularly the extension of the verification timeframes could lead to a scenario where fatal flaws remained unaddressed and subject trains to potential derailments." The Associations go on to "caution FRA from implementing an overly extended verification timeframe and encourage a conservative approach when considering what is a critical flaw requiring immediate attention." FRA appreciates the Associations' concerns. However, FRA is confident that the procedures governing continuous rail testing and the extension of field verification timeframes are sufficient to ensure railroad safety. Since 2009, various continuous rail testing procedures and timeframes have been trialed and fine-tuned through the waiver process on multiple railroads. Waiver data indicates that as track owners have increased their use of continuous rail testing under the waivers, they have realized a decrease in broken-rail-caused accidents and an increase in overall safety. For example, Norfolk Southern Railway, which began operating under a continuous test waiver on limited territories in 2015 and since that time has expanded its continuous test territory numerous times, experienced 34 percent fewer main line service failures (broken rails that do not result in

an accident) in 2018 as compared to 2014. Similarly, CSX Corporation, which has been piloting continuous test technologies and methodologies under an FRA waiver since 2009 and, similar to NS, has expanded its continuous test territories numerous times, had zero broken rail-caused main track accidents in 2019. FRA safety data demonstrates a nationwide 39 percent reduction in FRA reportable broken rail caused accidents from June 2019 to May 2020. In addition, since beginning continuous rail testing under waiver in 2018, the Long Island Railroad (LIRR) has tripled its testing frequency with no additional train delays. This final rule is based on the data and experience gained through those waivers.

V. Section-by-Section Analysis

Section 213.1 Scope of Part

Proposed rule: 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 proposed 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.

Comments: FRA received no comments on this proposed change.

Final rule: The change is adopted as proposed in the NPRM.

Section 213.5 Responsibility for Compliance

Proposed rule: 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 proposed 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 proposed 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.

Comments: FRA received no comments on these proposed changes.

Final rule: The changes are adopted as proposed in the NPRM.

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

Proposed rule: 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. For the reasons discussed in the NPRM, and consistent with the recommendations of the TSS Working Group, FRA agreed that requiring supervisory experience to qualify under paragraph (a)(1) creates a possible conflict in the regulatory language (an employee cannot be qualified under that paragraph unless he or she has supervisory experience yet an employee would not be able to gain supervisory experience without first being qualified). Accordingly, FRA proposed to remove the supervisory requirement in the paragraph.

Paragraphs (a)(3), (b)(3), (c)(4), and (e) each require "written" records. The records required in paragraphs (a)(3), (b)(3), and (c)(4) relate to individual's authorization from a track owner to prescribe remedial actions. The records required in paragraph (e) relate to the designation of individuals authorized to prescribe such actions. As noted in the NPRM, FRA finds that the term "written" can be interpreted to encompass both physical hardcopies or electronic versions of the required authorizations or designations. To avoid any possible confusion and consistent with the TSS Working Group's recommendations, FRA proposed to remove the term "written" from each of

these paragraphs to make clear that the required authorizations or designations could be recorded and conveyed either in hardcopy or electronic form.

FRA also proposed to add new paragraph (e)(2) to require records of designations under § 213.7 to include the date each designation is made. To incorporate this revision, FRA proposed to redesignate paragraph (e)(2) as paragraph (e)(3). FRA also proposed to revise the resulting new paragraph (e)(3) to require the records to contain not only the basis for each designation as paragraph (e)(2) currently requires, but also to require track owners to include the method used to determine that the designated person is qualified. FRA intended this change to better conform the section with the requirements of § 213.305(e) for high-speed operations, and better describe what FRA means by the "basis for each designation." As noted in the NPRM, 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.).

Paragraph (e)(3) also requires designation records under § 213.7 to include records of track inspections "made by each designated qualified person." FRA proposed to remove the requirement, finding it redundant with § 213.241's requirement that track owners maintain records of track inspections made by qualified inspectors that are "kept available for inspection and copying by [FRA] during regular business hours." Accordingly, FRA proposed to redesignate paragraph (e)(3) as new paragraph (f). FRA also proposed 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. As explained in the NPRM, the meaning of the term "reasonable notice" depends on the specific facts of each situation and 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.

Comments: With regard to the proposed introduction of the phrase "reasonable notice" in new proposed paragraph (f), AAR/ASLRRA, in their comment, state that "what constitutes 'reasonable notice' is inherently subjective" and assert that "a railroad acting in good faith to provide requested records to FRA representatives upon 'reasonable notice' should never be subject to civil penalties." Alternatively, AAR/ASLRRA suggest that FRA adopt "a presumptive ten days' notice requirement."

Final rule: As explained above and in the preamble to the NPRM, the term "reasonable notice" depends on the specific facts of each situation (e.g., time of day request made, day of the week request made, number of records requested). FRA does not agree that it is appropriate to adopt a blanket statement that a railroad can never be subject to civil penalties so long as it acts in "good faith." The subjective intent behind a railroad's actions is not a necessary consideration for whether it complies with the requirement to produce records. Likewise, FRA declines to adopt a blanket 10 days' notice requirement. Although current §§ 213.241(b) and 213.369(b) include a reference to a 10 days' notice for track inspection records, that only applies to paper records that are not maintained at the designated location where they are requested. Electronic records or those paper records maintained at the designated location where they are

requested are not subject to the automatic 10 days' notice requirement under current §§ 213.241(b) and 213.369(b).

FRA received no other comments on the proposed revisions to this section. Accordingly, the revisions to § 213.7 are adopted as proposed in the NPRM.

Section 213.9 Classes of Track: Operating Speed Limits

Proposed rule: 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 m.p.h. for passenger trains and up to 80 m.p.h. 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 designed 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) discussed above, FRA proposed 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).

Comments: FRA received no comments on this proposed change.

Final rule: The change is adopted as proposed in the NPRM.

Section 213.11 Restoration or Renewal of Track Under Traffic Conditions

Proposed rule: Section 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 proposed 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, to clarify an existing regulatory requirement, FRA proposed to add text stating that if the restoration or renewal is on continuous welded rail (CWR) track, the person must also be qualified under § 213.7(c).

To clarify that a person designated under § 213.7(a), and (c) if applicable, may not authorize movement over any track not meeting all the requirements of part 213 for its particular class, FRA also proposed adding a sentence stating that the "operating speed cannot be more than the maximum allowable speed under § 213.9 for the class of track concerned."

Comments: FRA received no comments on the proposed changes.

Final rule: The changes are adopted as proposed in the NPRM.

Section 213.113 Defective Rails

Proposed rule: Section 213.113 prescribes the required actions a track owner must take when it learns that a rail contains an indication of a defect and after the track owner verifies the existence of the defect. 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, FRA proposed to modify the second sentence in paragraph (b) so that it would begin with "except as provided in §

213.240, ..."

Comments: FRA received no comments on this proposed change.

Final rule: The change is adopted as proposed in the NPRM.

Section 213.137 Frogs

Proposed rule: Section 213.137 contains the standards for use of frogs. As discussed in detail in the preamble to the NPRM, 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. *See* 84 FR 72530.

Paragraph (a) of § 213.137 prescribes limits on the flangeway depth of a frog. These limits effectively prohibit the use of flange bearing frogs (FBFs) on Classes 2 through 5 track. However, since 2000, railroads have operated under a waiver that allowed the installation of FBFs in crossing diamonds in track Classes 2 through 5, and exempted those diamonds from the flangeway depth requirements of paragraph (a), subject to certain conditions. As discussed in more detail in section IV.C of the NPRM (*see* 84 FR 72530–32), FRA has renewed the waiver multiple times, and currently the waiver is set to expire in May 2025.

After careful review of safety performance under the waiver and analysis of track-caused derailments, as noted in the NPRM, FRA has identified no negative safety implications with the use of FBFs. As such, in the NPRM, FRA proposed to modify § 213.137 by adding paragraph (e) that would allow the use of FBFs in crossing diamonds in Classes 2 through 5 track consistent with the conditions of the existing waiver. The

existing waiver limited the installation of FBFs to locations with crossing angles above 20 degrees unless moveable guard rails are used and generally required track owners to initially inspect newly installed FBFs more often than traditional frogs. The waiver also required track owners to document certain information about the location of the installed FBFs (e.g., crossing angle, tonnage, speed, direction and type of traffic), develop maintenance manuals specific to the frogs, and properly train all personnel responsible for inspecting or repairing any FBF. *See* proposed paragraphs (e)(1)-(3).

Comments: FRA received comments generally supporting the proposed changes. AAR/ASLRRA, while strongly supporting the incorporation of the longstanding waiver for FBFs, disagreed with FRA's proposal to include "many of the same administrative and recordkeeping provisions found in the" waiver. AAR/ASLRRA contend that those additional administrative requirements "are no longer necessary or relevant once FRA has determined the new technology is safe."

Final rule: FRA agrees with AAR/ASLRRA's statement that the administrative requirements imposed as conditions of the waiver are no longer necessary given that the use of FBF's as proposed has been proven safe, and the regulations already require track owners to provide employees responsible for inspecting or repairing FBFs to be appropriately trained and demonstrate appropriate knowledge, understanding, and ability to do so. Accordingly, FRA is not adopting proposed paragraphs (e)(2) and (e)(3). FRA, however, is maintaining the requirement from proposed paragraph (e)(1) that FBFs may only be used at locations with crossing angles greater than 20 degrees unless movable

guard rails are used. As noted in the NPRM, 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.

Because FRA is not adopting proposed paragraphs (e)(2) and (e)(3), FRA is including the language proposed for paragraph (e)(1) at the end of new paragraph (e). The changes proposed in the NPRM are otherwise adopted, with the revisions discussed above.

Section 213.143 Frog Guard Rails and Guard Faces; Gage

Proposed rule: 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 the NPRM (*see* 84 FR 72530–32), 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 gage conforming to the standards for Class 4 track frogs. FRA granted several extensions of this waiver, and it is currently set to expire in February 2023.

After careful review of safety performance under the waiver and analysis of track-caused derailment data, FRA identified no negative safety implications with the use of HPFs under the conditions outlined in the waiver. As such, in the NPRM, FRA proposed to modify §213.243 to add footnote 3 to the table in § 213.143 which, consistent with the

conditions of the wavier, would: (1) allow the guard check gage for HPFs on Class 5 track to be less than the current 4-foot, $6^{1}/_{2}$-inch minimum, but not less than 4 feet, 6 $^{3}/_{8}$ inches (the current minimum for frogs in Class 4 track); (2) 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; (3) require that each HPF and the 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; (4) 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; and (5) require that each HPF bear an identifying mark that identifies the frog as an HPF.

Comments: FRA received comments generally supporting the proposed changes. AAR/ASLRRA, while strongly supporting the incorporation of the longstanding waiver for HPFs, disagreed with FRA's proposal to include "many of the same administrative and recordkeeping provisions found in the" waiver. AAR/ASLRRA assert that those additional administrative requirements "are no longer necessary or relevant once FRA has determined the new technology is safe."

Final rule: FRA agrees with AAR/ASLRRA's statement that the administrative requirements imposed as conditions of the waiver are no longer necessary given that the

use of HPFs as proposed has been proven safe and the regulations already require track owners to provide employees responsible for inspecting or repairing HPFs to be appropriately trained and demonstrate appropriate knowledge, understanding, and ability to do so.

Accordingly, FRA is not adopting the specific recordkeeping or training requirements proposed in paragraphs (a) or (c) of proposed footnote 3, and is also not adopting the second sentence of proposed paragraph (d). FRA is retaining the remainder of the proposed requirements related to HPFs, but in this final rule, FRA is designating proposed paragraphs (b) and (d) of footnote 3, as paragraphs (a) and (b) of footnote 3. The changes as proposed in the NPRM are otherwise adopted, with the revisions discussed above.

Section 213.233 Visual Track Inspections

Proposed rule: Section 213.233 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 existing scope of this section, FRA proposed to add the word "visual" to the section heading so that it would read "Visual track inspections." Because other sections in part 213 cover different types of inspections and inspection methods for the same types of track (automated inspections, inspections of rail, etc.), this proposed change would clarify that this section deals specifically with visual track inspections. This proposal would also make § 213.233's heading consistent with the heading for the corresponding high-speed track section, § 213.365, "Visual inspections." As discussed below, FRA proposed to revise the heading for § 213.365 so

that the headings are the same for both §§ 213.233 and 213.365.

Comments: AAR/ASLRRA contend that, although § 213.233 "currently contemplates human visual inspection, . . . as technology evolves in the future," these inspections "may not always be conducted 'visually' by humans." AAR/ASLRRA concludes that adding the word "visual" to the heading of § 213.233 "could make them more outdated in the future."

Final rule: FRA disagrees. As the commenters note, § 213.233 currently requires visual track inspections and the change to the heading is meant to make that clear, as well as make the heading of § 213.233 consistent with the heading of § 213.365, which applies to higher-speed tracks. If future regulatory changes are made to § 213.233 to allow the use of non-visual inspections specifically under the section's requirements, the heading could be updated at that time. Moreover, the change does not affect the use of non-visual inspection methods as provided in other sections of this part. The change is therefore adopted as proposed in the NPRM.

Proposed rule: Paragraph (b) 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 proposed revising the terms "riding over" and "passing over" to "traversing" in this paragraph and, for the same reason, FRA also proposed to revise the terms "is riding" and "are riding" to "traverses" and "traverse."

Additionally, FRA proposed 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.

Comments: FRA received no comments on these proposed changes.

Final rule: The changes are adopted as proposed in the NPRM.

Proposed rule: As discussed in more detail in section IV.B of the NPRM (*see* 84 FR 72530), FRA proposed 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 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 was directly responsive to Congress's direction in sec. 11409 of the FAST Act and NTSB's Safety Recommendation R-14-11. In addition, when proposed, FRA believed no track owner currently utilized this exception and the RSAC unanimously voted to remove the

exception, so FRA concluded its removal would have little to no impact on the regulated industry.

Comments: Despite affirmatively stating during the RSAC proceedings that none of their members currently utilize the high-density commuter line exception, in response to the NPRM, AAR/ASLRRA provided comments stating that the National Railroad Passenger Corporation (Amtrak) utilizes the exception in three locations, Penn Station in New York City and in the Washington, D.C. and Boston terminals, and "[c]ertain commuter railroads" also utilize the exception. AAR/ASLRRA further argue that "Amtrak is concerned that elimination of the exemption would result in roadway workers being required to conduct additional inspections at high traffic volume locations with narrow track centers." Consequently, AAR/ASLRRA assert that FRA should not adopt this proposal and, instead, study it further.

Final rule: FRA has considered the new information provided by AAR/ASLRRA and still concluded that the high-density commuter line exception should be removed. FRA finds that the exception is no longer justified and it is in the interest of safety that it be removed, based on the 2013 Metro-North Bridgeport, CT accident, discussed in greater detail in the NPRM (*see* 84 FR 72530), as well as internal evaluations by FRA. Track over which a large number of passengers traverse should be inspected at least in the same manner as other types of track. FRA notes that the high-density commuter line exception applies only to mainline track, so it is likely that any usage by Amtrak in Penn Station and the Washington, D.C. and Boston terminals is very limited. Additionally, FRA finds it is highly unlikely that the removal of the exception will result in any

additional required track inspections since track inspectors will still be permitted to inspect tracks adjacent to the one they operate over. Inspectors will simply be required to alternate which track they traverse so that each track is actually traversed every two weeks, instead of always permitting the inspection from an adjacent track. This may require those railroads utilizing the exception to slightly revise their inspection practices. Combined with effective roadway worker protection, this should not increase the risk to roadway workers and should improve the quality of inspections. Thus, FRA has determined that continuing this exemption is not in the interest of safety and the change is adopted as proposed in the NPRM.

Proposed rule: FRA proposed three changes to paragraph (c). First, FRA proposed to add the word "visual" before "track inspection" in the introductory text. This was simply to make paragraph (c) consistent with the new heading for § 213.233 and would have no effect on the meaning of paragraph (c). Second, FRA proposed 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.

Third, FRA proposed 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 without 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 proposed to revise paragraph (d). Specifically, FRA proposed to add the phrase "the § 213.7 qualified" at the beginning of the paragraph to clarify that "the person" making the inspection that the rule text refers to is the qualified track inspector designated under § 213.7. Additionally, FRA proposed 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 regulatory language to bar such movements of equipment and materials on track that is out of service. The proposed revision was meant to embody that practice and interpretation and prevent possible confusion.

Comments: FRA received comments supporting one of the proposed changes and no adverse comment on any proposed change to paragraph (c) or (d).

Final rule: The changes are adopted as proposed in the NPRM.

Section 213.240 Continuous Rail Testing

In the NPRM, FRA proposed to add this new section to allow track owners to utilize continuous rail testing to satisfy the requirements for internal rail inspections under § 213.237 (for track Classes 1-5), or § 213.339 (for Class 6 track and higher). As explained in the NPRM and above, proposed § 213.240 would allow greater flexibility in the rail flaw detection process by providing additional time to analyze the data collected during continuous rail testing and field-verify indications of potential rail flaws. This additional time 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, FRA proposed certain requirements related to this elective process to ensure it is conducted properly, which include requirements to maintain records that help ensure adequate FRA oversight.

Proposed rule: Proposed paragraph (a) would allow track owners to elect to use continuous rail testing instead of complying with § 213.113(b) (requiring field verification of indications either immediately or within 4 hours), 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 (including remedial action requirements), along with the requirements of proposed § 213.240. In other words, § 213.240 provides additional time to field-verify a

suspect location, but once verified, the track owner must take appropriate remedial action as described in § 213.113(c).

Comments: Asserting that FRA has not provided enough data to evaluate the safety benefits of the proposed change to rail testing procedures, NTSB commented that "[u]ntil data from continuous rail testing can be collected, analyzed, and verified as beneficial to safety, the FRA should require that traditional stop-and-verify rail inspections" continue. FRA received additional comments regarding the proposal to allow continuous testing and those comments are discussed either above in Section IV if they were more general, or below in the paragraph that they specifically concern.

Final rule: As discussed above, and in the NPRM, continuous testing has been conducted by multiple railroads under FRA's waiver process for over a decade. FRA has reviewed and analyzed the data received from those waivers as well as data related to service failures and derailments. As noted above, waiver data indicates that as track owners have increased their use of continuous rail testing under the waivers, they have realized a decrease in broken-rail-caused accidents and an increase in overall safety. FRA is confident that it has sufficient data and experience supporting continuous testing as beneficial to safety. Paragraph (a) is therefore adopted as proposed in the NPRM.

Proposed rule: 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 paragraphs (b)(1) through (5) would require track owners conducting continuous rail testing under § 213.240 to adopt procedures addressing how (1) test data would be transmitted and analyzed; (2) suspect locations would be identified for field verification; (3) suspect locations would be categorized and prioritized according to their potential severity; (4) suspect locations would be field-verified; and (5) suspect locations would be designated following field verification.

Comments: NTSB commented that FRA should provide more information regarding the specifics of the required minimum procedures. Specifically, NTSB states that the "guidance should discuss the transmittal of testing data, and provide procedures for locating and validating suspected defects, and managing recordkeeping."

With respect to proposed paragraph (b)(4), which would require the procedures address how suspect locations would be field-verified, BMWED/BRS commented that FRA has failed to articulate what actions must be taken should the field verifier be unable to reproduce the defect signature and that FRA should require suspect locations "be validated for 60 feet on either side of the suspect defect."

Final rule: As discussed in more detail below, and in the NPRM, FRA has intentionally designed the rule to provide track owners flexibility on how to structure their continuous testing procedures, while ensuring certain standards are met. Railroad operations are not uniform and technology changes. Accordingly, FRA seeks to avoid

limiting railroads' flexibility to innovate and utilize new technology and approaches as they are developed. However, the procedures track owners adopt must accomplish their purpose. To make this clear in this final rule, FRA is making changes throughout paragraph (b) requiring track owners' minimum procedures adopted under 213.240 to ensure accurate data transmittal, analysis, and conclusions throughout the entirety of the continuous test process. Specifically, FRA is revising proposed paragraph (b)'s introductory text and paragraphs (b)(1), (2), and (4).

First, FRA is revising the last sentence of paragraph (b)'s introductory text to specify that a railroad's continuous testing procedures must conform with the requirements of §213.240 and ensure the requirements of paragraphs (b)(1) through (5) are met.

FRA is revising proposed paragraph (b)(1) to specify that a track owner's procedures must ensure that test data will be "timely and accurately" transmitted and analyzed. Procedures that do not accomplish the timely and accurate transmittal and analysis of the test data will not comply with the requirements of paragraph (b)(1). For example, data integrity must be maintained throughout the collection, analysis, and verification process, and transmitted in a manner and speed sufficient to meet the field-verification timeframes discussed below.

FRA is revising proposed paragraph (b)(2) to make clear that the procedures must ensure suspect locations are "accurately" identified for field verification. Procedures that do not result in the accurate identification of suspect locations for field verification will not comply with the requirements of this paragraph (b)(2). For example, the data must

reflect the true position of the suspect location and contain sufficient data to allow the field verifier to successfully identify the suspect location. With this change, paragraph (b)(2) is adopted as proposed in the NPRM.

FRA is revising proposed paragraph (b)(4) to make clear that the procedures must ensure suspect locations are "accurately" field-verified. As explained in more detail in the NPRM, accurate field verification is vitally important to 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. FRA recognizes, however, that defect signatures will always differ to some degree even when the same equipment is used over the same defect. That is the nature of the technology. FRA does not intend to require a railroad to implement procedures that would ensure field verifiers can reproduce exact defect signatures. FRA recognizes this is simply not feasible. FRA also believes that requirements adopted in this final rule cover this issue by requiring track owners to document suspect locations with repeatable accuracy so that they may be located for field verification. However, to emphasize the general point discussed above (i.e., that the procedures adopted by track owners must accomplish their purpose), FRA is revising proposed paragraph (b)(4) to make clear that the procedures must address how suspect locations will be "accurately" field-verified. FRA intends the addition of "accurately" to more clearly convey the requirement. For example, the procedures must enable the field verifier to locate the suspect location and take appropriate action to determine whether the suspect location contains an actual rail defect. Procedures that do not accomplish the accurate field verification of a suspect location, which would implicitly also require

accurately locating that suspect location, will not comply with the requirements of § 213.240(b)(4).

FRA disagrees with BMWED/BRS's comment that it is necessary to require a track owner validate each suspect location for 60 feet on either side. Paragraph (b)(4) requires the track owner have procedures for the effective and accurate field verification of a suspect location. Additionally, paragraph (f) of this section, discussed below, requires that track owners record suspect locations with repeatable accuracy that allows for the location to be accurately located for subsequent verification. Requiring each suspect location to be validated for 60 feet on each side would be redundant and would create a substantial amount of extra, unnecessary work. Additionally, because such a condition would apply only to track owners conducting continuous testing, it would serve as a significant disincentive for railroads to adopt continuous rail testing, because it would apply only to continuous testing and not tradition stop-and-verify testing. Paragraph (b)(4) is therefore adopted as proposed in the NPRM, with the change noted above.

Proposed rule: 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. As proposed, track owners could elect to conduct continuous testing in conjunction with stop-and-verify rail testing, but a determination would need to be made prior to commencement of the test as to which type of test will be conducted on a given section of track. The decision as to what type of test is being conducted on a given section of track 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 commenced, FRA proposed to require the track owner to 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. As proposed, these records would need to 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 any suspected defects identified.

Additionally, proposed paragraph (c) would require a track owner to designate and document, at least 10 days prior to commencing a continuous rail test, whether the test is being conducted to satisfy the requirement for an internal rail inspection under § 213.237 or § 213.339. 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. Under FRA's proposal, a continuous rail test conducted to meet the minimum number of required internal rail inspections would need to comply with § 213.240, including the field-verification requirements under 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. As proposed, those additional rail tests (that are not intended to meet the minimum number required by § 213.237 or § 213.339) would not be required to meet the field-verification timeframe requirements of § 213.240, and

the track owner therefore cannot rely on such tests to demonstrate compliance with either § 213.237 or § 213.339. As proposed, 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, at least 10 days in advance of the test to allow FRA the opportunity to oversee the testing and ensure the proper procedures are being followed.

Comments: AAR/ASLRRA request two changes to the proposed rule. First, AAR/ASLRRA state that the proposed 10-day advance designation of whether a continuous test is being conducted to satisfy the minimum frequency requirements of § 213.237, or § 213.339, "may actually detract from safety by preventing a continuous test run from occurring when an opportunity to conduct such testing arises within the ten-day window." Accordingly, AAR/ASLRRA asks that FRA remove the proposed requirement. Second, AAR/ASLRRA oppose the requirement that, when the type of test (continuous or stop-and-verify) changes after a test commences, the track owner must document the reason for the change. AAR/ASLRRA contend that "the reason a track owner may decide to change a test may be a result of a business decision not within FRA's regulatory purview," and that the "proposal appears to serve no required safety purpose." Finally, AAR/ASLRRA comment on the use of the term "reasonable notice," which is discussed in more detail in the section-by-section analysis for § 213.7, above.

Final rule: Whether a continuous test is done to satisfy the inspection frequency required under this part affects what procedures the track owner must follow. Thus, for FRA to conduct effective oversight, and for track owner inspection personnel to know what procedures apply, the track owner must articulate whether the test is being

conducted to satisfy the inspection frequency required under part 213. However, FRA agrees that the 10 days' advance notice is unnecessary and could prevent a track owner from conducting a continuous test if the equipment becomes available within the 10-day window. Thus, FRA is not adopting the 10-day notice requirement and instead will require that the track owner designate the type of test prior to the start of the test. This revision will ensure that FRA and track owner personnel know whether the procedures required under this part apply to the test, while addressing AAR/ASLRRA's concern regarding advanced notice.

As for the proposed requirement that a track owner document the reason for a change in the type of test after commencing the rail test, although FRA does not believe it is burdensome, FRA agrees that the information is not vital to FRA's ability to conduct oversight and ensure safety. Accordingly, FRA is not adopting the proposed requirement that a track owner document the reason for such a change. However, the track owner must document the change and include the time the test was started and when it changed, and the milepost where the test started and where it was changed. Further, if a track owner switches from a continuous rail test to a stop-and-verify test, regardless of whether the continuous rail test was being conducted to satisfy the minimum frequency requirements of § 213.237, or § 213.339 where applicable, all requirements of § 213.113 will immediately apply and any suspect locations found during the stop-and-verify test must be field-verified within 4 hours.

See the section-by-section analysis for § 213.7 for FRA's response to AAR/ASLRRA's comment regarding the use of the term "reasonable notice." Paragraph

(c) is adopted as proposed in the NPRM, with the changes noted above.

Proposed rule: Proposed paragraph (d) lists required qualifications for certain persons involved in key aspects of the continuous testing program. Proposed paragraph (d)(1) would require operators of continuous rail test vehicles 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 proposed that the same qualification requirements apply to operators of continuous test vehicles, stating that, like operators of stop-and-verify test vehicles, operators of continuous test vehicles must ensure that the vehicles conduct a valid search and function as intended, and be capable of interpreting relevant equipment responses and determining that a continuous, valid search has been conducted.

Comments: Herzog Services, Inc. asserts that "the data collection phase of the Continuous Test Process only requires an operator whose sole function is to ensure the test equipment is functioning properly, and that a valid search for internal defects is being conducted." Herzog goes on to state that the "operator is not performing interpretation of the test data for the purpose of identifying a suspect defect location," and that accordingly, the operator need not be qualified under all elements of § 213.238(b), specifically, Herzog asserts that a continuous rail test inspection vehicle operator should not be required to be qualified under § 213.238(b)(3), which requires the operator be trained to "[i]nterpret equipment responses and institute appropriate action in accordance with the employer's procedures and instructions."

Final rule: FRA generally agrees with Herzog's comment and, in this final rule, is

revising paragraph (d)(1) to require the continuous rail test inspection vehicle operator be qualified under § 213.238, with the exception of § 213.238(b)(3). However, FRA makes clear that if the operator of a continuous rail test inspection vehicle is not fully qualified under § 213.238, including § 213.238(b)(3), then it will not be possible for that inspection to change from a continuous test to a stop-and-verify test, because the operator will not be qualified under § 213.238 to conduct a stop-and-verify test. Paragraph (d)(1) is adopted as proposed in the NPRM, with the changes noted above.

Proposed rule: 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 intentionally did not propose specific qualification requirements but instead proposed 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. As noted in the NPRM, 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. Accordingly, the track owner or a designee must 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 person 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.

Comments: FRA received no comments on this proposal.

Final rule: After further review of the proposed language, FRA realizes that by not incorporating specific training requirements such as in § 213.238 and instead giving track owners flexibility in how to train and qualify, there is no express requirement that the track owner provide relevant training and qualification records to FRA upon request. Although FRA recognizes that track owners would likely maintain records of operators' qualifications to demonstrate compliance with the rule, without such a requirement, FRA would not be able to provide any meaningful oversight of proposed paragraph (d)'s requirement that operators be qualified to interpret the equipment responses. Accordingly, in adopting paragraph (d)(2), FRA is including the following language:

> Each employer of a person qualified to interpret equipment responses shall maintain written or electronic records of each qualification in effect, including the name of the employee, the equipment to which the qualification applies, the date of qualification, and the date of the most recent reevaluation of the qualification, if any. Records concerning these qualifications, including copies of training programs, training materials, and recorded examinations, shall be kept at a location designated by the employer and available for inspection and copying by FRA during regular business hours, following reasonable notice.

This language is consistent with the current requirements of § 213.238. See the section-by-section analysis for § 213.7 above, for FRA's response to AAR/ASLRRA's comment regarding the use of the term "reasonable notice." Paragraph (d)(2) is adopted as proposed in the NPRM, with the changes noted above.

Proposed rule: Proposed paragraph (d)(3) would require 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 continuous test vehicle operators and believes that an understanding of the vehicle's systems is necessary to understand the test data accurately, find the suspected location, and field-verify the suspected defect successfully.

Comments: BMWED/BRS assert that track owners should be required to "maintain and make available to FRA training records identifying persons qualified to perform field-verification tests, the basis for such qualifications, and the type(s) of field-verification instruments they are qualified to operate."

Final rule: As proposed, paragraph (d)(3) would already require that persons conducting field verification be qualified under § 213.238. Section 213.238(g) itself requires that track owners make qualification and training records available to FRA, and § 213.238(e) requires that track owners keep a list of each qualification in effect, including the name of the employee, the equipment to which the qualification applies, the date of qualification, and the date of the most recent reevaluation. FRA expects that the referenced qualification requirements are sufficient to allow proper oversight and ensure safety. Accordingly, paragraph (d)(3) is adopted as proposed in the NPRM.

Proposed rule: 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. The suspect location must be identified with sufficient information so that a qualified person under § 213.238 can locate and field-verify each suspected defect accurately. FRA intentionally did not prescribe how a suspect location is identified and proposed to leave it up to the track owner because the identification process may be affected by specific circumstances

facing each track owner.

FRA notes that when proposed paragraph (e) is read in conjunction with proposed paragraphs (b)(2) and (f), the suspect location must be identified and recorded in a manner that allows the qualified person under § 213.238 to locate the suspect location with repeatable accuracy. This could include using 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 locate the suspected defect noted on the report accurately. For example, if the margin of error is too large, there is a 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.

Comments: FRA received no comments on this proposed change.

Final rule: Paragraph (e) is adopted as proposed in the NPRM.

Proposed rule: Proposed paragraphs (e)(1) and (2) contain specific timeframes in which field verification of suspected locations must be conducted. For purposes of the 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 (addressed in proposed paragraph (e)(2)); and all other defects

(addressed in proposed paragraph (e)(1)). Additionally, under proposed paragraph (e)(3), indications of a possible broken rail with rail separation must be protected immediately.

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 Remedial Action Table. In other words, this proposed paragraph would apply to suspected defects that pose less of an immediate safety risk than the ones covered in proposed paragraphs (e)(2) and (3).

Comments: FRA received multiple comments on this proposal. AAR/ASLRRA assert that having two different time periods "presents tracking issues that would be difficult and burdensome for railroads to monitor and would introduce unnecessary confusion regarding whether the appropriate time permitted for field verification was met." BMWED/BRS further comment that "completion of the test run" is ambiguous and FRA should "provide a clear and unambiguous definition as to when that is." For their part, AAR/ASLRRA advocate that track owners have 84 hours from the completion of the test run for field verification.

NTSB comments that the proposed field-verification timeframe could allow

"certain hazardous rail defects . . . to go 'unverified' for longer than 12 hours," presenting a "public safety concern" and states that FRA should enact "[p]rocedures for mitigating risks." Likewise, the Chemical, Energy, and Agricultural Trade Associations comment that they "are concerned that the proposed revisions, particularly the extension of the verification timeframes could lead to a scenario where fatal flaws remained unaddressed and subject trains to potential derailments."

Finally, Herzog notes a typographical error in proposed paragraph (e)(1) wherein it references paragraphs (c)(2) and (3) when it should reference paragraphs (e)(2) and (3). Additionally, Herzog requests that FRA use the term "indication" as opposed to "detection" in paragraph (e)(1) because the "collection vehicle is only collecting the test data and the location is an 'indication' at that time."

Final rule: In adopting this paragraph (e)(1) in the final rule, FRA has corrected the inadvertent typographical error so that paragraph (e)(1) references paragraphs (e)(2) and (3). FRA also agrees that "indication" is a more suitable term than "detection" and has changed paragraph (e)(1) accordingly. FRA makes clear that a track owner receives the indication of the suspect location, for purposes of the field-verification timeframe, when the collection vehicle passes over the suspect location.

FRA agrees that use of a single time period may allow track owners to more efficiently and accurately track when a suspect location must be field-verified without negatively impacting safety. However, FRA does not agree that this time period should begin upon completion of the test run, because "completion of the test run" could be hard to define and raises the possibility that a test run could continue for a lengthy and

unpredictable period, potentially resulting in the field-verification clock not starting until after a significant period of time passes. In this final rule, FRA is instead adopting a single timeframe that requires suspect locations be field-verified within 84 hours of their indication, i.e., when the collection vehicle passes over the suspect location. This change will address the concern raised about the different proposed timeframes while also ensuring that suspect locations are field-verified within a defined period of time that is not fluid or dependent on when a test run may end, thereby addressing possible ambiguity as to the meaning of "completion of the test run."

As for the concerns raised by NTSB and the Chemical, Energy, and Agricultural Trade Associations, as explained in greater detail above and in the NPRM (*see* 84 FR 72528–30), FRA has trialed continuous rail testing under the waiver process for over a decade and the regulatory changes adopted here are based on the lessons learned and procedures used under the waiver process. FRA is confident, based on the data and experience gained from those waivers, that the field-verification timeframes adopted here are sufficient to ensure safety.

Finally, in adopting paragraph (e)(1), FRA is adding "Except as provided in paragraph (e)(6) of this section" to the beginning of the paragraph. This change is meant to account for the addition of paragraph (e)(6), discussed below, codifying the interpretation articulated in the NPRM preamble that the applicable timeframes for field verification apply only to continuous rail tests conducted to meet the minimum inspection frequency required by § 213.237, or § 213.339 where applicable. Paragraph (e)(1) is adopted as proposed in the NPRM, with the changes noted above.

Proposed rule: 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 Remedial Action Table 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 those cited. Thus, if remedial action note "A," "A2," or "B" is cited in the remedial action column (the last column) of the Remedial Action Table, the defects associated with those remedial actions would be covered under proposed paragraph (e)(2) and any suspect location possibly containing one of those defects must be field-verified within the time required by proposed paragraph (e)(2). 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.

Comments: The same comments discussed above for paragraph (e)(1) are applicable here. See the above summary.

Final rule: Please see the relevant FRA responses to the comments above on paragraph (e)(1). For the reasons discussed above, in adopting the final rule, paragraph (e)(2) uses the term "indication" instead of "detection"; does not reference "completion of the test run"; and requires field verification within 36 hours of the indication, i.e., within 36 hours of the collection car passing over the suspect location.

Consistent with the change in paragraph (e)(1), FRA is also making an additional change by adding "Except as provided in paragraph (e)(6) of this section" to the beginning of paragraph (e)(2). This change is meant to account for the addition of paragraph (e)(6), discussed below, codifying the interpretation articulated in the NPRM preamble that the applicable timeframes for field verification apply only to continuous rail tests conducted to meet the minimum number required by § 213.237, or § 213.339 where applicable. Finally, FRA is making a further change by adding "and subject to the

requirement of paragraph (e)(3)" to make paragraph (e)(2) clearer and consistent with (e)(1). Paragraph (e)(2) is adopted as proposed in the NPRM, with the changes noted above.

Proposed rule: Proposed paragraph (e)(3) would require that track owners have procedures in place to ensure adequate protection is immediately implemented when continuous rail test inspection vehicles indicate a possible broken rail with rail separation. As explained in the NPRM, FRA intentionally does not specify what needs to be included in the procedures but expects the track owners to determine what is appropriate for their individual 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 personnel who can take the necessary steps to implement adequate protection immediately. A track owner may not wait until the suspected broken rail with rail separation is field-verified. The visual indication received by the analyst alone is sufficient.

Comments: FRA received no comments on this proposed change.

Final rule: Paragraph (e)(3) is adopted as proposed in the NPRM.

Proposed rule: Proposed paragraph (e)(4) states that a suspect 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, as proposed, a track owner would not be required to implement the remedial actions listed in the Remedial Action Table until a suspect 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 suspect location is field-verified and determined to be a defect, the track owner must immediately perform all remedial actions required by § 213.113(a).

Comments: FRA received no comments on this proposed change.

Final rule: FRA notes that the inclusion of paragraph (e)(4) is simply the codification of an existing FRA interpretation regarding rail inspections. Under § 213.113, an indication of a suspect location is not considered a defect, and thus the track owner is not required to take remedial action, until the suspect location is field-verified and an actual defect is found. Paragraph (e)(4) is adopted as proposed in the NPRM.

Proposed rule: Under proposed paragraph (e)(5), if a suspect 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 in the Remedial Action Table 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.

Comments: FRA received no comments on this proposed change.

Final rule: Paragraph (e)(5) is adopted as proposed in the NPRM.

Proposed rule: In the NPRM preamble, FRA stated that a continuous rail test conducted to meet the minimum number of required internal rail inspections under § 213.237, or § 213.339 where applicable, also called regulatory tests, must comply with §

213.240. FRA further explained that continuous rail tests conducted above and beyond the minimum frequency requirements of § 213.237, or § 213.339 where applicable, or on track not required to be tested under § 213.237, or § 213.339 where applicable, i.e., non-regulatory tests, are not required to meet all requirements of § 213.240.

Comments: BMWED/BRS assert there should be no difference between the rules applicable to regulatory and non-regulatory tests. According to BMWED/BRS, time limits for remedial action, field verification, and inspection records should apply to every continuous test regardless whether it is conducted to meet the minimum number of required internal rail inspections under § 213.237, or § 213.339 where applicable. BMWED/BRS contend that not requiring non-regulatory tests to comply with § 213.240 means that track owners "will be given 'carte blanche' by FRA to delay verification and protection of suspected rail defects indefinitely."

AAR/ASLRRA request clarification on FRA's discussion in the NPRM on regulatory and non-regulatory tests. AAR/ASLRRA "understand this to mean that when track owners proactively choose to conduct additional continuous tests that are not intended to fulfill the Federally required [track safety standards (TSS)] inspection requirements, that associated TSS testing intervals and deadlines, and data collection and other administrative requirements do not apply to the conduct of those tests."

In addition, NTSB believes that the proposed regulatory text may not accomplish what FRA intended by its preamble discussion, stating that proposed § 213.240 would only exempt track owners from the 4-hour field-verification timeframe in § 213.113(b) if the continuous test is conducted under the procedures listed in § 213.240.

Final rule: FRA agrees with NTSB that the proposed rule, as written, may not accomplish effectively what was intended. Thus, FRA is adding paragraph (e)(6), which states: "A continuous rail test that is not conducted to satisfy the requirements for an internal rail inspection under § 213.237, or § 213.339 if applicable, and has been properly designated and recorded by the track owner under paragraph (c) of this section, is exempt from the requirements of paragraphs (e)(1), (2), and (5) of this section."

This new paragraph also responds to the comment submitted by AAR/ASLRRA. A non-regulatory test is exempt only from the required timeframes for field verification. The track owner must still comply with all other regulatory requirements under this part, including recordkeeping, data collection, procedural, and reporting requirements.

FRA agrees with BMWED/BRS that the time limits for implementing remedial actions under § 213.113(a) apply to all tests, whether regulatory or non-regulatory, once a suspect location is field-verified and a defect is found. However, FRA does not agree that such suspect locations identified during non-regulatory tests should be subject to the same field-verification timeframes. Doing so would create a disincentive for track owners to conduct continuous tests above and beyond the minimum requirements, including on track where rail inspections are not required, such as yard track. Further, by not imposing the rule's field-verification timeframes on suspect locations found during non-regulatory tests, track owners have greater flexibility to prioritize field verification of suspect locations that pose a higher risk of derailment. Although the final rule allows track owners to leave some suspected defects in certain track, FRA expects it will result in track owners conducting tests where they otherwise would not, and ultimately result in

more rail defects being found and remediated. Accordingly, paragraph (e)(6) is adopted as stated above.

Proposed rule: Proposed paragraph (f) would require each suspect location be recorded with repeatable accuracy so that the location can 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 dependably and accurately identified. Recording each suspect location with this repeatable accuracy is a cornerstone of the entire process, and 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 field-verifiers 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 for reference, such as can result from some rail that is rolled in weld-free segments that exceed one-tenth of a mile in length.

Comments: FRA received no comments on this proposed change.

Final rule: Paragraph (f) is adopted as proposed in the NPRM.

Proposed rule: Proposed paragraph (g) would require track owners utilizing continuous rail testing to 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 under § 213.240 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. This proposed reporting requirement is designed to provide sufficient data to enable a comparison of the results and effectiveness of continuous rail testing to the results and effectiveness of inspections by track owners not utilizing continuous rail testing. The annual report will also allow FRA to monitor the effectiveness of individual track owners' specific continuous testing processes and programs, and compare results on a micro level for specific track owners. Further, 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 use the data provided in each track owner's annual report to match service failure rates with testing frequencies to estimate the correlation between increased testing frequencies to the accident rate. This will help confirm that the anticipated safety improvements are realized. In addition, FRA intends to utilize traditional and new methods of analysis to, among other things, study defect risk and track health and will share data with the track owners to inform continuous process improvement, as was done during the waiver process for continuous rail testing. The information should also serve as 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 is necessary for FRA to ensure safe operations and monitor the effectiveness of continuous rail testing and the requirements of this regulation. 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 annual reporting requirement is intended to provide FRA with information needed to ensure that the continuous testing process is consistently carried out in a proper manner.

Comments: AAR/ASLRRA ask for clarification on the intended meaning of "service failure" as used in proposed paragraph (g)(10) and whether it is meant to be

defined the same as in § 213.237(j)(3). In commenting, NTSB asserts that "to more effectively monitor the programs, the proposed regulation should require separately listing the quantity of each type of internal rail test on each segment." NTSB also suggests the regulation include "[p]rocedures for monitoring rail inspection program," indicating that allowance of "multiple rail inspection processes on a given segment in a given year . . . could be more complex to monitor."

Final rule: FRA is confident the annual reporting requirement under paragraph (g), together with FRA's general oversight authority, is sufficient to monitor the safety and effectiveness of track owners' rail inspection programs. FRA agrees that requiring a listing of the quantity and type of each rail inspection on a segment is vitally important information and proposed paragraphs (g)(7) and (8) to accomplish that. To make this intent clearer, FRA is combining proposed paragraphs (g)(7) and (8) into paragraph (g)(7) to read: "The total number of stop-and-verify rail tests and the total number of continuous rail tests over each track segment." In conformance with this change, FRA has renumbered proposed paragraphs (g)(9) and (10) as paragraphs (g)(8) and (9) in this final rule.

Finally, FRA confirms the term "service failure" as used in proposed paragraph (g)(10), now paragraph (g)(9), is intended to have the same meaning as in § 213.237(j)(3).

Paragraph (g) is adopted as proposed in the NPRM, with the changes noted above.

Section 213.241 Inspection Records

Proposed rule: Section 213.241 requires track owners to 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 proposed revising paragraph (b) by adding § 213.137 to those enumerated sections for which inspection records must comply with the requirements of paragraph (b), because of the incorporation of the waiver allowing the use of FBFs. One of the proposed requirements for the use of FBFs under § 213.137(e)(3) is that they must be inspected at specific intervals, records of which must be kept and comply with § 213.241(b).

FRA also proposed 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 the method chosen accurately and securely identifies the person making the inspection.

Further, FRA proposed adding three elements to the list of information that must be included in an inspection record: the author of the record, the type of track inspected, and the location of the inspection. FRA expects this information is already included in most, if not all, of the inspection records currently prepared 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 would change "owner" to "track owner" at the beginning of the last two sentences, remove "either" before the word "maintained" in the last sentence, and change "10 days notice" to "10 days' notice."

Comments: FRA received no comments on the proposed changes to paragraph (b).

Final rule: FRA is not adopting the proposed reference to § 213.137 in § 213.241(b). FRA had originally considered adopting the increased inspection frequency for FBFs included in the long-standing waiver but decided against that approach. Because FBFs are inspected in the same manner as other frogs in this final rule, a reference to § 213.137 is not needed. Section 213.241(b) is adopted as proposed in the NPRM, with the change noted above.

Proposed rule: FRA proposed revising paragraph (f) and redesignating it as paragraph (i) and adding new paragraph (f). Proposed paragraph (f) would list the recordkeeping requirements for continuous testing performed under § 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 § 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 § 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 (including, 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 of that remedial action). 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.

Comments: FRA received no comments on these proposed changes.

Final rule: Paragraph (f) is adopted as proposed in the NPRM.

Proposed rule: Proposed paragraph (g) is similar to paragraph (e). As proposed, the paragraph would require any track owner that elects to conduct continuous testing under § 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, as proposed, a track owner must keep sufficient records of procedures developed to comply with § 213.240(b), as well as 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.).

Comments: AAR/ASLRRA's comment on the use of the term "reasonable

notice" is discussed in more detail in the section-by-section analysis for § 213.7, above.

Final rule: See the section-by-section analysis for § 213.7 for FRA's response to AAR/ASLRRA's comment regarding the use of the term "reasonable notice." Paragraph (g) is adopted as proposed in the NPRM.

Proposed rule: 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 help ensure the quality and effectiveness of track inspections, and FRA expects 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.

Comments: FRA received no comments on this proposed change.

Final rule: Paragraph (h) is adopted as proposed in the NPRM.

Proposed rule: FRA proposed paragraph (i) to be redesignated as paragraph (f) and revised to include the phrase "during regular business hours following reasonable notice" at the end of the paragraph. 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.).

Comments: AAR/ASLRRA's comment on the use of the term "reasonable notice" is discussed in more detail in the section-by-section analysis for § 213.7, above.

Final rule: See the section-by-section analysis for § 213.7 for FRA's response to AAR/ASLRRA's comment regarding the use of the term "reasonable notice." Paragraph (i) is adopted as proposed in the NPRM.

Proposed rule: FRA proposed paragraph (j) to be a revised and redesignated version of existing paragraph (g). First, FRA proposed to reword the introductory language of the paragraph to make it clearer that a track owner may create, retain, transmit, store, and retrieve records by electronic means for purposes of complying with this section. The proposed change is not meant to affect the meaning or intent of this paragraph.

Next, 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 finds the proposal would help ensure the integrity of electronic records, while increasing clarity and allowing track owners additional flexibility without negatively impacting safety.

Under proposed paragraph (j)(1), the system used to generate the electronic records must meet all the requirements and include all the information required under subpart F. Proposed paragraph (j)(2) would require the track owner to monitor its electronic records database to ensure record accuracy, and FRA would intentionally leave

it up to the track owner to determine the best way to monitor, protect, and maintain the integrity and accuracy of its records database effectively. FRA proposed that existing paragraph (g)(1) be redesignated as paragraph (j)(3) and revised to require that the electronic system be designed to identify the author of each record uniquely and prohibit two persons from having the same electronic identity. This is a simplified rephrasing of the requirements of existing paragraph (g)(1).

FRA proposed that existing paragraph (g)(3) be redesignated as paragraph (j)(4) and slightly revised. Proposed paragraph (j)(4) would require that the electronic system ensure each record cannot be modified or replaced in the system once the record is completed. 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 proposed 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 finds 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 proposed 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 finds 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 proposed removing as redundant existing paragraph (g)(6), which generally requires that track owners make paper copies of electronic records available to FRA. Existing paragraph (f) already requires track owners to make records available to FRA for inspection and copying upon request, and would continue to do so as redesignated paragraph (i). Finally, FRA proposed removing existing paragraph (g)(7), which requires electronic track inspection records to be kept available to persons who performed the inspections and to persons performing subsequent inspections. FRA finds removal is justified because the addition of proposed paragraph (h) would require the same for all records, and therefore make the paragraph redundant.

Comments: FRA received no comments on the proposed changes to § 213.241.

Final rule: Section 213.241 is revised as proposed in the NPRM.

Section 213.305 Designation of Qualified Individuals; General Qualifications

Proposed rule: Proposed revisions to this section 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 expects 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 proposed 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.

Further, FRA proposed 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 proposed 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 expects 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 proposed 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 proposed 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.).

Comments: AAR/ASLRRA's comment on the use of the term "reasonable notice" is discussed in more detail in the section-by-section analysis for § 213.7, above.

Final rule: See the section-by-section analysis for § 213.7 for FRA's response to AAR/ASLRRA's comment regarding the use of the term "reasonable notice." Additionally, FRA has identified a technical error in paragraphs (a)(3), (b)(3), and (c)(4) and will change "successful completion of" to "successfully completed." This change is not meant to alter the intent or meaning of the section. Accordingly, § 213.305 is revised as proposed in the NPRM, with the changes noted above.

Section 213.365 Visual Track Inspections

Proposed rule: FRA proposed revisions to this section intended to mirror the relevant proposed revisions to § 213.233, discussed above. FRA first proposed to revise

the heading for § 213.365 by adding the word "track" after "visual" so that the heading reads "Visual track inspections." 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 would also make the heading for § 213.365 consistent with the proposed revision to the heading for the corresponding non-high-speed track section, § 213.233. 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 proposed 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 proposed 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 proposed removing the last sentence of paragraph (b)(3), also known as the high-density commuter line exception. It was 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 the NPRM (*see* 84 FR 72530).

Comments: FRA received a comment from AAR/ASLRRA objecting to the removal of the high-density commuter line exception. For a more complete summary of the comment, please see the discussion in the section-by-section analysis for § 213.233(b)(3), above.

Final rule: FRA has decided to adopt the proposal in the NPRM to remove the high-density commuter line exception from part 213, as explained in the section-by-section analysis for § 213.233(b)(3). Paragraph (b) is revised as proposed in the NPRM.

Proposed rule: FRA proposed two revisions to paragraph (c). First, FRA proposed to add the word "visual" before "track inspection" in the introductory text. This would simply make paragraph (c) consistent with the heading for § 213.365 and would have no effect on the meaning of paragraph (c). Second, FRA proposed 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.

Comments: FRA received no comments on these proposed changes.

Final rule: Paragraph (c) is revised as proposed in the NPRM.

Proposed rule: FRA also proposed 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 proposed 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 therefore does not interpret or enforce the 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.

Comments: FRA received no comments on these proposed changes.

Final rule: Paragraph (d) is revised as proposed in the NPRM.

Section 213.369 Inspection Records

Proposed rule: Proposed revisions are intended to mirror the relevant proposed revisions to § 213.241, discussed above. FRA proposed 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 chosen accurately and securely identifies the person making the inspection.

Next, FRA proposed to add three elements to the list of information that must be included in an inspection record: the author of the record, the type of track inspected, and

the location of the inspection. FRA expects this information is already included in most, if not all, of the inspection records currently prepared 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 would change "owner" to "track owner" at the beginning of the last two sentences. FRA would also remove "either" before the word "maintained" in the last sentence and change "10 days notice" to "10 days' notice."

Comments: FRA received no comments on these proposed changes.

Final rule: Paragraph (b) is therefore revised as proposed in the NPRM.

Proposed rule: FRA proposed 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 § 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 (including, 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.

Comments: FRA received no comments on these proposed changes.

Final rule: Paragraph (d) is revised as proposed in the NPRM.

Proposed rule: Proposed paragraph (e) would require any track owner that elects to conduct continuous testing under § 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 § 213.240(b), as well as 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.).

Comments: AAR/ASLRRA's comment on the use of the term "reasonable notice" is discussed in more detail in the section-by-section analysis for § 213.7, above.

Final rule: See the section-by-section analysis for § 213.7 for FRA's response to AAR/ASLRRA's comment regarding the use of the term "reasonable notice." Paragraph (e) is revised as proposed in the NPRM.

Proposed rule: 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 expects 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 recognize significant changes in the track condition effectively 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.

Comments: FRA received no comments on this proposed change.

Final rule: Paragraph (f) is revised as proposed in the NPRM.

Proposed rule: As noted above, FRA proposed 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.).

Comments: AAR/ASLRRA comment on the use of the term "reasonable notice,"

which is discussed in more detail in the section-by-section analysis for § 213.7, above.

Final rule: See the section-by-section analysis for § 213.7 for FRA's response to AAR/ASLRRA's comment regarding the use of the term "reasonable notice." Paragraph (g) is adopted as proposed in the NPRM.

Proposed rule: FRA also proposed redesignating existing paragraph (e) as paragraph (h), and revising it. First, FRA first proposed to reword the introductory language of existing paragraph (e) to make it clearer that a track owner may create, retain, transmit, store, and retrieve records by electronic means for purposes of complying with this section. The proposed change 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 finds the proposal would help ensure the integrity of electronic records, while increasing clarity and allowing track owners additional flexibility without negatively impacting safety.

Under proposed paragraph (h)(1), the system used to generate the electronic records must meet all the requirements and include all the information required under subpart G. Proposed paragraph (h)(2) would require the track owner to monitor its electronic records database to ensure record accuracy, and FRA would leave it up to the track owner intentionally to determine the best way to effectively monitor, protect, and

maintain the integrity and accuracy of its records database. FRA proposed 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 proposed 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, while 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 proposed 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 finds 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 proposed 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 finds 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 proposed removing as redundant existing paragraph (e)(6), which generally requires that track owners make paper copies of electronic records available to FRA. Existing paragraph (d) already requires track owners to make records available to FRA for inspection and copying upon request, and would continue to do so as redesignated paragraph (g). Finally, FRA proposed removing existing paragraph (e)(7), which requires electronic track inspection records to be kept available to persons who performed the inspections and to persons performing subsequent inspections. FRA finds removal is justified because the addition of proposed paragraph (f) would require the same for all records, and therefore make the paragraph redundant.

FRA is redesignating paragraph (f) as paragraph (i) and slightly revising it for

punctuation; no substantive change is intended.

Comments: FRA received no comments on these proposed changes.

Final rule: Paragraphs (h) and (i) are adopted as proposed in the NPRM.

VI. Regulatory Impact and Notices

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

This final rule is not a significant regulatory action within the meaning of Executive Order 12866 (EO 12866) and DOT's Administrative Rulemaking, Guidance, and Enforcement Procedures in 49 CFR part 5. This rule is considered an EO 13771 deregulatory action. Details on the estimated cost savings of this rule can be found in the 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 is revising its regulations governing the minimum safety requirements for railroad track. The 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 revisions will benefit railroad track owners and the public by reducing unnecessary costs and incentivizing innovation, while improving rail safety.

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

Net Cost Savings, in Millions (2019 Dollars)

	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Costs	$27.44	$33.24	$3.91	$3.90
Cost Savings	$149.30	$180.99	$21.26	$21.22
Net Cost Savings	$121.86	$147.75	$17.35	$17.32

The annualized net cost savings will be $17.4 million (7%) and $17.3 million (3%).

The additional flexibility of this rule will result in cost savings for railroad track owners. Continuous rail testing will reduce overtime hours for maintenance-of-way employees. The flange-bearing frog changes will 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 will eliminate the need for and costs of applying for waivers to implement such a testing practice and track components. In fact, fewer slow orders, which are temporary speed restrictions, will be needed with continuous testing, which will result in cost savings.

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

Summary of Total Cost Savings, in Millions

Section	Present Value 7%	Present Value 3%	Annualized 7%	Annualized 3%
Government Cost Savings	$0.194	$0.229	$0.028	$0.027
FBF Inspections	$0.184	$0.215	$0.026	$0.025
Frog Waiver Savings	$0.013	$0.016	$0.002	$0.002

Continuous Testing Labor Cost Savings	$7.452	$9.034	$1.061	$1.059
Slow Orders	$141.329	$171.340	$20.122	$20.086
Continuous Testing Waiver Savings	$0.132	$0.157	$0.019	$0.018
Total	**$149.305**	**$180.991**	**$21.258**	**$21.218**

The annualized cost savings of this final rule will be $21.3 million (7%) and $21.2 million (3%).

If railroad track owners choose to take advantage of the cost savings from this rule, they will incur additional labor costs associated with continuous rail testing. These costs are voluntary because track owners will 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	$27.4	$33.2	$3.9	$3.9

The annualized costs of this final rule will be $3.9 million (at both 7 percent and 3 percent).

The rule will 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 final 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 ((RFA) 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. When an agency issues a rulemaking proposal, the RFA requires the agency to "prepare and make available for public comment an initial regulatory flexibility analysis" which will "describe the impact of the proposed rule on small entities." (5 U.S.C. §. 603(a)). Section 605 of the RFA allows an agency to certify a rule, in lieu of preparing an analysis, if the proposed rulemaking is not expected to have a significant economic impact on a substantial number of small entities. Out of an abundance of caution, FRA prepared an initial regulatory flexibility analysis to accompany the NPRM, which noted no expected significant economic impact on a substantial number of small entities; no comments were received on this analysis.

In this final rule, FRA is revising its regulations governing the minimum safety requirements for railroad track. The changes include: permitting railroad track owners to inspect 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 revisions will benefit railroad track owners and the public by reducing unnecessary costs and incentivizing innovation, while improving rail safety. FRA estimates this final rule will only minimally impact small railroads and any impact will likely be beneficial.

Consistent with the findings in FRA's initial regulatory flexibility analysis, and

the lack of any comments received on it, the Administrator of FRA hereby certifies that this final rule will not have a significant economic impact on a substantial number of small entities.

C. *Paperwork Reduction Act*

The information collection requirements in this 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 responses	Total annual burden hours	Total cost equivalent3
213.4(f) — Excepted track — Notification to FRA about removal of excepted track	746 railroads	15 notices	10 minutes	2.5 hours	$190
213.5(c) – Responsibility for compliance – Notification of assignment to FRA	746 railroads	15 notices	1 hour	15 hours	$1,140
213.7(a)-(b) – Designations: Names on list with written authorizations	746 railroads	2,500 documents	10 minutes	416.7 hours	$31,669
213.17(a) – Waivers	746 railroads	10 petitions	2 hours	20 hours	$1,520
213.57(e) – Curves, elevation and speed limitations – Request to FRA for vehicle type approval	746 railroads	4 requests	8 hours	32 hours	$2,432

[3] The dollar equivalent cost is derived from the Surface Transportation Board's Full Year Wage A&B data series using the appropriate employee group hourly wage rate that includes a 75-percent overhead charge.

—(f) Written Notification to FRA prior to implementation of higher curving speeds	746 railroads	4 notifications	2 hours	8 hours	$608
—(g) Written consent of track owners obtained by railroad providing service over that track	746 railroads	4 written consents	45 minutes	3 hours	$228
213.110(a) – Gage restraint measurement systems (GRMS) – Implementing GRMS – notices & reports	746 railroads	1 notification	45 minutes	.8 hours	$61
—(g) GRMS vehicle output reports	746 railroads	1 report	5 minutes	.1 hours	$8
—(h) GRMS vehicle exception reports	746 railroads	1 report	5 minutes	.1 hours	$8
—(j) GRMS/PTLF – procedures for data integrity	746 railroads	1 documented procedure	1 hour	1 hour	$76
—(n) GRMS inspection records	746 railroads	2 records	30 minutes	1 hour	$76
213.118(a)–(c) – Continuous welded rail (CWR) – Revised plans w/procedures for CWR	438 railroads	10 plans	4 hours	40 hours	$3,040
—(d) Notification to FRA and RR employees of CWR plan effective date	438 railroads	750 notifications to employees	15 seconds	3.1 hours	$236
—(e) Written submissions after plan disapproval	438 railroads	5 written submissions	2 hours	10 hours	$760
—(e) Final FRA disapproval and plan amendment	438 railroads	5 amended plans	1 hour	5 hours	$380
213.234(f) – Automated inspection of track constructed with concrete crossties – Recordkeeping requirements	30 railroads	2,000 records	30 minutes	1,000 hours	$76,000

213.237(b)(2) – Inspection of Rail – Detailed request to FRA to change designation of a rail inspection segment or establish a new segment	65 railroads	4 requests	15 minutes	1 hour	$76
213.237(b)(3) – Notification to FRA and all affected employees of designation's effective date after FRA's approval/conditional approval	65 railroads	1 notice to FRA + 15 bulletins	15 minutes	4 hours	$304
—(d) Notice to FRA that service failure rate target in paragraph (a) of this section is not achieved	65 railroads	4 notices	15 minutes	1 hour	$76
—(d) Explanation to FRA as to why performance target was not achieved and provision to FRA of remedial action plan	65 railroads	4 letters of explanation/ Plans	15 minutes	1 hour	$76
213.238 – Qualified operators – Written or electronic of qualification4	3 railroads + 5 Testing Entities	250 records	5 minutes	20.8 hours	$1,581
213.240(b) – Continuous Rail Testing – Procedures for conducting continuous testing **(New requirement)**	12 railroads	4 procedures	8 hours	32 hours	$2,432
—(c) Type of rail test (continuous or stop-and-verify) – Record **(New requirement)**	12 railroads	25,000 documents/ Records	2 seconds	1.4 hours	$106
—(c) Type of rail test (continuous or stop-and-verify) – Documented changes **(New requirement)**	12 railroads	100 documents	1 minute	1.7 hours	$129
—(g) Annual reports to FRA **(New requirement)**	12 railroads	12 reports	4 hours	48 hours	$3,648
213.241 – Inspection records (**Revised**	746 railroads	1,375,000 records	10 minutes	229,166.7 hours	$17,416,669

[4] Includes burdens associated with proposed § 213.240(d)(2).

requirement)5					
213.303(b) – Responsibility for compliance – Notification of assignment to FRA	2 railroads	5 notices	30 minutes	2.5 hours	$190
213.305(a)-(c) – Designation of qualified individuals; general qualifications -- Written authorization for remedial actions	2 railroads	20 written documents	30 minutes	10 hours	$760
----(e) Recordkeeping requirements for designations	2 railroads	200 records	10 minutes	33.3 hours	$2,531
213.317(a)-(b) – Waivers	2 railroads	2 petitions	8 hours	16 hours	$1,216
213.329(e) – Curves, elevation and speed limitations – FRA approval of qualified vehicle types based on results of testing	2 railroads	2 cover letters + 2 technical reports + 2 diagrams	30 minutes + 16 hours + 15 minutes	33.5 hours	$2,546
—(f) Written notification to FRA 30 days prior to implementation of higher curving speeds	2 railroads	2 notices	2 hours	4 hours	$304
—(g) Written consent of other affected track owners by railroad	2 railroads	2 written consents	45 minutes	1.5 hours	$114
213.333(d) – Automated vehicle-based inspection systems – Track Geometry Measurement System (TGMS) output/exception reports	7 railroads	7 reports	1 hour	7 hours	$532

[5] Note: Each record of an inspection under §§ 213.4, 213.119, 213.233, 213.235, and 213.237 is covered under § 213.241.

213.341(b)-(d) – Initial inspection of new rail & welds – Inspection records	2 railroads	800 records	2 minutes	26.7 hours	$2,029
213.343(a)-(e) – Continuous welded rail (CWR) – Procedures for installations and adjustments of CWR	2 railroads	2 plans	4 hours	8 hours	$608
—(h) Recordkeeping requirements	2 railroads	8,000 records	2 minutes	266.7 hours	$20,269
213.345(a)-(c) – Vehicle qualification testing – Vehicle qualification program for all vehicle types operating at track Class 6 speeds or above	2 railroads	2 program plans	120 hours	240 hours	$18,240
—(d) Previously qualified vehicle types qualification programs	2 railroads	2 program plans	8 hours	16 hours	$1,216
—(h) Written consent of other affected track owners by railroad	4 railroads	4 written consents	30 minutes	2 hours	$230
213.369(d) – Inspection Records – Record of inspection of track	2 railroads	15,000 records	10 minutes	2,500 hours	$190,000
Total	746 railroads	1,429,776 responses	N/A	237,547 hours	$17,784,313

All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. For information or a copy of the paperwork package submitted to OMB, contact Ms. Hodan Wells, Information Collection Clearance Officer, Office of Railroad Safety, Federal Railroad Administration, at 202-493-0440.

Organizations and individuals desiring to submit comments on the collection of

information requirements should direct them to Ms. Hodan Wells, Federal Railroad Administration, via e-mail to Ms. Wells at *Hodan.Wells@dot.gov*.

OMB is required to make a decision concerning the collection of information requirements contained in this 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. FRA did not receive any OMB or public comments on the information collection requirements contained in the NPRM.

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. The current OMB control number for part 213 is 2130-0010.

D. *Environmental Impact*

FRA has evaluated this final rule consistent with the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.), the Council of Environmental Quality's NEPA implementing regulations at 40 CFR parts 1500–1508, and FRA's NEPA implementing regulations at 23 CFR part 771 and determined that it is categorically excluded from environmental review and therefore does not require the preparation of an environmental assessment (EA) or environmental impact statement (EIS). Categorical exclusions (CEs) are actions identified in an agency's NEPA implementing regulations that do not normally have a significant impact on the environment and therefore do not require either an EA or EIS. See 40 CFR 1508.4. Specifically, FRA has determined that this final rule is categorically excluded from detailed environmental review pursuant to

23 CFR 771.116(c)(15), "[p]romulgation of rules, the issuance of policy statements, the waiver or modification of existing regulatory requirements, or discretionary approvals that do not result in significantly increased emissions of air or water pollutants or noise."

The purpose of this rulemaking is to revise FRA's Track Safety Standards to reduce unnecessary costs and incentivize innovation, while improving rail safety. This rule does not directly or indirectly impact any environmental resources and will not result in significantly increased emissions of air or water pollutants or noise. Instead, the final rule is likely to result in safety benefits. In analyzing the applicability of a CE, FRA must also consider whether unusual circumstances are present that would warrant a more detailed environmental review. *See* 23 CFR 771.116(b). FRA has concluded that no such unusual circumstances exist with respect to this final regulation and it meets the requirements for categorical exclusion under 23 CFR 771.116(c)(15).

Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, FRA has determined this undertaking has no potential to affect historic properties. *See* 16 U.S.C. 470. FRA has also determined that this rulemaking does not approve a project resulting in a use of a resource protected by Section 4(f). *See* Department of Transportation Act of 1966, as amended (Pub. L. 89-670, 80 Stat. 931); 49 U.S.C. 303.

E. *Executive Order 12898 (Environmental Justice)*

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and DOT Order 5610.2(a) (91 FR 27534 May 10, 2012) require DOT agencies to achieve environmental justice as part of

their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects, including interrelated social and economic effects, of their programs, policies, and activities on minority populations and low-income populations. The DOT Order instructs DOT agencies to address compliance with Executive Order 12898 and requirements within the DOT Order in rulemaking activities, as appropriate. FRA has evaluated this final rule under Executive Order 12898 and the DOT Order and has determined it would not cause disproportionately high and adverse human health and environmental effects on minority populations or low-income populations.

F. *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 final 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.

G. *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 final rule will not result in such an expenditure, and thus preparation of such a statement is not required.

H. *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 final 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 final rule will not burden the development or use of domestically produced energy resources.

List of Subjects in 49 CFR Part 213

Penalties, Railroad safety, Reporting and recordkeeping requirements.

The Final Rule

For the reasons discussed in the preamble, FRA amends 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. Revise § 213.11 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) introductory text to read as follows:

§ 213.113 Defective rails.

* * * * *

(b) *** 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 the crossing angle is greater than 20 degrees unless movable guard rails are used.

9. Revise § 213.143 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—

Class of track	Guard check gage	Guard face gage
	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′6⅛”…….....	4′5¼”……
Class 2 track	4′6¼”…….....	4′5⅛”……
Class 3 and 4 track	4′6⅜”…….....	4′5⅛”……
Class 5 track	4′6½”[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′6½" but not be less than 4'6⅜", provided that:

(a) 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; and

(b) Each HPF bears an identifying mark applied by either the track owner, railroad, or the frog manufacturer that identifies the frog as an HPF.

Subpart F—Inspection

10. Amend § 213.233 by

a. Revising the section heading and paragraph (b);

b. Revising the first row of the table in paragraph (c) and adding footnotes 1 and 2 to the table; and

c. Revising paragraph (d).

The revisions and addition 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) ***

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 passengers 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. 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 ensure the following:

(1) Test data is timely and accurately transmitted and analyzed;

(2) Suspect locations are accurately identified for field verification;

(3) Suspect locations are categorized and prioritized according to their potential severity;

(4) Suspect locations are accurately field-verified; and

(5) 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, and the milepost where the test started and where it was changed. If the track owner intends to conduct a continuous 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. This documentation must be provided to FRA upon request during regular business hours following reasonable notice.

(d)(1) Continuous rail test inspection vehicle operators must be qualified under § 213.238, with the exception of § 213.238(b)(3).

(2) Internal rail inspection data collected during continuous rail tests must be reviewed and interpreted by a person qualified to interpret the equipment responses. Each employer of a person qualified to interpret equipment responses shall maintain written or electronic records of each qualification in effect, including the name of the employee, the equipment to which the qualification applies, the date of qualification, and the date of the most recent reevaluation of the qualification, if any. Records concerning these qualifications, including copies of training programs, training materials, and recorded examinations shall be kept at a location designated by the employer and

available for inspection and copying by FRA during regular business hours, following reasonable notice.

(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) Except as provided in paragraph (e)(6) of this section, and subject to the requirements of paragraphs (e)(2) and (3) of this section, if the continuous rail test inspection vehicle indicates a suspect location, field verification must be conducted within 84 hours of the indication of the suspect location.

(2) Except as provided in paragraph (e)(6) of this section, and subject to the requirements of paragraph (e)(3) of this section, 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 36 hours from indication of the suspect location.

(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.

(6) A continuous rail test that is not conducted to satisfy the requirements for an internal rail inspection under § 213.237 or § 213.339, and has been properly designated and recorded by the track owner under paragraph (c) of this section, is exempt from the requirements of paragraphs (e)(1), (2), and (5) of this section.

(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:

(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 stop-and-verify rail tests and the total number of continuous rail tests over each track segment;

(8) The total number of defects identified over each track segment; and

(9) 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, 213.233, 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 the 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 successfully completed 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 successfully completed 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 successfully completed 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 a 2 calendar day 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 by revising paragraphs (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 the 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 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.

(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.

Quintin Kendall,

Deputy Administrator.